1501 Del Norte Street Residential Project

Initial Study – Mitigated Negative Declaration

prepared by

City of West Covina
Planning Division, Department of Community Development
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Initial Study

1. Project Title

1501 Del Norte Street Residential Project

2. Lead Agency Name and Address

City of West Covina
1444 West Garvey Avenue
West Covina, California 91790

3. Contact Person and Phone Number

Jeff Anderson, Project Planner
(626) 939-8422

4. Project Sponsor's Name and Address

MLC Holdings, Inc.
Contact: Louisa Feletto, Forward Planning Manager
5 Peters Canyon Road
Irvine, California 92606

5. Project Location

The project site is located at 1501 Del Norte Street in the City of West Covina, California. Figure 1 shows the regional location of the project site and Figure 2 shows the location of the site in its neighborhood context. The project site encompasses approximately 13.56 acres and has an Assessor Parcel Number (APN) of 8458-020-901. The project site is bordered by Del Norte Park to the north and northeast; North Sunset Avenue, one residential building, and one commercial building to the east; West Del Norte Street and residential properties to the south; and North Nora Avenue to the west. The areas beyond these immediately bordering uses can be generally characterized as consisting of residential neighborhoods of mostly one-story single family homes.

Regional vehicular access to the project site is provided by the San Bernardino Freeway/Interstate 10 (I-10), with a westbound off-ramp available at Sunset Avenue and on- and off-ramps available both westbound and eastbound at Pacific Avenue/West Covina Parkway. In addition, the project site is locally accessible from West Del Norte Street and North Nora Avenue. There is a surface parking lot in the southeast corner of the project site that was accessible from North Sunset Avenue when the project site was being used as a school, but this access point is now gated off and there is currently no direct vehicular connection between North Sunset Avenue and West Del Norte Street. Regional mass transit service is provided by Foothill Transit, with the closest bus stops located at the intersection of North Sunset Avenue and West Rowland Avenue and the intersection of North Sunset Avenue and West Workman Avenue, both of which are within a few hundred feet of the project site.

Figure 1 Regional Location

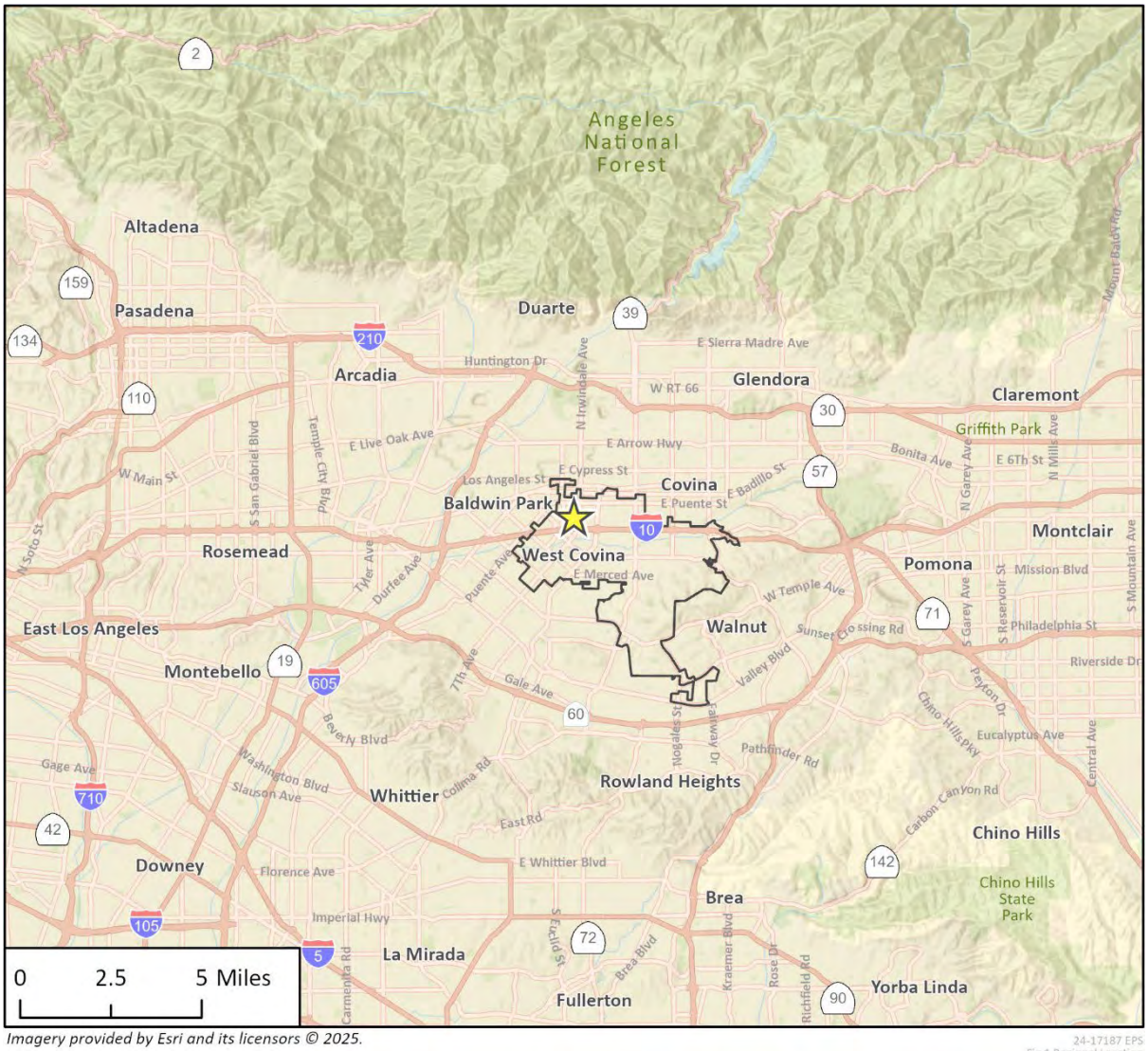

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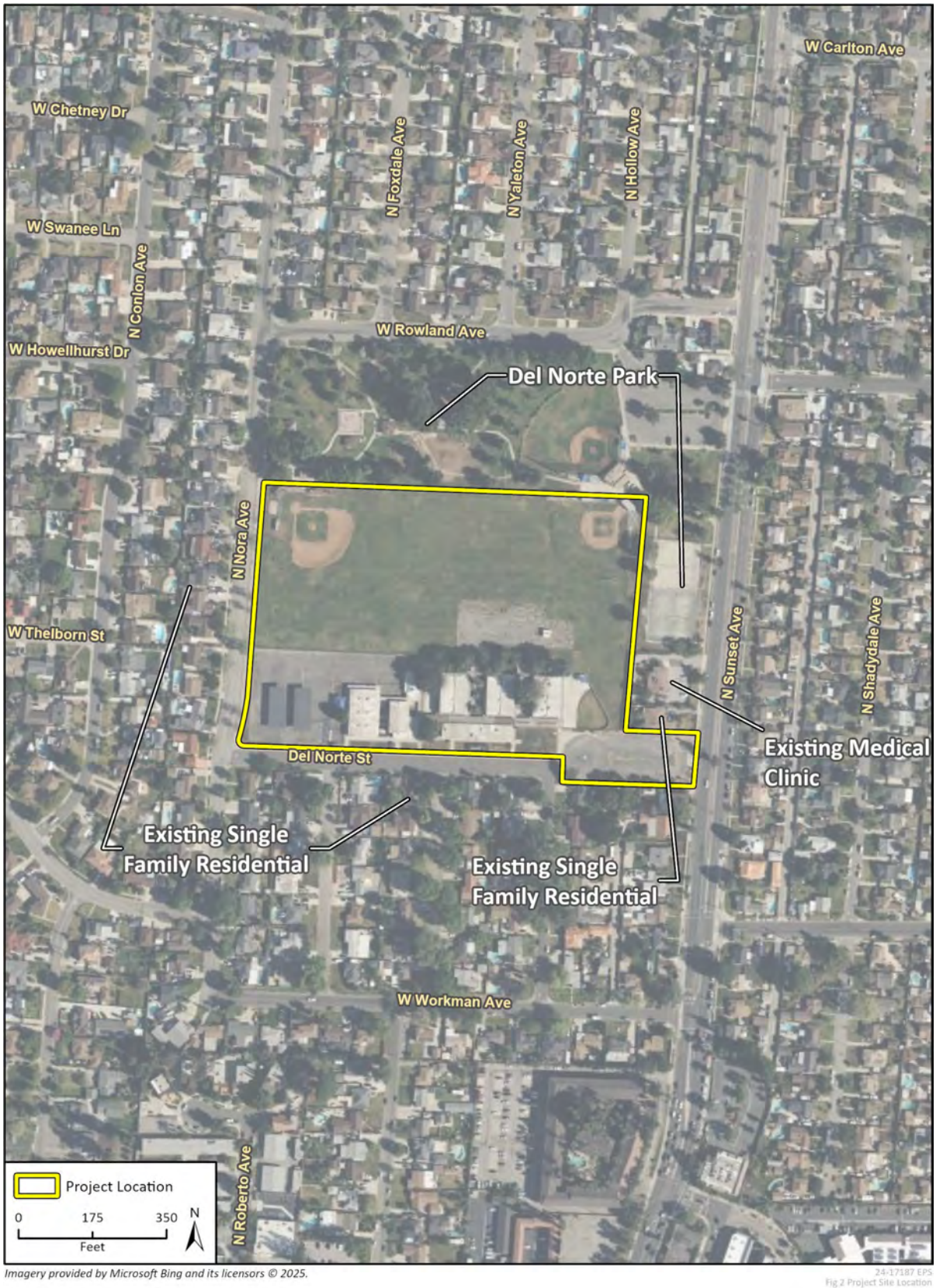
Fig 1 Regional Location

Figure 2 Project Site Location



6. Existing Setting

The project site is in a developed urban area surrounded by roads and urban structures (i.e., residential, office, and commercial buildings). The project site was previously developed and used as Del Norte Intermediate School, which closed in 1989; after which the project site was used for the East San Gabriel Valley Regional Occupational Program (ROP) Technical Center, which has since been relocated, leaving the existing structures on the site vacant. The project site contains school buildings, a surface parking lot, and sports fields. Vegetation on the project site is limited to grass lawns, trees, hedges, ruderal vegetation, and ornamental landscaping.

7. Existing General Plan Designation

The project site has a General Plan land use designation of Civic: Schools, which accommodates civic functions such as government offices, libraries, schools, community center, and places of religious worship (City of West Covina 2016a).

8. Existing Zoning

The project site is currently zoned Single Family Residential (R-1). According to the West Covina General Plan and Municipal Code (WCMC), areas zoned R-1 are intended for one single-family dwelling unit per lot, or urban dwelling unit.

9. Project Description

The 1501 Del Norte Street Residential Project (hereafter referred to as “proposed project” or “project”), includes a General Plan Amendment, a Specific Plan, a Zone Change, a Precise Plan, a Tentative Tract Map and a Tree Removal Permit. The proposed project would include the demolition of the existing buildings and structures on the project site (requiring a demolition permit); followed by construction of 34 single-family detached homes and 248 attached townhomes and stacked flats, for a total of 282 homes. The project site is 13.56-acres, of which 13.19 acres would be developed for residential uses and common space (?), and the additional 0.37 acres would be used as an extension and dedication of West Del Norte Street from its current terminus east to North Sunset Avenue.

The detached single-family homes would be two stories with a maximum height to peak of roof of 24 feet, 6inches and include three- and four-bedroom homes. These two-story single-family homes would include a private yard, two-car, side-by-side garage and a driveway two cars in width, and would serve as a buffer between the proposed project and the existing single family homes along North Nora Avenue and West Del Norte Street. The attached townhomes would be three stories (maximum height to peak of roof of 37 feet 10 inches) and include a mix of two- to four-bedroom homes. The stacked flats would be four stories (maximum height to peak of roof of 46 feet 1 inch). Each three-story townhome unit and four-story stacked flats would contain private open space in the form of a porch or deck, totaling approximately 32,367 square feet (sf) of private open space. In addition, the four-story stacked flat buildings would provide the necessary setbacks for aerial fire access. Each of the residential units would include a two-car garage (for a total of 564 enclosed parking spaces) and there would also be 77 uncovered parking spaces provided for guest parking, resulting in 641 total parking spaces, which would be distributed throughout the community.

The proposed project would provide approximately 68,305 sf of common open space, including an 18,000 sf central community space which would provide amenities such as a pool and restroom buildings, shade structure with seating, BBQ counter with seating, and a turf area for passive lawn play. Landscaping, including a variety of trees, shrubs, and groundcover would be provided throughout the project site. Fencing and walls would be used throughout the project site and along the project site borders to define private and semi-private spaces and would serve as a unifying design element. Fencing and perimeter walls would range from three feet to six feet in height, with pilasters up to eight feet and portal elements up to twelve feet in height.

In addition, the project approvals include establishing a new Specific Plan for the site, which would provide land use and development standards for the proposed project and would allow the proposed net density of 21.4 dwelling units per net acre. The Specific Plan is included as Appendix A of this IS-MND. The proposed project also includes the following requests:

- General Plan Amendment (GPA) to change the land use designation from Civic: Schools to Neighborhood Medium Residential (up to 20 units per acre) and Neighborhood High Residential (up to 53 units per acre)
- A Zone Change (to Specific Plan) to allow the proposed net density of 21.4 dwelling units per acre (du/ac);
- A Specific Plan, which provides land use and development standards for the proposed project and would allow a net density of 21.4 dwelling units per acre; and
- A Precise Plan for site plan layout and design
- A Tentative Tract Map to subdivide the property into multiple parcels
- A Tree Removal Permit to remove one significant tree.

Vehicles would be able to access the proposed project via a primary entrance on West Del Norte Street, and a secondary entrance on North Nora Avenue. Both entries would be defined by pedestrian entry pilasters with project signage, accent trees, enhanced landscaping and paving, and parkways and sidewalks on both sides. In addition, a 26-foot private lanes would provide vehicular access to all homes, which would be connected by the primary entrance on West Del Norte Street, and the secondary entrance on North Nora Avenue. Pedestrians would be able to access the project site via the sidewalks along West Del Norte Street, and North Nora Avenue. Residents will also be able to access the project site via two access points from Del Note Park.

Table 1 summarizes the characteristics of the proposed project. Table 2 summarizes the characteristics of the proposed residential unit types. Figure 3 shows the anticipated proposed conceptual site plan. Figure 4 through Figure 8 illustrate the proposed building elevations. Figure 9 shows the proposed conceptual landscape plan.

Construction Phasing

The construction process would include demolition of the existing buildings located on the project site and construction of up to 282 homes along with associated community amenities on the site. Construction phases would include demolition, site preparation, grading, building construction, paving, and architectural coating. Construction of the proposed project is anticipated to occur over an approximately two year period, beginning in January 2026 and ending in January 2028. Construction would occur Monday through Friday between the hours of 7:00 a.m. and 8:00 p.m. pursuant to WCMC construction standards. Construction staging would occur within the project site boundaries. Occupancy is expected to take place in 2028.

Table 1 Project Characteristics

Characteristics	Details
Address	1501 Del Norte Street
APN	8458-020-901
Gross Lot Area	13.56 acres
Net Lot Area	13.19 acres[1]
Residential	
Residential Lot Area	13.19 acres
Number of Residential Units	282 dwelling units
Residential Net Density	21.4 du/ac[2]
Open Space	
Common Open Space	68,305 sf (242 sf/unit)
Private Open Space	47,187 sf (167 sf/unit; min. 60 sf/unit)
Total Open Space	115,492 sf (409 sf/unit)
Parking	
Garage	564 spaces (2 car garage per unit)
Uncovered Guest Parking	77 spaces
Total Parking	**641 spaces**

sf = square feet

[1] Upon completion of the proposed project, the residential portion of the site would be reduced to 13.19 acres due to the 0.37-acre extension and dedication of West Del Norte Street from its current terminus east to North Sunset Avenue.

[2] Residential net density is calculated by dividing the number of proposed units by the net lot size.

Table 2 Townhome Residential Unit Type Summary

Unit Type (Count)	Area (sf)	Bedroom/Bathroom Count	Maximum Height
Detached Single-Family Homes[1]			
Plan 3222 (16)	1,678 sf	3 bedroom, 2.5 bathroom	24’3” (two-story)[1]
Plan 3522 (18)	1,957 sf	4 bedroom, 3 bathroom	24’-6” (two-story)
3-Story Attached Townhomes[2]			
Plan 5 (30)	1,226 sf	2 bedroom, 2.5 bathroom	37’-2” (three-story)
Plan 6 (54)	1,470 sf	3 bedroom, 3 bathroom	37’-2” (three-story)
Plan 7 (54)	1,755 sf	4 bedroom, 4 bathroom	37’-2” (three-story)
4-Story Stacked Flats[3]			
Plan 1 (33)	1,060 sf	2 bedroom, 2 bathroom	47’-9” (four-story)
Plan 2 (22)	1,336 sf	3 bedroom, 3 bathroom	47’-9” (four-story)
Plan 3 (33)	1,749 sf	3 bedroom, 2.5 bathroom	47’-9” (four-story)
Plan 4 (22)	2,071 sf	4 bedroom, 3 bedroom	47’-9” (four-story)
Total Housing Units: 282 Homes			

N/A = Not Applicable

[1] Plan 3222 and Plan 3522 include exterior elevations for Spanish and Seaside designs as shown in sheets A2.12 and A2.13 of the Entitlement Package.

[2] All plans for the 3-Story Attached Townhomes would vary among the Spanish and Seaside designs as shown in sheets A5.60 and A5.61 of the Entitlement Package.

[3] All plans for the 4-Story Stacked Flats would vary among the Spanish and Seaside designs as shown in sheets A5.90 and A5.91 of the Entitlement Package.

Figure 3 Conceptual Site Plan

Figure 4 Conceptual Detached Single-Family Home Elevations [1]

[1] Refer to the Applicant Submittal Package attached as Appendix B for other schematic designs of the proposed project.

Figure 5 Conceptual Attached 3-Story Townhome Elevations, 1

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

Figure 6 Conceptual Attached 3-Story Townhome Elevations, 2

1 - FRONT

2 - LEFT

3 - REAR

4 - RIGHT

Figure 7 Conceptual Attached 3-Story Townhome Elevations, 3

1 - FRONT

2 - LEFT

3 - REAR

4 - RIGHT

Figure 8 4-Story Stacked Flats Elevations

1 - FRONT

2 - LEFT

3 - REAR

4 - RIGHT

Figure 9 Conceptual Landscape Plan

10. Surrounding Land Uses and Setting

The project site is located in an urban area surrounded by residential, recreational, and commercial uses. The project site is bordered by Del Norte Park to the north and northeast; North Sunset Avenue, one residential building, and one commercial building to the east; West Del Norte Street and residential properties to the south; and North Nora Avenue to the west. The areas beyond these immediately bordering uses can be generally characterized as consisting of residential neighborhoods of mostly one-story single family homes.

11. Other Public Agencies Whose Approval is Required

The City of West Covina is the lead agency for the proposed project and no approvals are required from any other agency.

12. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

Three tribes have requested notification of projects in West Covina: the Soboba Band of Luiseño Indians, Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation), and Gabrieleño/Tongva Nation. Per the requirements of Public Resources Code (PRC) Section 21080.3.1, the City mailed AB 52 and SB 18 consultation letters to these tribes on May 14, 2025. On May 27, 2025, the City received an email from the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation) requesting government-to-government consultation regarding the proposed project. The City engaged consultation with the Kizh Nation in June 2025 that resulted in the City receiving a letter from the Kizh Nation that expressed their opinion that the project site has potential for intact, subsurface Tribal Cultural Resources, and requesting that specific mitigation measures included in their letter (including attachments) be implemented. The City of West Covina will continue to comply with all applicable tribal consultation requirements of Public Resources Code Section 21080.3.1 and all other applicable regulations as the proposed project progresses through the required review and approval process. For further discussion of tribal cultural resources in this IS-MND refer to Section 18*, Tribal Cultural Resources*.

13. Required Approvals

The proposed project would require the following entitlements from the City of West Covina:

- General Plan Amendment (GPA) to change the land use designation from Civic: Schools to Neighborhood Medium Residential (up to 20 units per acre) and Neighborhood High Residential (up to 53 units per acre)
- A Zone Change (to Specific Plan) to allow the proposed net density of 21.4 dwelling units per acre (du/ac)
- A Specific Plan, which provides land use and development standards for the proposed project and would allow a net density of 21.4 dwelling units per acre; and
- A Precise Plan for site design layout and design
- A Tentative Tract Map to subdivide the property into multiple parcels
- A Tree Removal Permit for the removal of one significant tree

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	☐	Air Quality
■	Biological Resources	■	Cultural Resources	☐	Energy
■	Geology and Soils	☐	Greenhouse Gas Emissions	■	Hazards and Hazardous Materials
☐	Hydrology and Water Quality	☐	Land Use and Planning	☐	Mineral Resources
■	Noise	☐	Population and Housing	☐	Public Services
☐	Recreation	☐	Transportation	■	Tribal Cultural Resources
☐	Utilities and Service Systems	☐	Wildfire	■	Mandatory Findings of Significance

Determination

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Jeff Anderson	10/21/25
Signature	Date
Jeff Anderson	Contract Planner
Printed Name	Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	■	☐
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	■	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	■	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	■	☐

For purposes of determining significance under CEQA, scenic resources are the visible natural and cultural features of the landscape that contribute to the public's enjoyment of the environment. A scenic vista is defined as a public viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Public views are those that are experienced from a publicly accessible vantage point, such as a roadway or public park. Scenic vistas can be officially designated by public agencies, or informally designated by tourist guides. The California Department of Transportation (Caltrans) manages the California State Scenic Highway Program, which designates state scenic highways. Scenic highways are highways located in areas of natural beauty. A scenic highway becomes officially designated when the local governing body applies to and is approved by Caltrans for scenic highway designation and adopts a Corridor Protection Program that preserves the scenic quality of the land that is visible from the highway right of way (Caltrans 2025a).

The City is located in the relatively flat San Gabriel Valley, framed by the San Gabriel Mountains on the north, the San Rafael Hills on the west, the Puente Hills on the south, and the Chino Hills and San Jose Hills on the east. Portions of the San Jose Hills are located in the eastern and southern area

of the City (West Covina 2016a). These mountains and hills provide background scenic views within West Covina, depending on the viewer's vantage point and orientation.

a. Would the project have a substantial adverse effect on a scenic vista?

According to the City's General Plan, the City of West Covina does not have officially designated scenic vistas (West Covina 2016a). However, the Angeles National Forest and San Gabriel Mountains are approximately seven miles north of the of the project site. From West Del Norte Street along the project site's southern border, existing buildings and mature trees on the project site limit views of scenic vistas of the San Gabriel Mountains to the north. Views of the San Gabriel Mountains from the eastern border of the project site near the tennis courts in Del Norte Park are mostly obstructed by trees on the west side of the tennis courts and by trees in the park near the northern border of the project site. Views of the San Gabriel Mountains from North Nora Avenue along the western side of the project site are mostly obstructed by trees along North Nora Avenue and trees in Del Norte Park. Views of the San Gabriel Mountains from the northern side of the project site would not be affected by the proposed project because from that vantage point the viewer would be looking away from, not through, the project site and any development on the project site resulting from the proposed project would not affect views in that direction.

As discussed above, views of other hills framing the San Gabriel Valley (including the San Rafael Hills on the west, the Puente Hills on the south, and the Chino Hills and San Jose Hills on the east) may also provide background scenic views within West Covina, depending on the viewer's vantage point and orientation. However, these hills are significantly lower than the San Gabriel Mountains and are either not visible or, at most, barely visible when looking through the project site in their direction due to intervening structures and vegetation. Development of the proposed would therefore not substantially impact views of these hills.

The proposed project would involve demolition of the existing one-story institutional buildings currently on the project site and the construction of 282 residential units. As can be seen by comparing the aerial imagery of the current project site shown in Figure 2 to the Conceptual Site Plan shown in Figure 3, the proposed project would increase the proportion of the site covered with buildings; however, there are no scenic public views across the site that would be substantially blocked by this proposed development and thus the proposed project would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

West Covina does not contain any officially designated State Scenic Highways (West Covina 2016a). State Route (SR) 57 between SR 60 and SR 91 (8.9 miles southeast of the project site) and SR 39 between SR 2 and I-210 (3.5 miles northeast of the project site) are eligible for State Scenic Highway designation, but both are too distant from the project site to be affected by implementation of the proposed project (Caltrans 2025b).

The project site is in an urban area consisting of residential, recreational, and commercial uses. The project site does not contain any scenic resources such as natural habitats or rock outcroppings, nor is it in proximity to any such resources. Although the proposed project includes the removal of trees and potentially historic buildings (refer to Section 5, *Cultural Resources*) the Cultural Resources Technical Report prepared by Rincon Consultants determined that the proposed project would not

have a significant impact on historical resources. The project site is not located near a California designated scenic highway and is not highly visible from SR 57 or SR 39 because of its distance from these roadways and because of intervening structures, vegetation, and topography. Therefore, the project would not substantially degrade views of mature trees, rock outcroppings, historic buildings, or any other scenic resources along or visible from a scenic highway, and this impact would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project site is in an urban area of West Covina, primarily developed with Del Norte Park to the north and northeast; North Sunset Avenue, a residential building, and a commercial building to the east; West Del Norte Street and residential properties to the south; and North Nora Avenue to the west. The areas beyond these immediately bordering uses can be generally characterized as consisting of residential neighborhoods of mostly one-story single family homes. The project site is currently developed with vacant school buildings and a surface parking lot. Vegetation on the project site is limited to grass lawns, trees, hedges, ruderal vegetation, and ornamental landscaping. The proposed project includes the construction of 282 residential units, access roadways, and installation of perimeter and on-site landscaping. The Arborist Report (Rincon 2025; Appendix C) found that there are 26 trees, including one significant tree, on or immediately bordering the project site, all of which would be removed as part of the development of the proposed project. However, as shown in Figure 3, the proposed project would provide new landscaping, including a variety of trees (295), shrubs, and groundcover, throughout the project site.

Implementation of the proposed project would add residential uses to the project site, which currently contains institutional (school) buildings. The project would increase the massing and height of buildings throughout the project site compared to existing conditions. In addition, the proposed project would be subject to City design review, including review of building elevations, colors and materials, and compliance with the Precise Plan standards per Article VI, Division 2 of the WCMC Chapter 26. The project design would be reviewed for approval by the Planning Commission as part of the Precise Plan application process. This regulatory process provides the City with an opportunity for aesthetic review, consistent with State Law requiring such review to be based on objective design standards. Thus, the project would not conflict with applicable zoning and other regulations governing scenic quality and would not substantially degrade the existing visual character of the site and its surroundings. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

The project site is in an urban area of West Covina, primarily developed with Del Norte Park to the north and northeast; North Sunset Avenue, a residential building, and a commercial building to the east; West Del Norte Street and residential properties to the south; and North Nora Avenue to the west. The areas beyond these immediately bordering uses can be generally characterized as consisting of residential neighborhoods of mostly one-story single family homes. Streetlights and

exterior lighting associated with these uses comprise the main sources of lighting of light and glare in the project area. The proposed project would introduce new sources of lighting associated with residential development, including exterior lighting for homes, internal roadways, pedestrian pathways, common open space areas, and parking areas. These lighting sources are expected to operate during evening and nighttime hours to ensure visibility and safety for residents and visitors. While the site is located in an urban area with existing ambient lighting, the project would increase overall lighting levels compared to existing conditions on the project site, which currently include vacant school structures with minimal lighting.

All proposed lighting would be equipped with appropriate shielding to minimize light spillage onto adjacent properties. Lighting for the proposed project would be regulated by the City of West Covina's Multi-Family and Mixed-Use Objective Design Standards described in Division 2 of the WCMC and regulations within the proposed Specific Plan. The proposed project would increase outdoor lighting on the project site due to the added development intensity on the site compared to the site's existing condition as an unoccupied former school site. However, light sources associated with the proposed project would not substantially increase the overall levels of nighttime lighting in the area because they would be comparable to existing light levels of the surrounding residential and commercial land uses and regulations prohibit light spilling off the site. Furthermore, roadways adjacent to the project site, including North Nora Avenue, West Del Norte Street, and North Sunset Avenue, are already illuminated by street lighting. For these reasons, the proposed project would not create a substantial new source of light such that day or nighttime views in the area would be adversely affected. Rather, the proposed exterior lighting and building materials would be consistent with those of surrounding uses and would be an important aid to public safety by providing adequate nighttime visibility of the project site and immediately surrounding streets.

As shown in Figure 4 through Figure 8, the project design does not include highly reflective materials that could cause significant glare during the day, such as stainless steel panels or expansive glass windows. The design of this project, including its finish, colors, and materials, would be reviewed for approval through the City's design review process to ensure final plans continue with this approach. Furthermore, the City's Objective Design Standards prohibit the incorporation of highly reflective materials. This regulatory procedure provides the City with an additional layer of review for aesthetics including light and glare.

In addition to new lighting associated with buildings and site amenities, the proposed project would increase vehicular activity in and around the site, which may generate additional sources of light and glare. Vehicle headlights from residents and visitors entering and exiting the site, as well as internal circulation, would introduce nighttime lighting that may be visible to adjacent properties, particularly along North Nora Avenue and West Del Norte Street. However, the site is in an urban area where street lighting and vehicle traffic already contribute to baseline nighttime lighting levels. During the daytime, glare from sunlight reflecting off vehicles may occur intermittently but would not represent a substantial or sustained source of glare. Given the urban context and presence of similar existing light sources, vehicle-related light and glare impacts would be less than significant.

For the reasons discussed above, the proposed project would not create new source of substantial light or glare that would have a substantial adverse effect on daytime or nighttime views in the area, and impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The project site is in an urban area and is currently occupied by vacant buildings. According to the City's Zoning and Land Use Maps, the project site is currently zoned Single-Family Residential (R-1) and has a land use designation of Civic: School (S). The California Department of Conservation (DOC) has not designated important farmland areas for the project site (California DOC 2025a). The project site is also not zoned for agricultural production, it has been previously developed, and it is not located in the vicinity of agricultural operations. Therefore, the proposed project would have no impact on designated Farmland.

NO IMPACT

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

As discussed under impact discussion *2.a* of this section, the project site is currently occupied by vacant buildings and is not zoned or designated for agricultural use. In addition, the project site is not under a Williamson Act contract (California DOC 2025b). The proposed project involves demolition of existing school buildings and construction of a new residential community in an urban area. The project site does not include conversion of farmland to non-agricultural uses; therefore, the proposed project would not conflict with agricultural zoning or a Williamson Act contract. No impact would occur.

NO IMPACT

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

As discussed in Section 5, *Project Location,* the project site is surrounded by residential, recreational, and commercial uses, and neither it nor any nearby uses are zoned or designated for forest land or timberland (DOC 2019). Therefore, the proposed project would not conflict with forest land or timberland zoning or result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

NO IMPACT

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The project site is in an urban area and is currently occupied by vacant buildings and landscaped areas and is zoned and designated for urban uses. Therefore, the proposed project would not conflict with forest land or timberland zoning or result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

NO IMPACT

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

The project site is in an urban area and is currently occupied by vacant buildings and landscaped areas and is zoned and designated for urban uses. Therefore, the proposed project would not result in the conversion of farmland to non-agricultural uses, forest land to non-forest uses, nor any other change in the existing environment that could result in impacts to farmland or forest land. No impact would occur.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	■	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

The information and analysis in this section of the IS-MND is based on the Air Quality Analysis report by UXR, which is Appendix D of this IS-MND.

Overview of Air Pollution

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG), nitrogen oxides (NO_X), particulate matter with diameters of ten microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO_X. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air Quality Standards and Attainment

The project site is located in the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, SCAQMD must monitor air pollutant levels to ensure that the NAAQS and CAAQS are met, and to develop strategies to meet the standards if they are not met.

Depending on whether the standards are met or exceeded, the SCAB is classified as being in "attainment" or "nonattainment." In areas designated as nonattainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants. The human health associated with these criteria pollutants, presented in Table 3, is already occurring in those areas as part of the environmental baseline condition. Under State law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The SCAB is in nonattainment for ozone and $PM_{2.5}$ federal standards. Also, the SCAB is in nonattainment for the State standard for PM_{10} and designated unclassifiable or in attainment for all other federal and State standards (CARB 2024). The nonattainment statuses result from several factors. These factors include the combination of emissions from a large urban area, the regional meteorological conditions adverse to the dispersion of air pollution emissions, and the mountainous terrain surrounding the SCAB that traps pollutants (SCAQMD 2022).

Table 3 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Carbon monoxide (CO)	Reduces oxygen delivery leading to: (1) aggravation of chest pain (angina pectoris) and other aspects of coronary heart disease; (2) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (3) impairment of central nervous system functions; and (4) possible increased risk to fetuses.
Nitrogen dioxide (NO_2)	(1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (2) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (3) contribution to atmospheric discoloration.
Sulfur dioxide (SO_2)	(1) Bronchoconstriction accompanied by symptoms that may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma.
Suspended PM_{10}	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).
Suspended $PM_{2.5}$	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.
Lead	(1) Short-term overexposures and lead poisoning can cause (a) anemia, (b) weakness, (c) kidney damage, and (d) brain damage; (2) long-term exposure to lead increases risk for (a) high blood pressure, (b) heart disease, (c) kidney failure, and (d) reduced fertility.

Source: USEPA 2024

Air Quality Management

Since the SCAB currently exceeds ozone and $PM_{2.5}$ NAAQS standard, the SCAQMD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS. The SCAQMD 2022 Air Quality Management Plan (2022 AQMP) is a regional blueprint designed to meet the NAAQS and demonstrate how attainment will be reached. The 2022 AQMP represents a thorough analysis of existing and potential regulatory control options, includes available, proven, and cost-effective strategies, and seeks to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The prior AQMP, published in 2016, determined that, with implementation of the proposed control strategy, the SCAB could expect to reach attainment of the 1997 8-hour ozone standard by July 15, 2024, and the 2012 annual $PM_{2.5}$ by 2025. The 2006 24-hour $PM_{2.5}$ did not meet the attainment date of December 31, 2019, which required SCAQMD to revise the plan to meet standard as early as possible. SCAQMD's 2022 AQMP, an update to the 2016 AQMP, was developed to identify and implement strategies and control measures to meet the 2015 8-hour ozone NAAQS as expeditiously as practicable, but no later than the statutory attainment deadline of August 3, 2038 for the SCAB (SCAQMD 2022).

Air Emission Thresholds

The SCAQMD approved the *CEQA Air Quality Handbook* in 1993. Since then, the SCAQMD has provided supplemental guidance on their website to address changes to the methodology and nature of CEQA since the publication of the Handbook. Some of these changes include recommended thresholds for emissions associated with both construction and operation of the project are used to evaluate a project's potential regional and localized air quality impacts (SCAQMD 2023).

Regional Thresholds

Table 4 presents the significance thresholds for regional construction and operational-related criteria air pollutant and precursor emissions being used for the purposes of this analysis.

Table 4 Air Quality Thresholds of Significance

Pollutant	Construction (pounds per day)	Operation (pounds per day)
NOx	100	55
VOC	75	55
PM10	150	150
PM2.5	55	55
SOx	150	150
CO	550	550

NO_x = Nitrogen Oxides; VOC = Volatile Organic Compounds; PM_{10} = Particulate Matter with a diameter no more than 10 microns; $PM_{2.5}$ = Particulate Matter with a diameter no more than 2.5 microns; SO_x = Sulfur Oxide; CO = Carbon Monoxide

Source: SCAQMD 2023

Localized Significance Thresholds

In addition to the above regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_2, CO, PM_{10}, and $PM_{2.5}$. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor by taking into consideration ambient concentrations in each SRA, distance to the sensitive receptor, and project size. LSTs have been developed for emissions generated in construction areas up to five acres in size. However, LSTs only apply to emissions in a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2009).

The project site is located within SRA 9 (East San Gabriel Valley). The Construction LSTs are provided in Table 5.

Table 5 SCAQMD LSTs for Construction in SRA 9

	Emission (ppm)				
	CO		NO2	PM10	PM2.5
	Averaging Time				
Peak Cosntruction	1-Hour	8-Hours	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.07	0.05	2.25E-02	2.97	1.17
Background Concentration[A]	1.5	1.4	0.088		
Total Concentration	**1.57**	**1.45**	**0.11**	**2.97**	**1.17**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	NO	NO	NO	NO	NO

[A] Highest concentration from the last three years of available data.

Notes:

PM10 and PM2.5 concentrations are expressed in µg/m3. All others are expressed in ppm.

Based on SCAQMD's LST Methodology, background concentrations are considered only for CO and NO2. According to the SCAQMD Air Quality Significance Thresholds (March 2023), the SCAB is in attainment for NO2 and CO. Therefore, a project would be considered significant if it causes or contributes to an exceedance of the applicable attainment standards. As such, the maximum background concentration values from the most recent three years of monitoring data for SRA 9 were added to the proposed project's emissions to assess total concentrations.

Toxic Air Contaminants

SCAQMD has developed significance thresholds for the emissions of toxic air contaminants (TACs) based on health risks associated with elevated exposure to such compounds. For carcinogenic compounds, cancer risk is assessed in terms of incremental excess cancer risk. A project would result in a potentially significant impact if it would generate an incremental excess cancer risk of 10 in 1 million (1×10^{-6}) or a cancer burden of 0.5 excess cancer cases in areas exceeding a one-in-one-million risk. In addition, non-carcinogenic health risks are assessed in terms of a hazard index. A project would result in a potentially significant impact if it would result in a chronic and acute hazard index greater than 1.0 (SCAQMD 2023).

Methodology

Criteria pollutant and greenhouse gas (GHG) emissions for proposed project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide (CAPCOA 2022). The input data and subsequent construction and operation emission estimates for the proposed project are discussed below. CalEEMod output files for the proposed project are included in Appendix D to this report.

Proposed project construction would primarily generate temporary criteria pollutant and GHG emissions from on-site construction equipment operation, construction worker vehicle trips to and from the site, and haul truck trips related to demolition debris and soil import activities.

Construction input data for CalEEMod include but are not limited to: (1) the anticipated start and end dates of January 2026 through January 2028; (2) construction phase durations ranging from 15 to 450 days; (3) equipment inventories provided by the applicant, including excavators, graders, scrapers, air compressors, pavers, forklifts, and others operating up to eight hours per day; and (4) site-specific cut and fill volumes totaling 1,871 cubic yards of cut and 6,172 cubic yards of fill, with a net import of 4,301 cubic yards of material. The analysis assessed maximum daily emissions from individual construction activities, including demolition, site preparation, grading, building construction, paving, and architectural coating. Demolition would remove approximately 45,244 square feet of existing structures and 176,000 square feet of asphalt or concrete, generating an estimated 2,300 tons of debris.

Construction emissions were modeled in CalEEMod to reflect the actual duration and intensity of construction activity and the expected construction fleet provided by the applicant. Construction emissions associated with development of the proposed project were quantified using the types and quantities of equipment for each construction phase as provided by the applicant. CalEEMod also estimated emissions from on-road construction-related trips, including worker trips (ranging from 3 to 198 per day), vendor trips (up to 27 per day), and hauling trips (up to 19 per day), adjusted for each phase of construction. The analysis assumes that off-site utility and roadway improvements would not exceed the emissions already accounted for, as those activities would be constrained by limited work areas and equipment usage.

Operational emissions modeled include mobile source emissions, energy emissions, and area source emissions. For mobile source emissions, trip-generation estimates were based on land use codes from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (2021), for single-family detached housing (ITE Code 210), multifamily low-rise residential (ITE Code 220), and multifamily mid-rise residential (ITE Code 221). These trip rates were used to quantify vehicle emissions resulting from proposed project-related travel. Fugitive dust related to vehicular travel was also included and estimated in CalEEMod.

Area source emissions were modeled for architectural coatings, consumer products, and landscaping equipment using CalEEMod defaults. Although Assembly Bill (AB) 1346 bans the sale of new gasoline-powered landscaping equipment as of January 1, 2024, the analysis conservatively does not incorporate emissions reductions associated with this regulation.

Energy emissions were modeled based on electricity usage only, as no natural gas would be used according to the project applicant. Since electricity generation occurs offsite and may be offset through mechanisms like RECLAIM, emissions from offsite generation were excluded from the significance evaluation.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The proposed project is located within the South Coast Air Basin (SCAB), an area under the jurisdiction of the South Coast Air Quality Management District (SCAQMD), which regularly prepares Air Quality Management Plans (AQMPs) to meet federal and state air quality standards. The current applicable plan is the 2022 AQMP, which is based on regional growth projections in SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Consistency with the AQMP is determined using two CEQA Handbook criteria.

The criterion are as follows:

- Would the project result in increased frequency or severity of air quality violations?
- Would the project exceed the growth assumptions in the AQMP?

Regarding the first criterion, the analysis demonstrates that the proposed project's construction and operational emissions (shown in Table 6 and Table 7 below) would not exceed applicable regional significance thresholds or localized significance thresholds listed in Table 4 and Table 5. Therefore, the proposed project would not interfere with timely attainment of ambient air quality standards and would result in a less than significant impact.

For the second criterion, the proposed project proposes residential development requiring a General Plan Amendment and zone change from "Civic: Schools" and "Single-Family Residential" to "Neighborhood Medium Residential" and "Neighborhood High Residential", and "Specific Plan", respectively. Although the proposed development differs from existing land use designations, the emissions would remain below applicable thresholds, and the overall development intensity aligns with regional growth forecasts considered in the 2022 AQMP. As such, the proposed project would not conflict with the AQMP's goals.

Therefore, the proposed project would not conflict with or obstruct implementation of the 2022 AQMP. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

Table 6 Construction Emissions (pounds/day)

Year	VOC	Nox	CO	SO2	PM10	PM2.5
Summer						
2026	2.99	27.00	25.40	0.06	4.12	2.16
2027	33.20	7.32	23.10	0.02	3.52	0.95
Winter						
2026	33.20	27.10	25.30	0.06	4.12	2.16
2027	33.90	11.90	27.40	0.03	3.83	1.15
2028	33.80	11.50	26.60	0.03	3.79	1.11
Maximum Daily Emissions	33.90	27.10	27.40	0.06	4.12	2.16
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

See Appendix D for CalEEMod worksheets.

Table 7 Operational Emissions (pounds/day)

Source	VOC	Nox	CO	SO2	PM10	PM2.5
Summer						
Mobile	4.37	3.08	36.70	0.09	8.71	2.25
Area	36.40	0.15	16.10	< 0.005	0.01	0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Daily Emissions	40.77	3.23	52.80	0.09	8.72	2.26
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Winter						
Mobile	4.32	3.36	33.80	0.09	8.71	2.25
Area	35.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Daily Emissions	39.32	3.36	33.80	0.09	8.71	2.25
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

See Appendix D for CalEEMod worksheets.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The SCAB is currently designated non-attainment for ozone (O_3), particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$) under federal and/or state air quality standards. During construction, emissions would result from on-site equipment, soil disturbance, and vehicle travel associated with construction activities. As shown in Table 6, maximum daily unmitigated emissions for all criteria pollutants during construction would remain below the applicable South Coast Air Quality Management District (SCAQMD) regional thresholds. Therefore, the proposed project's construction emissions would not be cumulatively considerable.

During operation, emissions would originate primarily from mobile sources (i.e., vehicle trips), as well as area sources such as architectural coatings, consumer products, and landscape maintenance equipment. As shown in Table 7, operational emissions for all criteria pollutants, including VOC, NO_x, CO, SO_2, PM_{10}, and $PM_{2.5}$, would also remain well below applicable SCAQMD thresholds. Energy source emissions are minimal and no natural gas use is proposed.

Given that both construction and operational emissions would be below SCAQMD significance thresholds, which are designed to account for cumulative regional air quality impacts, the proposed project would not result in a cumulatively considerable net increase of any non-attainment criteria pollutant. Therefore, because the proposed project would not result in a cumulatively considerable net increase of any non-attainment criteria pollutant, impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

As discussed above, the proposed project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during proposed project construction.

Additionally, the proposed project would not exceed the SCAQMD localized significance thresholds during operational activity. Furthermore, proposed project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of proposed project operations. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The potential for the proposed project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The proposed project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed project's long-term operational uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that proposed project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed project would be less than significant

LESS-THAN-SIGNIFICANT IMPACT

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	■
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	■
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	■
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	■	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

The analysis presented in this section is predominantly based on a review of available technical information regarding biological resources in the project vicinity. In order to obtain comprehensive information regarding the presence or potential presence of sensitive biological resources (including special status species, sensitive communities, and jurisdictional waters and wetlands) in the vicinity of the project site, queries of the United States Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS): Information for Planning and Consultation System (IPaC) (USFWS 2025a), USFWS Critical Habitat Portal (USFWS 2025b), USFWS National Wetlands Inventory (NWI) (USFWS 2025c), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2025a), CDFW Biogeographic Information and Observation System (BIOS) (CDFW 2024b) and California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2025) were conducted. Additionally, a site reconnaissance as well as an arborist assessment was performed in March 2025 to assess trees on and near the project site. An Arborist Report (Rincon 2025) was prepared to document results of the survey and is included as Appendix C.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The project site encompasses 13.56 acres of land developed with buildings, asphalt surfaces, lawns, and recreational and baseball fields. The site is in a developed urban area approximately 3.8 miles southeast of Santa Fe Dam Recreation Area, which is the nearest open space covering approximately 1,200 acres in Irwindale. The literature review identified records or ranges of 35 special status plants and 47 special status wildlife species within the project site vicinity (within a 9-quadrangle search area). The nearest USFWS-designated Critical Habitats occur approximately three miles to the southeast for the coastal California gnatcatcher (*Polioptila californica californica*; federally threatened) and three miles to the northwest for the southwestern willow flycatcher (*Empidonax traillii extimus*; federal and state endangered) (CDFW 2025c; USFWS 2025b).

Based on a desktop review of aerial imagery and results of the arborist assessment, the site contains paved and vegetated areas. Non-native/ornamental trees are predominant at the site and include Chinese banyan (*Ficus microcarpa*), Chinese elm (*Ulmus parvifolia*), holly oak (*Quercus ilex*), deodar cedar (*Cedrus deodara*), Shamel ash (*Fraxinus uhdei*), tuckeroo (*Cupaniopsis anacardioides*), common olive (*Olea europaea*), callery pear (*Pyrus calleryana*), and tulip tree (*Liriodendron tulipifera*). Additionally, a single native coast live oak (*Quercus agrifolia*) is present on site. Additionally, recreational fields and smaller lawn areas, both consisting of turf grasses, are present.

None of the special status plant and wildlife species identified in the literature review have potential to occur on the project site based on incompatible habitat conditions or limited habitat components meeting the species' requirements (e.g., vegetation assemblage, soils, topography, hydrology, and prior disturbances) and/or because the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. Specifically, the entire site has been developed, and the majority of vegetation types present on site are ornamental. While a few trees are present on site that could provide nesting habitat for birds (including one native oak) they are not expected to be suitable for other special status species. As a result, impacts to special status species would be less than significant without mitigation.

However, the site has the potential to provide minimal foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that are adapted to disturbed areas and urban environments. Whether designated at the federal, state, or local level as special status or not, migratory or other common nesting birds are protected by the California Fish and Game Code (CFGC) and Migratory Bird Treaty Act (MBTA) and may nest in any of the 26 trees currently on and adjacent to the project site. Therefore, construction of the project has the potential to directly impact (by destroying a nest) or indirectly impact (by creating construction noise, dust, and other human disturbances that may cause a nest to fail) nesting birds protected under the CFGC and MBTA. Implementation of Mitigation Measure BIO-1 would ensure compliance with the CFGC Section 3503 and the MBTA with respect to nesting birds by reducing the impact through pre-construction nesting bird surveys and avoidance of active nests. As a result, impacts to protected nesting birds would be less than significant with mitigation incorporated.

Mitigation Measure

BIO-1 Nesting Bird Avoidance

Prior to issuance of grading permits, the following measures shall be implemented:

- To avoid disturbance of nesting birds, including raptorial species protected by the MBTA and CFGC, construction activities related to the project, including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 1 through August 31). If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven days prior to initiation of construction activities. The nesting bird pre-construction survey shall be conducted on foot inside the project site, including a 100-foot buffer, and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practical. The survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in southern California.
- If active nests (i.e., nests occupied by eggs or fledglings) are found, the 100-foot avoidance buffer shall be demarcated by a qualified biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No parking, storage of materials, or construction activities shall occur within this buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.
- A survey report by the qualified biologist documenting and verifying compliance with the mitigation and applicable State and federal regulations protecting nesting birds shall be submitted to the City. The qualified biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas to ensure that no inadvertent impacts on these nests would occur.

Implementation of Mitigation Measure BIO-1 would reduce potentially significant impacts to nesting birds to less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California cdfw 2025a and Wildlife or U.S. Fish and Wildlife Service?

Natural vegetation communities are classified as sensitive biological resources if they have limited distributions, have high wildlife value, include special status species, or are particularly susceptible to disturbance. Vegetation alliances in the CNDDB are ranked 1 through 5 based on NatureServe's methodology (2025), with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Some alliances with the rank of 4 and 5 have also been included in the sensitive natural communities list under CDFW's revised ranking methodology (CDFW 2025).

The project is in a developed urban area and is not located within a naturally vegetated or open space area. On-site vegetation, including ornamental shrubs and trees, does not constitute a sensitive natural community. Additionally, there is no riparian habitat on the project site. The channelized Walnut Creek occurs approximately 0.6 mile south of the site, where it runs under South Sunset Avenue and is designated as riverine habitat (USFWS 2025c); review of aerial imagery indicates that it does not contain riparian vegetation. Construction and operation of the proposed project would not have a substantial adverse effect on riparian habitat or other sensitive natural communities as none exist on the site or in nearby areas. No impact would occur.

NO IMPACT

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No riparian habitats, wetlands, or other water features have been identified on or directly adjacent to the project site (USFWS 2025c). Furthermore, the project site does not include any discernable drainage courses, inundated areas, wetland vegetation, or hydric soils (USDA 2025). No State or federally protected wetlands or other waters that may be considered jurisdictional by the CDFW, United State Army Corps of Engineers (USACE), or Regional Water Quality Control Board (RWQCB) occur on or adjacent to the project site. Therefore, the proposed project would not directly or indirectly have a substantial adverse effect on State or federally protected wetlands or other jurisdictional waters. No impact would occur.

NO IMPACT

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Wildlife corridors are generally defined as connections between habitat areas that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Examples of barriers or impediments to movement include housing and other urban development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover.

As discussed above, the project site is developed and within an urbanized area. While the site overlaps areas mapped by the California Essential Habitat Connectivity (CEHC) as small natural areas, the site is isolated from the nearest open space area or regional wildlife corridors or linkages,

and there are no riparian corridors, creeks or useful patches of stepping-stone habitat (natural areas) on or connecting the project site. Thus, project implementation would not disrupt or have any adverse effects on migratory corridors or linkages in the area. In addition, the project site does not contain any natural communities or habitat that would be expected to support native wildlife nurseries or the movement of species. Therefore, the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. No impact would occur.

NO IMPACT

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

In accordance with Article VI, Division 10 –Preservation, Protection and Removal of Trees of the City of West Covina Municipal Code (referred to as "Tree Ordinance"; Ordinance No. 2519; City of West Covina 2024), a tree permit is required to:

- Remove, relocate, or destroy any significant or heritage trees on private or public property.
- Prune or trim more than 20 percent of live foliage or limbs from any oak tree as defined in this article.

A heritage tree generally means any tree(s) identified as such by the City's Planning Commission and/or any of the Southern California black walnut (*Juglans californica*) tree species located in the San Jose Hills, as found within the City's jurisdictional boundaries.

A significant tree is a tree located on private and/or public property that meets one or more of the following requirements:

- Is located in the front yard of a lot or parcel and has a caliper[2] of one foot or more, as measured four and one-half feet above mean natural grade;
- Is located in the street-side yard of a corner lot and has a caliper of one foot or more;
- Is located anywhere on a lot, has a caliper of six inches, or more, and is one of the following species: any oak tree native to California, including but not limited to California live, canyon, interior, mesa, scrub, or valley oak (*Quercus agrifolia, Q. chrysolepis, Q. wislezenii, Q. engelmanii, Q. dumoso, or Q. lobata*); California sycamore (*Platanus racemosa*); or American sycamore (*Platanus occidentalis*).

Tree removal is defined as the uprooting, cutting, or severing of the main trunk or any act which causes, or may be reasonably expected to cause a tree to die or to be seriously damaged. This includes damaging the root system by machinery, storage of materials within the dripline, soil compaction, or substantially changing the grade around the root system, excessive pruning, or paving with concrete, asphalt, or other inadequate irrigation.

[2] Caliper is defined by the Tree Ordinance as the maximum diameter of the trunk of a tree measured at 4.5 feet above the natural grade. In the case of multi-trunked trees, caliper shall mean the sum of the calipers of each individual trunk measured at 4.5 feet above grade.

A total of 26 trees were assessed in the Arborist Report (Rincon 2025; Appendix C), of which 1 is a significant tree and 25 are non-significant trees[3]. As shown in Figure 10, seven of the non-significant trees are street trees located along North Nora Avenue outside of the project boundary and 18 are located within the project boundary within landscaped areas and adjacent to buildings. One non-significant tree (#30) is located adjacent to a single-family residence. The proposed project would remove all 26 trees identified in the Arborist Report. While existing street trees would normally be preserved, if possible, the proposed project would install new parkway and sidewalk along North Nora Avenue and West Del Norte Street. The proposed project would plant 295 new trees for a 1:11 replacement ratio. There are no designated heritage trees within or adjacent to the project site. None of the trees are so diseased or damaged that they are no longer viable or are a threat to other protected plant species, per Tree Ordinance §26-260(c).

The WCMC Section 26-290 also specifies that removal of any City/public tree with a caliper of one foot or more requires a permit. In addition, no tree permit shall be issued for the removal of any heritage tree or significant tree on any lot associated with a development application, unless all discretionary approvals have been obtained from the City. The Planning Director may approve, conditionally approve, or deny a tree removal application, after a site investigation regarding specific trees, site conditions, and topographic considerations. The Planning Director may also place conditions on the tree removal permit, including replacement of removed trees with comparable size and species, or relocation of existing trees.

As described above and shown in Figure 9, the proposed project would incorporate landscaping which would include a greater number of new trees than the number of trees to be removed, resulting in greater tree coverage on the proposed project site than what currently exists.

Additionally, the proposed project would conform to the requirements of Division 10 of the West Covina Municipal Code, including the following:

- Obtaining permits for the removal of significant trees.
- Replacement of the removed trees with a tree of comparable species, size, and condition as determined by the Community Development Director.
- Payment of the proper restitution value of the trees or donation of boxed trees to the City or other public agency should a suitable replacement location not be possible on-site or off-site.

As a result, the proposed project would not conflict with any local policies or ordinance protecting biological resources, and this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No adopted Habitat Conservation or Natural Community Conservation Plans or other approved local, regional, or State habitat conservation plans apply to City of West Covina (CDFW 2023). Therefore, no impact would occur.

NO IMPACT

[3] Defined as any tree not meeting the requirement of "significant tree".

Figure 10 Project Site Trees

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	■
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

A Cultural Resources Technical Report was conducted by Rincon Consultants, Inc. in April 2025 for the proposed project. The report conducted background and archival research, California Historical Resources Information System (CHRIS) records search, sacred lands file search, and a pedestrian field survey. The report found that implementation of the proposed project would not result in significant impacts to cultural resources. The following analyses are based on the Cultural Resources Technical Report.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

The Cultural Resources Technical Report found, based on the field survey and background research done for the report, that there is one built environment historical resource on the project site, the Del Norte School. This resource was previously evaluated for listing in the National Register of Historic Places, California Register of Historical Resources, and local listing in 2019 by GPA Consulting. Rincon's Cultural Resources Technical Report concurs with the finding of the finding of GPA's 2019 analysis that the resource is ineligible for NRHP, CRHR, and local listing and therefore does not qualify as a historical resource as defined by CEQA. Consequently, the proposed project would not result in a substantial adverse change in the significance of a historical resource, and there would be no impact.

NO IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

No archaeological resources were identified within or adjacent to the project site by the Cultural Resources Technical Report, which included a records search, Sacred Lands File search, Native American consultation support, and a cultural resources survey. The lack of surface evidence of archaeological materials does not preclude their subsurface existence, but the absence of substantial prehistoric or historic-period archaeological remains within the immediate vicinity, along

with the existing level of disturbance in the project site, suggests there is a low potential for encountering intact subsurface archaeological deposits. Because the possibility of encountering subsurface archaeological materials during construction of the proposed project cannot be ruled out, Mitigation Measure CUL-1 is required.

Mitigation Measure

CUL-1 Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of the California Code of Regulations (CCR) Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The City shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per CCR Guidelines Section 15126.4(b)(3)(C).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

The Cultural Resources Technical Report determined that no human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a mostly likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, impacts to human remains would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	■	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	■	☐

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The proposed project would use nonrenewable resources for construction and operation of the proposed project. Natural resources that would be utilized by the proposed project include petroleum-based fuels for vehicles and equipment. The anticipated use of these resources is detailed in the following subsections. As supported by the discussion below, the proposed project would not create energy demand that would result in a significant environmental impact.

Construction Energy Demand

During proposed project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The proposed project would require demolition, site preparation and grading, including hauling material off-site, installing pavement and asphalt, constructing buildings, applying architectural coating, and installing landscaping and hardscaping. Energy use during construction would be temporary, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations (CCR) Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes, minimizing unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements such as California's Green Building Standards Code ([CALGreen] CCR, Title 24, Part 11), the proposed project would comply with construction waste management practices to divert a minimum of 75 percent of construction and demolition debris. These practices would result in efficient use of energy necessary to construct the proposed project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the proposed project

would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.

Operational Energy Demand

Operation of the proposed project would contribute to area energy demand by consuming electricity, , gasoline, and diesel fuel. Electricity would be used for heating and cooling systems, lighting, appliances, water use, and overall operation of the proposed project. However, as described in Section 5.6 of the proposed Specific Plan (Appendix A of this IS-MND) all homes would include roof top photovoltaic (PV) solar panels, energy efficient lighting and appliances, cool roofs, energy efficient windows, and other design features that significantly conserve energy. These features would help the proposed project achieve net zero electricity use to meet 2025 Title 24 requirements. Gasoline and diesel consumption would result from trips generated by future residents.

Table 8 summarizes estimated operational energy consumption for the proposed project. While the West Covina Unified School District (WCUSD) no longer operates a full-time school on the project site, it does occasionally rent out a multi-purpose room and sports fields on the project site. While these activities may generate some operational energy usage, they are irregular in nature and represent a fraction of the previous operational use of the project site when it functioned as a fully operational school. For these reasons, and to produce a conservative analysis, existing operational energy use is assumed to be zero and any estimated increase in future operational energy use under the proposed project is analyzed as increasing from a baseline of zero. Proposed project operation is estimated to require approximately 12,036 million metric British thermal units (MMBtu) per year.

The proposed project would be required to comply with all standards set in CBC Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's Green Building Standards Code (CALGreen; CCR, Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2022 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the California Energy Commission. These standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. The standards are updated every 3 years, and each iteration is more energy efficient than the previous standards. While the 2025 Building Energy Efficiency Standards are still in the rulemaking phase and are not scheduled to take effect until January 2026 (CEC 2025), it is expected that this trend towards energy efficiency in the standards will continue with the 2025 Standards. Furthermore, the proposed project would continue to reduce its use of nonrenewable energy resources as the electricity generated by renewable resources provided by SCE continues to increase to comply with State requirements through Senate Bill (SB) 100, which requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Table 8 Estimated Project Annual Operational Energy Consumption

Source	Energy Consumption[1]	
Electricity	1.4 GWh	4,773 MMBtu
Natural Gas Usage	72,629 U.S. therms	7,263 MMBtu
Total Energy Consumption		**12,036 MMBtu**

MMBtu: million metric British thermal units; GWh: Gigawatt hours

[1] Energy consumption is converted to MMBtu for each source

See CalEEMod output results for electricity and natural gas usage.

Overall, construction of the proposed project would be temporary and typical of similar projects, and would not result in the wasteful, inefficient, or unnecessary consumption of energy. Operation of the proposed project would consume fuel; however, the proposed project would conform to the latest version of California's Green Building Standards Code and Building Energy Efficiency Standards, and would therefore not lead to wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The City adopted its Energy Action Plan (EAP) in 2011, which includes energy conservation goals and policies for municipal operations in West Covina, and outreach programs to encourage local businesses and residents to implement utility energy efficiency measures such as design features that achieve water and energy use reductions, including compliance with Title 24 (City of West Covina 2011). The goals and policies established by the EAP are geared towards municipal operations and the establishment of new local energy policies and, therefore, have limited applicability to residential projects in the City. However, the proposed project would be in accordance with the overall intent of the EAP. For example, the proposed project would be designed to comply with the performance levels of the latest version of CALGreen, through adoption of the State building code as amended by the West Coving Building and Building Regulations (Chapter 7 of the WCMC). This would reduce energy consumption compared to standard building practices. The proposed project would be required to comply with the residential mandatory measures in the 2025 CALGreen, Title 24, Part 11. The proposed project would also be required to comply with the energy standards in the California Energy Code, CALGreen Part 6. Compliance with these regulations would minimize potential conflicts with adopted energy conservation plans. There would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	■	☐
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
4. Landslides?	☐	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	■	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	■	☐	☐

A Geotechnical Due Diligence Study was prepared for the project site by SA Geotechnical, Inc. in June 2024 to analyze the geotechnical factors that may impact the redevelopment of the site. The report included a review of relevant United States Geological Survey (USGS) and California Geological Survey (CGS) maps for the site and surrounding area; geological field investigation to evaluate subsurface conditions; laboratory testing on selected soil samples to evaluate physical, engineering, and chemical properties of on-site soils, evaluation of geologic and seismic hazards (i.e., seismicity, surface fault rupture, ground shaking, liquefaction); and evaluation of design parameters in accordance with the California Building Code (CBC). The report concluded that the proposed project is feasible from a geotechnical engineering standpoint, provided that the recommendations presented in the report are adhered to during design, grading, and construction of the proposed project, to the satisfaction of the City's Building Division. The following analysis is based on the information contained in the project-specific Preliminary Geotechnical Due Diligence Study (SA Geotechnical Inc 2024; Appendix E).

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The project site is in a seismically active area of southern California, but according to the CGS, the project site is not in an Alquist-Priolo Fault Zone (CGS 2025). No faults are present on the project site. According to the Preliminary Geotechnical Due Diligence Study, the nearest active fault is the San Jose Fault, approximately 4.1 miles southeast of the project site, and the estimated maximum "moment magnitude" (Mw) at the project site IS 7.4 Mw, which would be generated from the Puente Hills Fault (SA Geotechnical Inc 2024; Appendix E) approximately 13.2 miles southwest of the project site. Other nearby faults include the Sierra Madre Fault Zone approximately 4.6 miles north of the site and the Whittier section of the Elsinore fault zone approximately 9.1 miles south of the project site (CGS 2025). Implementation of the proposed project would not exacerbate any existing risk of fault rupture, as the proposed project would not include uses such as hydraulic fracturing or minerals extraction that can exacerbate earthquake risks. Though the project site is not on an Alquist-Priolo Fault Zone, strong ground shaking at the site may occur if a sufficiently large earthquake occurs on this or other nearby faults.

To reduce geologic and seismic impacts, the City regulates development based on CBC requirements. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare by ensuring structural strength, means of egress, and general stability through regulation and control of the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures under its jurisdiction. The CBC earthquake design requirements consider the occupancy category of the structure, site class, soil classifications, and various seismic coefficients. The CBC provides standards for various aspects of construction, including but not limited to excavation, grading, earthwork, construction, preparation of the site prior to fill placement, specification of fill materials, fill compaction and field testing, retaining wall design and construction, foundation design and construction, and seismic requirements. It includes provisions to address issues such as construction on expansive soils and soil strength loss, among other things.

In accordance with California law, proposed project design and construction would be required to comply with provisions of the CBC. Because the proposed project would comply with the CBC and recommendations of the Preliminary Geotechnical Due Diligence Study, and because the proposed project would not exacerbate existing ground shaking hazards, impacts related to seismically induced ground shaking would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Liquefaction is a process whereby soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. Typically, liquefaction occurs in areas where there are loose soils and the depth to groundwater is less than 50 feet from the surface. According to the Preliminary Geotechnical Due Diligence Study, the site is not located within an Earthquake Required Investigation Zone for liquefaction. Furthermore, groundwater was not encountered during the associated field investigation at the maximum drilled depth of 50.5 below ground surface (bgs) and the site's historical highest groundwater level is 100 feet deep (SA Geotechnical 2024). Therefore, the report concluded that site has low potential for liquefaction. Furthermore, design and construction of the proposed project would conform to the current seismic design provisions of the CBC, which incorporates the latest seismic design standards for structural loads and materials, as well as provisions from the National Earthquake Hazards Reduction Program, to mitigate losses from an earthquake and provide for the latest in earthquake safety. While the proposed project would be susceptible to seismic activity given its location within a seismically active area, the project site is not susceptible to liquefaction and the proposed project would be required to minimize this risk, to the extent feasible, through the incorporation of applicable CBC standards. Therefore, the potential effects of differential settlement as a result of liquefaction would be less than significant.

In addition, the project site and surrounding areas are relatively flat and located centrally within an alluvial valley with a gentle slope to the southwest. There are no significant slopes that would present a landslide hazard at or near the site (SA Geotechnical 2024). The proposed project would not involve changes to the site grading or terrain that would destabilize soils prone to landslide. Therefore, the proposed project would not directly or indirectly cause potential adverse effects related to landslides. Potential impacts related to liquefaction and landslides would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

The proposed project involves demolition of existing school buildings and construction of new residential buildings in an urban area. Fugitive dust caused by strong wind and/or earth-moving operations during construction would be minimized through compliance with SCAQMD Rule 403, which prohibits visible particulate matter from crossing property lines. Standard practices to control fugitive dust emissions include watering of active grading sites, covering soil stockpiles with plastic sheeting, and covering soils in haul trucks with secured tarps.

The potential for proposed project construction activities involving soil disturbance, such as excavation, stockpiling, and grading to result in increased erosion and sediment transport by stormwater to surface waters would be minimized because the proposed project would be required to comply with a Construction General Permit, which is issued by the State Water Resources Control Board (SWRCB). The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP), which outlines best management practices (BMPs) to reduce erosion and topsoil loss from stormwater runoff (also refer to the discussion in Section 9, *Hydrology and Water Quality*). Compliance with the Construction General Permit would ensure that BMPs are implemented during construction and minimize substantial soil erosion or the loss of topsoil. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Lateral spreading is the horizontal movement or spreading of soil toward an open face. Lateral spreading may occur when soils liquefy during an earthquake event, and the liquefied soils with overlying soils move laterally to unconfined spaces. Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is caused by a variety of activities that include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydrocompaction. Collapse potential refers to the potential settlement of a soil under existing stresses upon being wetted.

As discussed under impact discussions *7.a.1* through *7.a.4*, although the proposed project is in a seismically active area, the project site is not located on unstable soils or a geologic unit at risk for liquefaction or landslides. The project site consists of compact, relatively flat land that is surrounded by developed land with no significant slopes that would present a landslide hazard. Furthermore, construction and operation of the proposed project would not involve activities known to cause or trigger subsidence and is not anticipated to adversely affect soil stability or increase the potential for local or regional landslides, subsidence, liquefaction, or collapse. The proposed project would comply with CBC requirements and recommendations of the Preliminary Geotechnical Due Diligence Study. Because the proposed project would not create or exacerbate conditions related to unstable soils, impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils are highly compressible, clay-based soils that tend to expand as they absorb water and shrink as water is drawn away. According to the Preliminary Geotechnical Due Diligence Study, alluvium (Qal) encountered in the borings done for the study generally consisted of dark brown, yellowish brown, yellowish gray and gray sandy silt and silty sand near-surface (uppermost 5 to 7 feet), below which the soils consisted of silty sand, clean sand, and sand with gravel. Furthermore, the depth to groundwater at the project site is reported to exceed 50.5 feet bgs, and the historic high ground water is approximately 100 feet bgs at the site. In addition, laboratory testing performed on representative samples of the near surface soils indicates that the on-site sandy soils are expected to have a very low expansion potential. Therefore, the proposed project would not

create a substantial direct or indirect risk to life or property due to expansive soils and impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed project would be served by the City of West Covina's existing sewer system and no septic tanks are proposed for the project. Therefore, there is no potential for adverse effects due to soil incompatibility with septic tanks. No impact would occur.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is currently developed and in an urban region of the City. The Preliminary Geotechnical Due Diligence Study states the following:

> Remedial grading at the site should consist of removal of undocumented fill, if any, and weathered/unsuitable alluvium in their entirety. In general, we recommend that remedial removals consist of removal and recompaction of soils in the upper 5 to 7 feet, below existing grades across the site. Where deeper unsuitable material or undocumented fill is encountered, the removals should be extended to the bottom of unsuitable materials and/or undocumented fill to competent native soils. Where not limited by adjacent properties, the removals should extend a minimum of 5 feet laterally beyond the building footprints.

Due to the site being previously graded and developed, and near-surface soils consisting of relatively young alluvium and potential previously placed artificial fill, it is unlikely that unique paleontological resources exist on the project site. Although proposed project implementation is not expected to uncover paleontological resources, a remote possibility for such resources to be uncovered during the over excavation and compaction process exists, and therefore the potential for impacts to previously undiscovered paleontological resources cannot be ruled out. Mitigation Measure GEO-1 is therefore required to avoid impacts to paleontological resources in the case of unanticipated fossil discoveries. This measure would apply to all phases of proposed project construction and would reduce the potential for impacts to fossils present on site by providing for the recovery, identification, and curation of paleontological resources.

Mitigation Measure

GEO-1 Unanticipated Discovery of Paleontological Resources

In the event an unanticipated fossil discovery is made during the course of project development, construction activity shall be halted in the immediate vicinity of the fossil, and a qualified professional paleontologist shall be notified and retained to evaluate the discovery, determine its significance, and determine if additional mitigation or treatment is warranted. Work in the area of the discovery shall resume once the find is properly documented and the qualified professional paleontologist authorizes resumption of construction work. Any significant paleontological resources found during construction monitoring shall be prepared, identified, analyzed, and

permanently curated in an approved regional museum repository under the oversight of the qualified paleontologist.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

The information and analysis in this section of the IS-MND is based on the *Greenhouse Gas Analysis* report by UXR, which is Appendix F of this IS-MND.

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHGs. GHGs contribute to the "greenhouse effect," which is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature.

GHGs occur naturally and from human activities. Human activities that produce GHGs include the burning of fossil fuels (coal, oil and natural gas for heating and electricity, gasoline and diesel for transportation); methane from landfill wastes and raising livestock, deforestation activities; and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). Emissions of GHGs affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way in which the Earth absorbs gases from the atmosphere. Potential impacts of climate change in California may include loss in snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

Regulatory Setting

State and Regional Regulations

California Global Warming Solutions Act of 2006 (Assembly Bill 32, Senate Bill 32, and Assembly Bill 1279)

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT of CO_2e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others.

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies (CARB 2017).

AB 1279, "The California Climate Crisis Act," was passed on September 16, 2022, and declares the State would achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. In addition, the bill states that the State would reduce GHG emissions by 85 percent below 1990 levels no later than 2045. In response, CARB published a 2022 update to the Scoping Plan. The 2022 Scoping Plan lays out a path to achieve AB 1279 targets (CARB 2022a). The actions and outcomes in the 2022 Scoping Plan would achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

Senate Bill 100 (100 Percent Clean Energy Act)

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Senate Bill 375 (Sustainable Communities and Climate Protection Act)

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning

Organizations to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. SCAG was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035 (CARB 2022b). In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

CALIFORNIA CODE OF REGULATIONS TITLE 24 (CALIFORNIA BUILDING CODE)

Updated every three years through a rigorous stakeholder process, Title 24 of the California Code of Regulations requires California homes and businesses to meet strong energy efficiency and sustainability measures, thereby lowering their GHG emissions. Title 24 contains numerous subparts, including Part 1 (Administrative Code), Part 2 (Building Code), Part 3 (Electrical Code), Part 4 (Mechanical Code), Part 5 (Plumbing Code), Part 6 (Energy Code), Part 8 (Historical Building Code), Part 9 (Fire Code), Part 10 (Existing Building Code), Part 11 (Green Building Standards Code), Part 12 (Referenced Standards Code). The CBC is applicable to all development in California (Health and Safety Code Sections 17950 and 18938[b]. Part 6 and Part 11 set forth energy and other conservation standards which establish, among other requirements, rules for installation of solar photovoltaic and battery storage standards, solid waste diversion standards, water conservation requirements, and electric vehicle accommodation requirements. The most recent iteration of the CBC, the 2022 Title 24 standards, is applicable to all buildings for which an application for a building permit is submitted on or after January 1, 2023.

The regulations receive input from members of industry, as well as the public, with the goal of "[r]educing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (Public Resources Code Section 25402). These regulations are scrutinized and analyzed for technological and economic feasibility (Public Resources Code Section 25402[d]) and cost effectiveness (Public Resources Code Sections 25402[b][2] and [b][3]).

Regional and Local Regulations

SCAQMD

The project site is in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, which could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board

has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. The most commonly used SCAQMD threshold is 3,000 $MTCO_2e$/yr.
- Tier 4 has the following options:
  - Option 1: Reduce Business-as-Usual (BAU) emissions by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$ per SP per year for projects and 6.6 $MTCO_2e$ per SP per year for plans;
  - Option 3, 2035 target: 3.0 $MTCO_2e$ per SP per year for projects and 4.1 $MTCO_2e$ per SP per year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. At this time, it is unknown if the proposed project would include stationary sources of emissions subject to SCAQMD permits. Notwithstanding, if the proposed project requires a stationary permit, it would be subject to the applicable SCAQMD regulations.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD would fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over

to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

CITY OF WEST COVINA ENERGY ACTION PLAN

The City of West Covina Energy Action Plan (EAP) outlines strategies to enhance energy efficiency, promote renewable energy, and reduce GHG emissions. By implementing energy efficiency programs in residential and commercial buildings, encouraging renewable energy sources like solar, and setting long-term sustainability goals, the EAP aims to mitigate climate change impacts. It also emphasizes community engagement and collaboration with local organizations to foster a culture of energy conservation. Ultimately, the EAP directly contributes to reducing GHG emissions, improving air quality, and promoting a healthier, more sustainable environment for its residents (City of West Covina 2011).

Significance Thresholds

Most individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. As a result, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the Initial Study Checklist in Appendix G of the State *CEQA Guidelines* (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to GHG if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state *"[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."*

CEQA Guidelines Section 15064.4(a) further states, *". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards."*

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- Consideration #1: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

The City of West Covina has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 MTCO2e/yr to determine if additional analysis is required is an acceptable approach for small projects such as the proposed Project. This approach is a widely accepted screening threshold used by the City of West Covina and numerous cities in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. As noted by the SCAQMD:

> "…the…screening level for stationary sources is based on an emission capture rate of 90% for all new or modified projects...the policy objective of [SCAQMD's] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90% of all new or modified stationary source projects. A GHG significance threshold based on a 90% emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90% emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than 1% of future 2050 statewide GHG emissions target (85 [MMTCO2e/yr]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology] (BACT) for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility."

Thus, and based on guidance from the SCAQMD, if a non-industrial project would emit GHGs less than 3,000 MTCO2e/yr, the project is not considered a substantial GHG emitter and the GHG impact is less than significant, requiring no additional analysis and no mitigation. On the other hand, if a non-industrial project would emit GHGs in excess of 3,000 MTCO2e/yr, then the project could be considered a substantial GHG emitter, requiring additional analysis and potential mitigation. As previously discussed, a screening threshold of 3,000 MTCO2e/yr is an acceptable approach for small projects to determine if additional analysis is required and is therefore applied for this Project.

Methodology

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity for the proposed project is provided in Appendix 3.1 of the *Greenhouse Gas Analysis* report by UXR, which is Appendix F of this IS-MND. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, and refrigerants sources.

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time. Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the Project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared.

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood, or documented, and would be challenging to mitigate. Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, the SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis.

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Emissions

Project construction activities would generate CO_2, CH_4, N_2O, and refrigerant (R) emissions. The *Air Quality Analysis* (AQA) report (Appendix D) contains detailed information regarding Project construction activities. As discussed in the AQA, construction-related emissions are expected from the following activities.

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

For purposes of analysis, construction will begin January 2026 and would last through January 2028. The construction schedule utilized in the analysis represents a “conservative” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent. The duration of construction activity and associated equipment

represents a reasonable approximation of the expected construction fleet as required per the CEQA Guidelines.

Consistent with industry standards and typical construction practices, each piece of construction equipment listed in Table 3-2 of the AQA (Appendix D) is assumed to operate up to a total of eight hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City of West Covina Municipal Code.

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. As shown in Table 9 below, the proposed project's estimated amortized construction emissions are 40 MT/yr CO_2e.

Table 9 Estimated Construction GHG Emissions

Year	Project Emissions (MT/yr CO_2e)
Total	1,206
Total Amortized over 30 Years	40

See Appendix D for CalEEMod worksheets.

Operational Emissions

Operational activities associated with the proposed project would result in emissions of CO2, CH4, N2O, and Refrigerant emissions from the following primary sources:

- Mobile Sources
- Area Sources
- Energy Sources
- Water Supply, Treatment, and Distribution
- Solid Waste
- Refrigeration

Mobile Source Emissions

The operational air quality emissions associated with the Project are primarily attributable to vehicle trips generated by the proposed development. In order to develop the traffic characteristics of the proposed Project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for the following land use codes (51):

- Single-Family Detached Housing (ITE Land Use Code 210)
- Multifamily (Low-Rise) Residential (ITE Land Use Code 220)
- Multifamily (Mid-Rise) Residential (ITE Land Use Code 221)

Area Source Emissions

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers,

shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod, and do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

Energy Source Emissions

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting.[4] GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Electricity usage associated with the Project was calculated by CalEEMod using default parameters. Based on information provided by the Project Applicant, no natural gas would be used as a result of the Project, and as such use of natural gas is not considered in the analysis.

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters.

Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the USEPA (2016b). CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a GWP of 150 or greater as of January 1, 2022. Additionally, beginning January 1, 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters.

Estimated GHG emissions related to the proposed project are summarized in Table 10 below. Detailed operation model outputs for the proposed project are shown in Appendix 3.1 of UXR's *Greenhouse Gas Analysis* report (Appendix F). As shown in Table 10, construction and operation of the proposed project is estimated to generate approximately 1,889 MTCO2e/yr.

[4] The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

Table 10 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (CO_2e in metric tons)
Construction	40
Operational	
Mobile	1,479
Area	17
Energy	221
Water	34
Solid Waste	98
Total	**1,889**

MT CO_2e = metric tons of carbon dioxide equivalent

See Appendix D for CalEEMod worksheets.

Source: UXR. *Greenhouse Gas Analysis*. June 2025.

The City of West Covina has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 $MTCO_2e$/yr to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by the City of West Covina and numerous cities in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required.

As shown in Table 10, the proposed project would result in a net increase of approximately 1,889 $MTCO_2e$/yr. As such, the proposed project would not exceed the SCAQMD's recommended numeric threshold of 3,000 $MTCO_2e$/yr, and proposed project-related emissions would have a less than significant direct or indirect impact on GHG and climate change, and no mitigation measures are required.

LESS-THAN-SIGNIFICANT IMPACT

b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Pursuant to 15604.4 of the *CEQA Guidelines*, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the proposed project's consistency with the 2022 Scoping Plan is discussed below. It should be noted that the proposed project's consistency with the 2022 Scoping Plan also satisfies consistency with AB 32, since the 2022 Scoping Plan is based on the overall targets established by AB 32 and SB 32. Consistency with the 2008 and 2017 Scoping Plan is not necessary, since both of these plans have been superseded by the 2022 Scoping Plan. For reasons outlined below, the proposed project would result in a less than significant impact with respect to GHG emissions in this regard.

2022 Scoping Plan Consistency

Included in the 2022 Scoping Plan is a set of Local Actions (Appendix D to the 2022 Scoping Plan) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the

ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects, in fact CARB states in Appendix D to the 2022 Scoping Plan (page 4): "…focuses primarily on climate action plans (CAPs) and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

The 2022 Scoping Plan lays out a framework to determine project-level consistency when there is not a CEQA-qualified CAP available to tier off of. CARB recommends that the first approach for determining whether a proposed residential or mixed-use residential development would align with the State's climate goals is to examine whether the project includes key project attributes that reduce operational GHG emissions while simultaneously advancing fair housing. The 2022 Scoping Plan goes on to note that projects that can demonstrate consistency with the priority areas identified in Table 3 *Key Residential and Mixed-Use Project Attributes that Reduce GHGs* of the 2022 Scoping Plan would be aligned with the State's priority GHG reduction strategies and would be deemed consistent with the Scoping Plan. As such, these projects are considered to be consistent with the Scoping Plan or other plans, policies, or regulations adopted for the purposes of reducing GHGs; therefore, the GHG emissions associated with such projects would result in a less-than-significant GHG impact under CEQA.

The proposed project's consistency with the *Key Residential and Mixed-Use Project Attributes that Reduce GHGs* is summarized in Table 11.

Table 11 Proposed Project's Potential to Conflict with Key Attributes Identified in Table 3 of the 2022 CARB Scoping Plan's Appendix D

Priority Areas	Key Project Attribute	Potential to Conflict
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval	No Conflict. The Project would meet the most ambitious voluntary EV charging infrastructure standards (Tier 2) required by the most recent CALGreen standards.
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)	No Conflict. The Project site is currently developed with an existing structure that housed the East San Gabriel Valley Regional Occupational Program And Technical Center. The site's surrounding area is urbanized with a variety of residential densities and other uses consistent with these current designations. Specifically, the surrounding area is predominantly developed with residential uses, primarily single-family neighborhood developments. Among these residential neighborhoods lie the Del Norte Park. Existing infrastructure and utilities to serve the site are located within adjacent roadways. The Project would require internal construction of roads for local access, customary extension of water services and facilities, and construction of new sewer lines and stormwater and drainage infrastructure, consistent with existing sewer and stormwater/drainage infrastructure in the area.

Priority Areas	Key Project Attribute	Potential to Conflict
	Does not result in the loss or conversion of natural and working lands	No Conflict. The Project would not result in the loss or conversion of natural and working lands, as none exist on the Project site. Therefore, the Project would be consistent with this attribute.
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or Is in proximity to existing transit stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region's SCS	No Conflict. The overall density for the Project would be 21.4 dwelling units per acre. Therefore, the Project is consistent with this attribute.
	Reduces parking requirements by: Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	No Conflict. The Project is consistent with this attribute as the parking requirements identified within the Specific Plan are consistent with those outlined in the West Covina Municipal Code.
	At least 20 percent of units included are affordable to lower-income residents	No Conflict. Although the Project does not include 20 percent affordable or low-income units, the VMT analysis found the Project is located in a low VMT-generating area, with 25.5 VMT per service population, below the 15% below-baseline threshold of 27.1. Therefore, the Project is presumed to have a less than significant impact. As such, the Project would not conflict with VMT reductions consistent with the 2022 Scoping Plan.
	Results in no net loss of existing affordable units	No Conflict. The Project site does not contain any existing residences. Project implementation would not displace any existing affordable housing units or necessitate construction of any replacement affordable housing units elsewhere.
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking	No Conflict. The Project would not be served by natural gas. The single-family detached homes, townhomes, and flats proposed as part of the Project would use all-electric appliances without any natural gas connections and would not include the use of propane or other fossil fuels for space heating, water heating, or indoor cooking. Therefore, the Project would not conflict with the CARB 2022 scoping plan according to this attribute.

Source: UXR. *Greenhouse Gas Analysis*. June 2025

As shown in Table 11, the proposed project would not conflict with the priority areas identified in Table 3 *Key Residential and Mixed-Use Project Attributes that Reduce GHGs* of the 2022 Scoping Plan, and would therefore be aligned with the State's priority GHG reduction strategies and be consistent with the Scoping Plan.

Consistency with City of West Covina EAP

The City's EAP is not directly applicable to the proposed Project because the goals and policies in the plan are focused on energy efficiency and sustainability of City facilities. However, because the proposed project is required to comply CALGreen and Title 24 standards, the proposed project would not conflict with the community-wide energy use goals of the EAP.

For the reasons discussed above, implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

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9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	■	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school?	☐	☐	☐	■
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	■	☐
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	■	☐

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Proposed project construction would involve the use of potentially hazardous materials such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. However, standard construction BMPs for the use and handling of such materials would be implemented to avoid or reduce the potential for such conditions to occur. Any use of potentially hazardous materials during construction of the proposed project would be subject to all local, State, and federal regulations regarding the handling of potentially hazardous materials.

Operation of the proposed project would likely involve the use of common materials used in the regular maintenance of buildings and landscaping, such as cleaning and degreasing solvents, fertilizers, and pesticides. However, maintenance activities would only require minor quantities of these products and would not involve the use of extremely hazardous substances. Use of these materials would be subject to compliance with existing regulations, standards, and guidelines established by the federal, State, and local agencies related to storage, use, and disposal of hazardous materials. The transport, use, and storage of hazardous materials during construction of the proposed project would be subject to all applicable State and federal laws, such as the Hazardous Materials Transportation Act (HMTA), Resource Conservation and Recovery Act (RCRA), the California Hazardous Material Management Act (CHMMA), and the CCR, Title 22.

The proposed project's residential uses would not emit or handle hazardous materials beyond typical household and landscaping maintenance waste and materials. Operation of the proposed project would not create a hazard to the public through transportation of hazardous materials upon completion and residential occupancy. Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Accidents during construction of the proposed project could occur as a result of any of the following actions: direct dermal contact with hazardous materials, incidental ingestion of hazardous materials, or inhalation of airborne dust released from dried hazardous materials. The transportation of hazardous materials could result in accidental spills, leaks, toxic releases, fire, or explosion.

Compliance with federal, State, and local laws, regulations, and California Division of Occupational Safety and Health training programs would minimize or avoid potential impacts associated with the routine transport, use, or disposal of hazardous materials during construction. Appropriate documentation for all hazardous waste that is transported, stored, or used in connection with specific project-site activities would be provided as required for compliance with existing hazardous materials regulations codified in the CCR.

The Certified Unified Program Agency is an agency certified by the Department of Toxic Substances Control (DTSC) to regulate hazardous waste generators and on-site treatment programs; aboveground and underground storage tank programs; Hazardous Materials Management, Business Plans, and Inventory Statements; and the Risk Management and Prevention Program. The Los Angeles County Fire Department (LACFD), Health and Hazardous Materials Division (HHMD) is the Certified Unified Program Agency responsible for administering hazardous materials programs in Los

Angeles County. LACFD and HHMD personnel respond to hazardous materials incidents in West Covina. (LACFD 2025).

Construction activities on the project site would be required to comply with federal and State laws to eliminate or reduce the consequences of hazardous materials accidents. For example, employees who would work around hazardous materials would be required to wear appropriate protective equipment, and safety equipment is routinely available in all areas where hazardous materials are used. Adherence to the federal, State, and local regulations governing the transportation, use, and disposal of hazardous waste would reduce impacts associated with reasonably foreseeable upset and accident conditions during construction to less than significant.

Buildings built before about 1970 may contain asbestos-containing materials (ACMs). According to the Cultural Resources Technical Report (Appendix G), the Del Norte School buildings on the project site date to 1953. ACMs may therefore be present in the existing buildings on the project site.

Demolition of structures potentially containing ACMs, lead, and PCBs could pose a risk to construction workers and the public if not conducted according to applicable federal, state, and local regulations. Therefore, Mitigation Measure HAZ-1 is required to reduce these potential impacts to a less than significant level.

The proposed single-family residential uses are not typically associated with upset and accident conditions involving the release of hazardous materials. Maintenance and upkeep of facilities on-site, including cleaning of individual residences, play areas, open space areas, parking areas, and shared community spaces, would occasionally require the use of various solvents, cleaners, paints, oils/fuels, and pesticides/herbicides. However, maintenance activities would only require minor quantities of these products and would not involve the use of extremely hazardous substances. Use of these materials would be subject to compliance with existing regulations, standards, and guidelines established by the federal, State, and local agencies related to storage, use, and disposal of hazardous materials. The transport, use, and storage of hazardous materials during construction of the proposed project would be subject to all applicable State and federal laws such as the HMTA, RCRA, the CHMMA, and the California Code of Regulations, Title 22. Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and impacts would be less than significant.

The proposed site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, due to the site's historical development and the potential presence of contaminants in soils, the potential presence of contaminated soils cannot be ruled out and further investigation is warranted. Therefore, Mitigation Measures HAZ-2 is required to ensure any residual hazardous materials in on-site soils are identified and properly managed prior to construction.

Mitigation Measures

HAZ-1 Testing and Disposal for Building Materials Containing ACMs, Lead-Based Paint, and PCBs

Prior to issuance of a demolition permit for any building on the project site, the applicant shall obtain and submit to the City for review and approval a letter from a qualified consultant verifying that no ACMs, lead-based paint, or PCB-containing materials are present in the on-site buildings. This requirement can also be satisfied by completion of the Phase I Environmental Assessment required by Mitigation Measure HAZ-2. If any of these materials are found to be present, they shall

be abated in compliance with SCAQMD Rule 1403, as well as other applicable State and federal rules and regulations. Only asbestos trained and certified abatement personnel shall be allowed to perform asbestos abatement activities on-site. All such materials removed from any on-site structure shall be hauled and disposed off-site by a transportation company certified to handle these materials. If these abatement measures are necessary, the applicant shall submit documentation to the City demonstrating that they have been properly carried out prior to issuance of building permits for the project.

HAZ-2 Phase I Environmental Site Assessment

Prior to the issuance of a demolition permit for any building on the project site, the applicant shall retain a qualified environmental professional to prepare a Phase I Environmental Site Assessment (ESA) for the project site in accordance with the current ASTM E1527-21 standard. The Phase I ESA shall evaluate the potential presence of hazardous substances, including but not limited to contaminated soils, asbestos-containing materials (ACMs), lead-based paint, and polychlorinated biphenyls (PCBs), based on the site's historical use and age of existing structures. If the Phase I ESA identifies Recognized Environmental Conditions (RECs), a Phase II ESA shall be conducted to further investigate the nature and extent of contamination. If contamination is confirmed, appropriate remediation measures shall be developed in consultation with the appropriate regulatory agencies. All required investigations and, if necessary, remediation activities shall be completed prior to issuance of grading permits. Documentation of the completed assessments and any required remediation shall be submitted to the City for review and approval.

With implementation of Mitigation Measure HAZ-1 and Mitigation Measure HAZ-2 the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school?

There are no schools within 0.25 mile of the project site. The nearest schools are the following:

- Monte Vista Elementary School, approximately 0.35 mile northwest of the project site at 1615 West Elfred Avenue in West Covina
- Baldwin Park High School, approximately 0.61 mile northwest of the project site, at 3900 Puente Avenue in Baldwin Park
- Central Elementary School, approximately 0.91 mile west of the project site, at 14741 Central Avenue in Baldwin Park

During construction of the proposed project, hazardous and potentially hazardous materials would be utilized for the transport and operation of vehicles and machinery. As discussed above, the transport, use, and storage of hazardous materials during the construction of the proposed project would be conducted in accordance with all applicable State and federal laws, such as the HMTA, RCRA, the CHMMA, and the California Code of Regulations, Title 22. As discussed under impact discussion 9a, construction of the proposed project, and associated air pollutant emissions, would be temporary and less than significant. Furthermore, operation and maintenance of the proposed project would only involve the use of common cleaning and landscape maintenance materials comparable to those materials already in use in the project site vicinity. Because the nearest school

is located over 0.25 mile from the project site and operation of the proposed project would not include emissions or use of substantial quantities of hazardous materials, there would be no impact to nearby schools.

Potential uses of hazardous materials would be site-specific and limited to the physical boundaries of the project site, and therefore, the proposed project would not emit or handle hazardous materials within 0.25-mile of an existing or proposed school. There would be no impact.

NO IMPACT

d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The following databases and listings compiled pursuant to Government Code Section 65962.5 were checked for known hazardous materials contamination at the project site:

- USEPA – Superfund Enterprise Management System (SEMS) Search
- DTSC – EnviroStor database for hazardous waste facilities or known contamination sites; Cortese list of Hazardous Waste and Substances Sites
- SWRCB – GeoTracker search for leaking underground storage tanks (LUST) and other cleanup sites

The SEMS database search did not produce any results associated with the project site, indicating that the site is free of known hazards and contaminants (USEPA 2019). A search of the DTSC EnviroStor database did not identify any hazardous or known contamination sites within a 0.25 mile of the site (DTSC 2025a). Furthermore, according to the DTSC Cortese list, the only hazardous materials release site in West Covina is the BKK Sanitary Landfill located approximately 4.5 miles southeast of the project site (DTSC 2025b). According to GeoTracker, the project site does not contain any LUST or other cleanup sites. There are no LUST sites within 0.25 mile of the project site (SWRCB 2025).

Therefore, impacts related to hazardous material sites would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The project site is not located within two miles of a public airport or in an airport land use plan. The closest airport to project site is San Gabriel Valley Airport, approximately 5 miles west of the project site. Furthermore, no private airstrips are near the project site. Therefore, the proposed project would not result in safety hazards or excessive noise related to airports for people residing or working at the project site and its vicinity. No impact would occur.

NO IMPACT

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project would modify site access to include one driveway on North Nora Avenue and another on West Del Norte Street. In addition, the project will extend Del Norte Street from the existing terminus at Hollow Avenue easterly out towards Sunset Avenue, creating a new intersection. These improvements were analyzed in the *Del Norte Traffic Engineering and Construction Evaluation Technical Memorandum* prepared by Urban Crossroads, identify that there's adequate sight distance for the planned improvements (refer to Appendix K).

Additionally, the proposed residential development is consistent with adjacent land uses (refer to Section 11, *Land Use and Planning*) and would not introduce an incompatible use to local roadways. Internal roadways have been configured to allow for adequate turning radii throughout the site for passenger vehicle, garbage truck, and emergency vehicle access. Additionally, as part of building permit process, the West Covina Fire Department will review the project plans to confirm adequate emergency vehicle access is provided.

Furthermore, as discussed in Section 17, *Transportation* and in the *Del Norte Traffic Engineering and Construction Evaluation Technical Memorandum* included in Appendix K, development of the proposed project would not impair roadways or conflict with planned pedestrian, bicycle, and transit facilities in the vicinity. The proposed project would not have a significant impact on any area intersections that would be used for emergency access or evacuation. As such, operation of the proposed project would not interfere with existing emergency evacuation plans or emergency response plans in the area. Therefore, the proposed project would have a less than significant impact.

LESS-THAN-SIGNIFICANT IMPACT

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The project site is in an urban area of West Covina. Undeveloped wildland areas are not close to the project site. As detailed in Section 20, *Wildfire,* the project site is not in any "Fire Hazard Severity Zone" (including the "Moderate," "High," or "Very High" zones) for wildland fires (CAL FIRE 2025). The nearest Very High Hazard Severity Zones are approximately 3.0 miles north of the project site on the northeastern edge of the Santa Fe Dam Open Space area; and 3.0 miles southeast of the project site in the San Jose Hills. Therefore, the proposed project would not directly expose people or structures to a significant risk of loss injury or death involving wildland fires. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	■	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	■	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	■	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	■	☐
(iv) Impede or redirect flood flows?	☐	☐	■	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	■	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	■	☐

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The project site is almost entirely developed and is surrounded by residential and commercial uses in an urban area. The site is currently developed with buildings associated with its previous uses for the Del Norte Intermediate School and the East San Gabriel Valley Regional Occupational Program (ROP) Technical Center. Compared to existing conditions, and due to the density of proposed residential development, the proposed project would decrease pervious site surfaces and increase existing stormwater flows off the site. However, the proposed project would be required to comply with all established regulations under the National Pollution Discharge Elimination System (NPDES) permitting program to control both construction and operation stormwater discharges. Under the permit, the applicant would be required to eliminate or reduce non-stormwater discharges, develop and implement a SWPPP for proposed project construction activities, and perform inspections of the stormwater pollution prevention measures and control practices to ensure conformance with the SWPPP. Furthermore, the applicant would be required to implement all applicable source control BMPs to reduce water-quality impacts as listed under the NPDES permit. The proposed project would also be required to comply with WCMC water quality regulations. Chapter 9, Article III, Section 9-36, Control of pollutants from new developments/redevelopment projects, requires that a project implement a standard urban stormwater mitigation plan (SUSMP) that the City would review and approve prior to construction of the proposed project.

As required by the WCMC and NPDES permit, construction activities on the project site would use a series of BMPs to reduce erosion and sedimentation, and the construction contractor would be required to operate and maintain these controls throughout the duration of construction. According to proposed project plans, the grading plan is designed to drain all stormwater from within the project site into a private storm drain system. Catch basins and inlets would collect stormwater and convey water via 12-inch and 24-inch pipes to three infiltration galleries. Offsite drainage that currently flows towards the project site would be diverted via bio-swales along the north and east property lines that connect to the existing storm drain system in North Nora Avenue and West Del Norte Street. Because the proposed project includes infiltration basins that would improve infiltration and stormwater quality and would comply with all applicable local and federal stormwater drainage requirements, impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project site receives its water service from Azusa Light and Water (ALW). ALW primarily sources its water supply from 11 groundwater wells that pump water from the Main San Gabriel Basin, which account for 65 percent of its water supply, and surface water from the San Gabriel River, which accounts for approximately a third of the water supply (ALW 2021). Imported water is sourced from Metropolitan Water District of Southern California and is only used on an emergency basis to supplement groundwater and surface water supplies (ALW 2021).

As discussed in Section 19, *Utilities and Service Systems,* the proposed project's water demand would not substantially affect the City's ability to meet water demands. According to its 2020 Urban Water Management Plan (UWMP), ALW would be able to provide reliable water supplies for an average year, single dry year, and multiple dry years for its existing and planned supplies through 2045 (ALW 2021). Though the proposed project would increase the amount of impervious surface

on the site compared to existing conditions, the incorporation of infiltration galleries would improve the infiltration mechanism and ensure stormwater is captured and treated on the project site prior to conveying to off-site storm drain systems or into groundwater. The proposed project would be served by available water supply and would not significantly deplete groundwater supplies or interfere with groundwater recharge. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

The project site is generally flat, with minimal elevation change across the site. The project site does not contain any streams, rivers, or other drainage features. According to proposed project plans, drainage for the project site is directed toward North Nora Avenue and West Del Norte Street. Though the proposed project would increase the amount of impervious surface on the site compared to existing conditions, the incorporation of infiltration galleries would improve the infiltration mechanism and ensure stormwater is captured and treated on the project site prior to conveying to the off-site storm drain systems or into groundwater. Therefore, polluted runoff leaving the project site would not be increased compared to existing conditions. Furthermore, as listed under impact discussion *10.a*, the proposed project would comply with the provisions of the NPDES General Construction Permit and the City's urban runoff requirements as stated in the WCMC, which would reduce the quantity and level of pollutants in runoff leaving the project site. Therefore, impacts related to erosion and siltation would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

The project site is generally flat, with minimal elevation change across the site. The project site does not contain any streams, rivers, or other drainage features. Though the proposed project would increase the amount of impervious surface on the site compared to existing conditions, the incorporation of infiltration galleries would improve the infiltration mechanism and ensure stormwater is captured and treated on the project site prior to conveying to the off-site storm drain systems or into groundwater. Therefore, any runoff from the site would be conveyed into the existing drainage system and the proposed project would not substantially change the site's drainage patterns and would not alter a stream, river or other drainage course in a manner that would result in flooding or redirect flood flows. The proposed project would not increase runoff such that flooding would occur or flood flows would be impeded or redirected, and impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The project site is generally flat, with minimal elevation change across the site. The project site does not contain any streams, rivers, or other drainage features. Though the proposed project would increase the amount of impervious surface on the site, compared to existing conditions, the incorporation of infiltration galleries would improve the infiltration mechanism and ensure stormwater is captured and treated on the project site prior to conveying to the off-site storm drain systems or into groundwater. Furthermore, as discussed under impact discussion *10.a*, the proposed project would comply with the City's urban runoff requirements as stated in the WCMC and with the requirements of NPDES, which would reduce the quantity and level of pollutants in runoff leaving the project site. Therefore, the proposed project would not create runoff that would exceed the capacity of the storm drain system and would not provide a substantial additional source of polluted runoff. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is not located near any major bodies of water that could produce seiche impacts at the project site. In addition, the project site is located approximately 35 miles from the Pacific Ocean and, according to the California DOC, is not inside the boundaries of any regional tsunami impact areas (California DOC 2025c). Furthermore, according to the Federal Emergency Management Agency (FEMA), the project site is located in Zone X and has a 0.2 percent Annual Chance Flood Hazard, indicating that the project site is in an area of minimal flood hazard (FEMA 2025). However, the City could be impacted by flooding in the event of dam failure at the Puddingstone Dam or San Dimas Dam, located 7.2 miles east and 9.5 miles northeast of the project site, respectively (West Covina 2020). The Puddingstone Dam failed once in 1926, when it overtopped due to construction on the dam, and there was no loss of life or significant damage. The San Dimas Dam has not experienced failure to date (West Covina 2020). Dam failure at either of these dams is unlikely, and each dam has an Emergency Action Plan in place to guide emergency response in case of dam failure. Furthermore, the proposed project would not involve the regular use or storage of large quantities of hazardous materials. Therefore, the proposed project would not pose a significant risk of release of pollutants due to inundation and impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The proposed project would receive water service from ALW, which maintains a UWMP (ALW 2021). ALW primarily sources water from groundwater wells and purchases imported water from Metropolitan on an emergency basis (ALW 2021). The proposed residential uses on the project site would not be point source generators of water pollutants and would not interfere with the ability of the City to maintain water quality standards per the UWMP. Furthermore, as discussed under impact discussion *10.a*, the proposed project would include infiltration galleries that would improve

infiltration and ensure stormwater is captured and treated on the project site prior to conveying to the off-site storm drain systems or into groundwater. Section 19*, Utilities and Service Systems* provides additional details about proposed project water demand. The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	■	☐
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	■	☐

a. Would the project physically divide an established community?

The project site is located in an urban area surrounded by residential, recreational, and commercial uses. The project site is bordered by Del Norte Park to the north and northeast; North Sunset Avenue, one residential building, and one commercial building to the east; West Del Norte Street and residential properties to the south; and North Nora Avenue to the west. The areas beyond these immediately bordering uses can be generally characterized as consisting of residential neighborhoods of mostly one-story single family homes.

The proposed project involves demolition of the existing structures on the site and construction of a new residential community in a predominantly residential area. The proposed project would also include the addition of internal access drives throughout the project site, and walls and fencing to delineate the boundaries of the community and individual properties within the community.

As the project site is already fenced and previously was developed and operated, the proposed project would not substantially alter access in and around the project site or divide an established community. Therefore, impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project involves the construction of a residential community in an area zoned Single Family Residential (R-1) and having a General Plan designation of Civic: Schools. According to the West Covina General Plan and Municipal Code, areas zoned R-1 are intended for one single-family dwelling per lot.

However, land use on the site would be regulated by the Del Norte Specific Plan (Appendix A), which would provide the development standards and regulations for development of the proposed project and supersede the existing zoning.

Additionally, while the proposed project requires an amendment to the General Plan (PlanWC), it is consistent and/or compatible with surrounding residential development in terms of aesthetics (as

described in Section 1, *Aesthetics*) and residential land use type; and supports the General Plan's goals to enhance neighborhood character and improve the pedestrian environment by providing improved landscaping, street edges, and sidewalks. Additionally, the proposed project is consistent with all applicable objective land use standards.

Therefore, the proposed project would not conflict with any applicable land use plans, policies, or regulations. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	■

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The California Surface Mining and Reclamation Act of 1975 was enacted to promote conservation and protection of significant mineral deposits. According to the California Department of Conservation Mineral Land Classification Maps, the project site is in an area with MRZ-2 designation, indicating that significant measured mineral resources may exist or the likely presence of mineral resources(DOC 2010). However, according to the EIR for the City's 2016 General Plan Update, the City does not contain mineral resources appropriate for extraction (City of West Covina 2016b). The proposed project involves demolition of school buildings and construction of a new residential community in a residential area of the City. The project site and its vicinity are, therefore, not used for or compatible with mineral deposit recovery. Given the existing developed condition of the site and its surroundings and the consistency of the proposed project with the land use designation, zoning, and actual use of the project site and its surroundings, the loss of availability of a known mineral resource would not occur, and there would be no impact.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	■	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	■	☐	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	■	☐

Overview of Noise and Vibration

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

Human Perception of Sound

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible

(8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

Sound Propagation and Shielding

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a "sound power level" or a "sound pressure level," which are two distinct characteristics of sound. Both share the same unit of measurement, dB. However, sound power (expressed as L_{pw}) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

Descriptors

The impact of noise is not a function of loudness alone. The time of day and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level (L_{eq}).

L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a one-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise levels may also be reduced by intervening structures. The amount of reduction provided by the "shielding" of these features depends on the size of the structure/s, the location of the structure/s relative to the noise source and receivers, and the frequency content of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight

between a noise source and receiver will provide at least a 5-dBA reduction in source noise levels at the receiver (FHWA 2011).

Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. Vibration levels are usually expressed as a single-number measure of vibration magnitude in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second. Since it is related to the stresses experienced by buildings, PPV is often used in monitoring and controlling construction vibration to prevent damage to nearby structures.

Project Noise Setting

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Sensitive land uses are generally defined as locations where people reside or where the presence of noise could adversely affect the use of the land. According to the City of West Covina General Plan, noise sensitive uses in the city includes residential uses, health care facilities, and schools (City of West Covina 2016b).

Vibration sensitive receptors, which are similar to noise sensitive receptors, include residences and institutional uses (e.g., schools, libraries, and religious facilities). However, vibration-sensitive receptors also include buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studios or medical facilities with sensitive equipment).

The nearest sensitive receptors in the project area include the residential area adjacent to West Del Norte Street, North Nora Avenue, and North Sunset Avenue, all located less than 200 feet from the project boundary, which includes multi-family and single-family residences.

Noise Measurements

The most common source of noise in the project site vicinity is vehicular traffic from nearby roadways such as North Sunset Avenue, North Nora Avenue, and West Rowland Avenue; and from Del Norte Park. To characterize ambient sound levels at and near the project site, four sound level measurements were taken: two measurements on the south side of the project site primarily capturing traffic noise; and two measurements on the north side of the project site primarily capturing noise from activities at the park. The two measurements on the south side of the project site were taken at the corner of North Nora Avenue and West Del Norte Street, and the southeast corner of the project site on the west side of North Sunset Avenue, between 12:28 pm and 12:53 pm on Wednesday, May 29, 2024. The two measurements on the north side of the project site were taken in Del Norte Park approximately 50 feet south of the Little League Field, and in the small dog portion of the Central Bark Dog Park, between 1:04 pm and 1:23 pm on Saturday, November 16, 2024. Table 12 summarizes the results of the noise measurement, and Figure 11 shows the noise measurement locations.

Table 12 Project Site Vicinity Noise Measurement Results

Site Number	Description	Primary Noise Source	Start Time of Measurement	Measured Noise Level	
				dBA Leq	dBA Lmax
Noise Measurements taken on Wednesday, May 29, 2024					
1	Located near the southwest corner of the project site, approximately 25 feet north of West Del Norte Street centerline and 60 feet east of North Nora Avenue centerline	Vehicles on North Nora Avenue and West Del Norte Street	12:28 p.m.	55.0	70.1
2	Located near lower southeast corner of the project site, approximately 65 feet west of Sunset Avenue centerline	Vehicles on North Sunset Avenue	12:43 p.m.	60.3	68.3
Noise Measurements taken on Saturday, November 16, 2024					
3	Located on the north property line, approximately 50 feet south of the Little League Field	People in Stands and on Little League Field	1:04 p.m.	55.0	66.1
4	Located a couple feet north of the north property line in the small dog portion of the Central Bark Doig Park	Dogs in the Dog Park	1:23 p.m.	62.4	78.7

Noise measurements taken with a Larson-Davis Model 831 Type 1 precision sound level meter.

dBA = A-weighted decibel; Leq = equivalent noise level; L_{min} = minimum noise level; L_{max} = maximum noise level

Figure 11 Noise Measurement Locations

Source: Vista Environmental: Noise Impact Analysis. 1501 Del Norte Street Residential Project. June 2025 (Appendix H)

Regulatory Setting

City of West Covina 2016 General Plan Our Healthy and Safe Community

The City maintains the health and welfare of its residents with respect to noise through abatement ordinances and land use planning. The City's General Plan Our Healthy and Safe Community Section includes several policies and actions with the intent to reduce excessive noise impacts that are applicable to the proposed project:

- **Policy 6.23**. Ensure that new development is not exposed to excessive noise.
  - **Action 6.23a.** Require new developments to reduce exterior noise levels for any usable outdoor area to the "normally acceptable" range in the City's land use/noise compatibility matrix, shown in Table 6.4 of this Noise Element.
  - **Action 6.23c.** Require any residential component of all new buildings to comply with the requirements of the residential noise insulations standards of the most recent edition of California's building code.
- **Policy 6.24**. Ensure that new development does not expose surrounding land uses to excessive noise.
  - **Action 6.24.** Through the environmental review process, require applicants for new development to analyze potential noise impacts on nearby noise-sensitive receivers. If noise levels generated exceed the "normally acceptable" range shown in Table 6.4 of this Noise Element, require appropriate noise mitigation so that these levels would no longer be exceeded.
- **Policy 6.25**. Minimize noise conflicts between local noise generators and sensitive receivers.
  - **Action 6.25a**. Continue to enforce the City's existing Noise Ordinance.

City of West Covina Municipal Code

The City of West Covina Municipal Code establishes the following applicable standards related to noise.

SECTION 15-85 LOUD, UNNECESSARY NOISES PROHIBITED GENERALLY

Notwithstanding any other provision of this article, it shall be unlawful for any person within any residential zone of the city to willfully make or continue or cause to be made or continued, any loud, unnecessary or unusual noise which unreasonably disturbs the peace and quiet of any residential neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. If the noise which is being created is plainly audible at a distance of fifty (50) feet from the property line of any property (or if a condominium or apartment house, within any adjoining unit or apartment), building, structure or vehicle in which it is located, it shall be presumed that the noise being created is in violation of the provisions of this section.

SECTION 15-95 CONSTRUCTION AND BUILDING PROJECTS

(a) *Regulation.* Between the hours of 8:00 p.m. of one day and 7:00 a.m. of the next day, it shall be unlawful for any person within a residential zone, or within a radius of five hundred (500) feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, steam shovel, pneumatic

hammer, derrick, steam or electric hoist, or other construction type device in such manner as to create any noise which causes the noise level at the property line to exceed the ambient noise level by more than five (5) decibels unless a permit therefor has been duly obtained in accordance with paragraph (b) of this section. No permit shall be required to perform emergency work as defined in section 15-83 of this article.

(b) *Permit procedure.* A permit may be issued authorizing noises prohibited by this section whenever it is found that the public interest will be served thereby. Applications for permits shall be in writing, shall be accompanied by an application fee in the amount of five dollars ($5.00), and shall set forth in detail facts showing that the public interest will be served by the issuance of such permit. Applications shall be made to the building director; provided, however, that, with respect to work upon or involving the use of a public street, alley, building, or other public place under the jurisdiction of the engineering department, applications shall be made to the city engineer. Anyone dissatisfied with the denial of a permit may appeal to the council.

(c) *Unloading and Loading.* Between the hours of 8:00 p.m. of one day and 6:00 a.m. of the next day, it shall be unlawful for any person within the radius of five hundred (500) feet of generally occupied residences to unload, load or otherwise perform duties preparatory to the commencement of construction or repair work on buildings and structures. Generally occupied residences shall include, but not limited to, areas which there is a reasonable probability of occupancy in the area.

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, with the incorporation of mitigation. The following section calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the proposed project and compares the noise levels to the City standards.

Construction-Related Noise

The construction activities for the proposed project are anticipated to include demolition of the existing school structures and parking areas, site preparation and grading of the 13.56-acre project site, building construction of a residential community with 282 homes, paving of the onsite roads and sidewalks, and application of architectural coatings. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

The nearest sensitive receptors to the project site are the single-family homes located as near as eight (8) feet south of the southeastern portion of the project site and mixed-use office professional (zoned OPMU) structures as near as four (4) feet north of the southeastern portion of the project site. There are also single-family homes located on the west side of North Nora Avenue, which are as near as 90 feet west of the project site. In addition, Del Norte Park is adjacent to the north and east sides of the project site, where the nearest picnic table area (passive recreation area) is located as near as 150 feet north of the project site. In order to account for the acoustical center of the offroad equipment, it has been assumed that the average width of offroad equipment is 12 feet

wide, which would result in an additional 6 feet being added to the distances to the nearby sensitive receptors.

Section 15-95(a) of the City's Municipal Code restricts construction activities from occurring between the hours of 8:00 p.m. one day and 7:00 a.m. of the next day. The City construction noise standards do not provide any limits to the noise levels that may be created from construction activities that occur during the allowable hours of construction. As such, in order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the FTA construction noise criteria thresholds detailed above have been utilized, which shows that a significant construction noise impact would occur if construction noise exceeds 80 dBA during the daytime at the nearby homes and park.

Construction noise impacts to the nearby sensitive receptors have been calculated through use of the RCNM and the parameters and assumptions that show the anticipated construction equipment that would be used in each phase of construction. The calculated construction-related noise impacts prior to mitigation are shown below in Table 13 and the RCNM printouts for the unmitigated conditions are provided in Appendix H.

Table 13 Construction Noise Levels at the Nearby Sensitive Receptors Prior to Mitigation

	Construction Noise Level (dBA Leq) at:			
Construction Phase	**Homes to the East[1]**	**Homes to the South[2]**	**Homes to the West[3]**	**Park to the North[4]**
Demolition	97	94	78	74
Site Preparation	94	91	74	70
Grading	95	92	77	74
Building Construction	94	91	76	72
Paving	88	86	71	67
Painting	88	85	70	66
Maximum Construction Noise Level	**97**	**94**	**78**	**74**
FTA Construction Noise Threshold	**80**	**80**	**80**	**80**
Exceed Threshold?[4]	Yes	Yes	No	No

[1] The nearest homes to the east are located as near as 4 feet from the project site.

[2] The nearest homes to the south are located as near as 8 feet from the project site.

[3] The nearest homes to the west are located as near as 90 feet from the center of the project site

[4] The distance to the park to the north is based on the location of the picnic table area in the park that is located as near as 150 feet from the project site.

Source: Vista Environmental: Noise Impact Analysis. 1501 Del Norte Street Residential Project. September 2025 (Appendix H); RCNM, Federal Highway Administration, 2006

Table 13 shows that the greatest noise impacts would occur during the demolition phase, with noise levels as high as 97 dBA Leq at the homes to the east, 94 dBA Leq at the homes to the south, 78 dBA Leq at the homes to the west, and 74 dBA Leq at the park to the north. Table 13 shows that the noise levels at the homes to the east and south would exceed the FTA construction noise standard of 80 dBA, while the noise levels at the homes to the west and park to the north would be below the FTA construction noise standard of 80 dBA. This would be considered a significant impact.

Mitigation Measure 1 has been provided that would require the installation of a temporary noise barrier on the portion of the east side that is adjacent to the homes and entire south side as well as

providing additional temporary noise barriers around all stationary equipment and concrete saws that are operated within 30 feet of the homes to the east and south and Mitigation Measure 2 has been provided that would restrict the largest equipment, which is typically the loudest from operating within 20 feet from any offsite structure.

According to the Housing and Urban Development's Barrier Performance Module, a ten-foot barrier would result in a noise reduction of approximately 10 dBA, which was entered into the RCNM model for the homes to the east and homes to the south in order to account for Mitigation Measure 1. In addition, the minimum distance was adjusted out to 20 feet for the homes to the east and homes to the south in order to account for Mitigation Measure 2. The RCNM model was re-run and the calculated mitigated construction-related noise levels are shown in Table 14 and the RCNM printouts for the mitigated conditions are provided in Appendix D. As shown in Table 14, with implementation of Mitigation Measures 1 and 2, construction-related noise impacts would be below the FTA construction noise standard of 80 dBA at all analyzed receptors. Therefore, with implementation of Mitigation Measures 1 and 2, construction noise impacts would be less than significant.

Table 14 Mitigated Construction Noise Levels at the Nearby Sensitive Receptors

	Construction Noise Level (dBA Leq) at:			
Construction Phase	**Homes to the East[1]**	**Homes to the South[2]**	**Homes to the West[3]**	**Park to the North[4]**
Demolition	79	79	78	74
Site Preparation	76	76	74	70
Grading	77	77	77	74
Building Construction	76	76	76	72
Paving	71	71	71	67
Painting	71	71	71	67
Maximum Construction Noise Level	**79**	**79**	**78**	**74**
FTA Construction Noise Threshold[5]	**80**	**80**	**80**	**80**
Exceed Threshold?[4]	No	**No**	No	No

[1] The nearest homes to the east are located as near as 4 feet from the project site.

[2] The nearest homes to the south are located as near as 8 feet from the project site.

[3] The nearest homes to the west are located as near as 90 feet from the center of the project site

[4] The park to the noise is based on the picnic table area that is located as near as 150 feet from the project site.

[5] Obtained from Table B of the Vista Environmental: Noise Impact Analysis. 1501 Del Norte Street Residential Project. September 2025 (Appendix H)

Source: RCNM, Federal Highway Administration, 2006

Operational-Related Noise

Potential noise impacts associated with the operations of the proposed project would be from project-generated vehicular traffic on the nearby roadways and from onsite noise sources to the nearby sensitive receptors. The noise impacts created from project generated vehicular traffic on the nearby roadways and from onsite noise sources to the nearby homes have been analyzed separately below.

Roadway Vehicular Noise Impact to Nearby Sensitive Receptors

Vehicle noise is a combination of the noise produced by the engine, exhaust and tires. The level of traffic noise depends on three primary factors (1) the volume of traffic, (2) the speed of traffic, and (3) the number of trucks in the flow of traffic. The proposed project does not propose any uses that would require a substantial number of truck trips and the proposed project would not alter the speed limit on any existing roadway so the proposed project's potential offsite noise impacts have been focused on the noise impacts associated with the change of volume of traffic that would occur with development of the proposed project.

Neither the General Plan nor the Municipal Code defines what constitutes a "substantial permanent increase to ambient noise levels". As such, this impact analysis has utilized guidance from the Federal Transit Administration for a moderate impact.

The potential offsite traffic noise impacts created by the on-going operations of the proposed project have been analyzed through utilization of the FHWA model and parameters provided in Appendix H. The proposed project's potential offsite traffic noise impacts have been calculated through a comparison of the existing year scenario to the existing with project scenario. The results of this comparison are shown in Table 15.

Table 15 Project Related Roadway Noise Contributions

		dBA CNEL at Nearest Receptor[1]			
Roadway	Segment	Existing	Existing Plus Project	Project Contribution	Increase Threshold[2]
North Nora Avenue	North of Driveway 1	48.2	50.0	+1.8	+7 dBA
North Nora Avenue	North of West Del Norte Street	48.2	49.0	+0.8	+7 dBA
North Nora Avenue	South of West Del Norte Street	47.5	48.5	+1.0	+7 dBA
North Yaleton Avenue	South of West Del Norte Street	40.5	44.6	+4.1	+7 dBA
North Sunset Avenue	North of West Workman Avenue	67.2	67.3	+0.1	+1 dBA
West Del Norte Street	West of North Yaleton Avenue	45.3	48.4	+3.1	+7 dBA
West Del Norte Street	East of North Yaleton Avenue	43.4	49.9	+6.5	+7 dBA

[1]Distance to nearest sensitive receptors shown in Table 13 does not take into account existing noise barriers such as walls and structures.

[2]Increase Threshold obtained from the FTA's allowable noise impact exposures.

Source: Vista Environmental: Noise Impact Analysis. 1501 Del Norte Street Residential Project. June 2025 (Appendix H); FHWA Traffic Noise Prediction Model FHWA-RD-77-108.

Table 15 shows that the proposed project's permanent noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed the roadway noise increase thresholds detailed above. It should be also noted that the noise levels shown in Table 15 do not account for non-road noise sources and the greatest project impacts that occur on West Del Norte Street are below the measured ambient noise level of 55.0 dBA Leq as shown above in Table 15. For these reasons, the proposed project would not result in a substantial permanent roadway noise increase above ambient noise levels. Roadway noise impacts would be less than significant.

Onsite Noise Impacts to Nearby Sensitive Receptors

Operation of the project may create onsite noise impacts to the nearby residential properties from the operation of air conditioning equipment. Section 15-85 of the Municipal Code restricts the making of noise in any residential neighborhood that is plainly audible at a distance of 50 feet from the property line of any property. In order to provide a quantitative threshold, "plainly audible" has been assumed in this analysis to be a noise level that exceeds ambient noise levels at a distance of 50 feet from the nearby homes and park property lines.

The project applicant has stated that the proposed townhomes will likely use a heat pump made by Carrier Series 38 MURA, which produces noise levels as high as 62 dBA at one meter. The noise level at 50 feet from the nearest residential property lines were calculated through use of standard geometric spreading of noise, which provides an attenuation rate of 6 dB per doubling the distance between source and receptor. Table 16 shows the calculated noise levels at the nearby sensitive receptors.

Table 16 Onsite Operational Noise Levels at the Nearby Sensitive Receptors

	Calculated Noise Levels (dBA Leq) at[1]:			
Noise Source	Homes to the East[2]	Homes to the South[3]	Homes to the West[4]	Park to the North[5]
Air Conditioner Equipment	37	31	31	47
Existing Ambient Noise Levels	60.3	60.3	55.0	55.0
Exceed Ambient Noise Threshold?	No	No	No	No

[1] Noise levels calculated based on a reference noise level of 62 dB at one meter and a standard geometric spreading of noise, which results in a 6.0 dB drop in noise when distance is doubled.

[2] The distance from the nearest air conditioner equipment to the nearest property line for the Homes to the East is 10 feet. As such, noise was calculated at 60 feet.

[3] The distance from the nearest air conditioner equipment to the nearest property line for the Homes to the South is 60 feet. As such, noise was calculated at 110 feet.

[4] The distance from the nearest air conditioner equipment to the nearest property line for the Homes to the West is 60 feet. As such, noise was calculated at 110 feet.

[5] The distance from the nearest air conditioner equipment to the property line for the Park to the North is 5 feet. As such, noise was calculated at 55 feet.

Table 16 shows that the proposed project's operational noise from air conditioner units on the project site would create a noise level as high as 47 dBA at the park to the north and as high as 37 dBA at the nearest homes to the east. The operational onsite noise levels would be below the existing ambient noise levels at 50 feet from the nearest property lines. Therefore, operation of the proposed project's onsite noise sources would not create a substantial increase in ambient noise levels that are in excess of applicable noise standards. Onsite noise impacts would be less than significant.

Generation of Noise Levels in Excess of Standards

The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, with the incorporation of mitigation for temporary construction noise (N-1 and N-2).

Mitigation Measure

N-1 Construction Temporary Noise Barriers

The project applicant shall require the installation of a minimum 12-foot high temporary noise barrier on the portion of the east side of the project site that is adjacent to the homes as well as the entire south side of the project site. The project applicant shall also require the installation of minimum 8-foot high temporary noise barriers around all stationary equipment and concrete saws that are operated within 30 feet of the homes located on the east and south sides of the project site. The temporary noise barriers shall be constructed with either minimum 5/8" thick plywood or oriented strand board (OSB) or sound blankets that have a minimum Sound transmission class (STC) rating of 15 STC.

N-2 Construction Equipment Use Restrictions

The project applicant shall require that all construction contractors restrict the operation of any large bulldozers that is powered by a greater than 150 horsepower engine from operating within 20 feet of any off-site structure. The grading contractor shall use a small bulldozer (i.e., D1, D2, or D3 dozers) or other type of equipment that is less than 150 horsepower to perform all demolition and grading activities that are located within 20 feet of any off-site structure.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

The proposed project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the proposed project.

Construction-Related Vibration Impacts

The construction activities for the proposed project are anticipated to include demolition of the existing school structures and parking areas, site preparation and grading of the 13.56-acre project site, building construction of a residential community with 282 homes, paving of the onsite roads and sidewalks, and application of architectural coatings. Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road equipment.

The primary sources of vibration during construction would be from the operation of a bulldozer during demolition and grading activities and from a vibratory roller during paving activities. A large bulldozer would create a vibration level of 0.089 inch-per-second PPV or 87 VdB at 25 feet and a vibratory roller would create a vibration level of 0.21 inch-per-second PPV or 94 VdB at 25 feet. Vibration has the potential to create annoyance to the nearby residents as well as damage to the nearby structures, which have been analyzed separately below.

Human Annoyance Vibration Impacts

The FTA guidance that is detailed above in Section 4.1, defines the threshold for human annoyance in residential buildings where people normally sleep is 72 VdB. Since the human annoyance threshold is based on the daily average, the analyzed distance utilized is based on the nearest offsite home to the center of the project site, which are the homes to the east that are located as near as 485 feet from the center of the project.

As detailed above, a vibratory roller would create the highest level of vibration at 94 VdB at 25 feet. Based on typical vibration propagation rates, the average vibration level at the nearest homes to the east (485 feet from center of project site) would be 56 VdB, which is below the FTA's human annoyance threshold of 72 VdB. Therefore, construction-related human annoyance vibration impacts would be less than significant.

Building Damage Vibration Impacts

Caltrans guidance defines the threshold for building damage to older residential structures and other older buildings to 0.3 inch per second PPV, which is based on the peak vibration level. Since the building damage threshold is based on the peak vibration level, the analyzed distance is the shortest distance between where construction equipment would operate and the nearest offsite structure. The nearest offsite structures are the single-family homes located as near as eight (8) feet south of the southeastern portion of the project site and mixed-use office professional (zoned OPMU) structures as near as four (4) feet north of the southeastern portion of the project site.

For the vibratory roller, the laying of asphalt pavement would occur as near as 24 feet from the nearest home located south of the southeastern portion of the project site. Based on typical vibration propagation rates, the vibration level at the nearest offsite home (24 feet away) would be 0.22 inch per second PPV. The vibration level at the nearest offsite home would be below the building damage threshold of 0.3 inch per second PPV threshold that is detailed above. Therefore, the use of vibratory rollers during paving activities, would create a less than significant building damage vibration impact.

For the large bulldozer, based on typical vibration propagation rates, the vibration level at the nearest offsite mixed-use structure (4 feet away) would be 0.67 inch per second PPV. The vibration level at the nearest offsite mixed-use structure would exceed the building damage threshold of 0.3 inch per second PPV. This would be considered a significant impact.

Mitigation Measure N-2 is provided that would require that the applicant to restrict the use of a large dozer within 20 feet of any offsite structure. For all grading activities that occur within 20 feet of any offsite structure, the applicant shall require the use of a small dozer or other type of equipment that is less than 150 horsepower. A small bulldozer would create a vibration level of 0.003 inch-per-second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest mixed-use structure (4 feet away) would be 0.023 inch per second PPV, which would be below the building damage threshold of 0.3 inch per second PPV. Therefore, with implementation of Mitigation Measure N-2, a less than significant building damage vibration impact is anticipated from construction of the proposed project.

Operations-Related Vibration Impacts

The proposed project would consist of the development of a residential community. The ongoing operation of the proposed project would not include the operation of any known vibration sources other than typical onsite vehicle operations for a residential development. Therefore, a less than significant vibration impact is anticipated from operation of the proposed project.

Mitigation Measure

N-2 Construction Equipment Use Restrictions (see above)

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airport is San Gabriel Valley Airport, located approximately 5.5 miles west of the project site. The project site is located outside of the Airport Land Use Plan, and the 60 dBA CNEL noise contours, of this airport. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	■	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	■	☐

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Existing development on the project site includes buildings and ancillary structures associated with the site's previous use for Del Norte Intermediate School and the East San Gabriel Valley Regional Occupational Program (ROP) Technical Center. The proposed project involves the construction of a total of up to 282 residential units.

According to the California Department Of Finance, the City has an estimated current population of 109,428, with 35,864 households with an average of 3.14 persons per household (CDOF 2025). The State's anticipated growth level for the City is reflected by the City of West Covina's RHNA allocation is 5,346 additional housing units during the 2021-2029 planning period.

The 282 housing units generated by the proposed project would represent approximately 5.3 percent of the City's RHNA allocation.[5] If all of the proposed project's housing units were filled by new residents of the City with an average household size of 3.14 persons, the proposed project would increase the City's existing population by 885, or approximately 0.8 percent, to 110,313, which would be within SCAG's 2045 population forecast of 118,900 residents (SCAG 2020).

Therefore, population and housing growth generated by the proposed project would be within SCAG forecasts for the City and impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

[5] Assuming one household per housing unit.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

There is currently no housing on the project site; therefore, the proposed project would not displace existing housing or people and would not necessitate the construction of replacement housing elsewhere. No impact would occur.

NO IMPACT

15 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	1 Fire protection?	☐	☐	■	☐
	2 Police protection?	☐	☐	■	☐
	3 Schools?	☐	☐	■	☐
	4 Parks?	☐	☐	■	☐
	5 Other public facilities?	☐	☐	■	☐

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The West Covina Fire Department (WCFD) provides fire protection and paramedic emergency services to residents and businesses within the City. The project site is in located in the district of Fire Station No. 3, which is located at 1433 West Puente Avenue approximately 0.25 mile north of the project site. According to the City, the WCFD responds to the average emergency medical service (EMS) call with one fire engine and paramedic ambulance with a total of five personnel, and for single alarm/initial fire calls, the response would consist of three engines, one ladder truck, one paramedic vehicle, and one command unit, for a total of 15 personnel. More equipment and additional personnel may be called to respond, based on a greater alarm fire or more significant event, at the discretion of the fire captain and/or the incident commander (City of West Covina 2025).

The proposed project is designed to accommodate emergency access to the site. As shown in Figure 3, fire access routes have been designed to meet the minimum width and turning dimensions required by WCFD. Furthermore, all buildings would be constructed to meet the current building code requirements for fire safety. The West Covina Fire Prevention Bureau of the WCFD provides

technical review of all building construction plans within the City to ensure proposed buildings meet the City's adopted 2025 California Fire Code, 2025 California Building Code (CBC), California Health and Safety Code, and WCMC standards prior to construction. As such, the WCFD would review the site and building plans for the proposed project as part of the City's review process. The proposed project would demolish the school facilities currently on the site and replace them with 34 single-family detached homes and 248 attached townhomes and stacked flats, for a total of 282 homes, which would incrementally increase demand for fire protection services. However, the project site is in an urbanized area already served by the WCFD and the proposed project would be required to adhere to all applicable Fire Code standards and requirements. Therefore, the proposed project would not have a significant impact on fire response times nor create a substantially greater need for additional fire protection services above current capacity.

General Plan Policy P6.13 aims to optimize firefighting and emergency response capabilities. Specifically, Action A6.13-a under Policy P3.11 states that an increase of public access to fire protection services would be enhanced by an increase in fire staffing and funding to coincide with increasing population, development, and calls for public services. Consistent with the City's General Plan policies and actions, developers in the City are required to pay development impact fees that go toward public facilities such as fire facilities, as per WCMC Section 17-204. Because it would not create a substantially greater need for additional fire protection services above current capacity, the proposed project would not require new or expanded facilities to support fire protection and emergency response providers. Therefore, the proposed project's potential impacts to fire services and facilities would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The West Covina Police Department (WCPD) provides police protection services to residents and businesses within the City. As of June 2025, the WCPD consists of a full-time workforce of 96 sworn Officers and 41 civilians, with approximately 52 percent of all sworn Officers pertaining to the Patrol Division. The Patrol Division focuses on patrolling City streets, answering calls for service, and identifying potential crime problems. In addition, there are approximately 7 part-time civilian positions in the force (WCPD 2025). With approximately 109,428 residents and 885 additional potential residents resulting from the proposed project in West Covina and 96 sworn officers, the WCPD currently operates with 0.87 officers per 1,000 residents, which is below the national average of 1.7 officers per 1,000 residents for police departments serving a population between 100,000 to 249,999. The WCPD would need an additional 92 officers to reach the 188 total officers that would allow it to meet the national average.

The project site is located in WCPD Service Area 1 (North), and the police station is located at 1444 West Garvey Avenue, approximately 0.5 mile south of the project site along public streets. The proposed project would incrementally increase demand for police protection services by adding up to approximately 885 residents to the City as described in Section 14, *Population and Housing*. However, the ratio of police officers to residents would remain at 0.87 officers per 1,000 residents even with the additional residents generated by the proposed project. Furthermore, the project site is in a highly urbanized area already served by the WCPD and the proposed project would not have a

significant impact on police response times nor create a substantially greater need for additional police services above current capacity.

West Covina General Plan Policy P6.11 aims to provide community safety through enhanced police services. Specifically, Action A6.11-a under Policy P6.11 states that an increase of public access to police services would be enhanced by an increase in police staffing and funding to coincide with increasing population, development, and calls for public services. Consistent with the City's General Plan policies and actions, developers in the City are required to pay development impact fees that go toward police facilities, as per Chapter 17, Article IV of the WCMC. Because it would not create a substantially greater need for additional police services above current capacity, the proposed project would not result in the need for new or physically altered police protection facilities that could have an environmental impact, and impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

West Covina is primarily served by the West Covina Unified School District (WCUSD), Covina-Valley Unified School District (CVUSD), and Rowland Unified School District (RUSD), as well as other districts at least partially within West Covina. The project site, specifically, is served by WCUSD. Based on available enrollment data, the estimated number of students enrolled is 14,750 at WCUSD (Ed-Data 2025). The need for new school facilities is typically associated with a population increase that generates an increase in enrollment large enough to cause new schools to be constructed. The proposed project involves construction of 34 single-family detached homes and 248 attached townhomes and stacked flats, for a total of 282 homes. As discussed in Section 14, *Population and Housing*, if all of the proposed project's housing units were filled by new residents of the City, the proposed project would increase the City's existing population by 885 residents. The Environmental Impact Report for the City's General Plan (City of West Covina 2016b) assumes a student generation rate of 0.5 students per single family detached dwelling unit and 0.36 students per multi-family dwelling unit. Using these rates, the proposed project would generate 106 students, which would increase the combined current enrollment of all schools in the WCUSD from 14,750 students to 14,856 students, an increase of approximately 0.7 percent.

The applicant would be required to pay state-mandated school impact fees that would contribute to the funds available for development of new school facilities. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization."

For the reasons discussed above, the proposed project would not increase student enrollment at serving school districts in a manner that would result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

According to the CDOF, the City has an existing population of 109,428 (CDOF 2025). West Covina has 501.5 acres of existing parks and open space, which results in an estimated ratio of 4.7 acres per 1,000 residents (West Covina 2016b). The City is urbanized and nearly built out, with limited open space available to meet recreational needs associated with anticipated population growth. However, public schools in West Covina have 287 acres of additional open space, which provide potential recreational access for residents through joint use agreements between the City and school districts (West Covina 2016b). The proposed project would reduce the amount of school open space that is currently potentially available for recreational use by approximately 7.7 acres[6], from 287 to 279.3 acres, because it would replace the approximately 7.7 acres of open space currently on the project site with residential uses. Nonetheless, these 279.3 acres of school open space, added to the City's existing 501.5 acres of parks and open space, equals approximately 780.8 acres of parks and open space within the City, which results in a ratio of approximately 7.1 acres per 1,000 residents.

The nearest park to the project site is Del Norte Park, which is adjacent to the project site. Del Norte Park includes a baseball field, tennis courts, picnic tables, children's play areas, splash pads, and a dog park. Palmview Park, which includes walking paths, play structures, a baseball field, and a recreation center, is approximately 1.5 miles east (either driving or walking) of the project site. As discussed in Section 14, *Population and Housing*, if all the proposed project's housing units were filled by new residents of the City, the proposed project would increase the City's existing population by 885 residents, to a population of 110,313, resulting in a ratio of approximately 7.0 acres per 1,000 residents. This population increase would not substantially decrease the existing parkland-to-resident ratio, which would go from approximately 7.1 acres per 1,000 residents before implementation of the proposed project to approximately 7.0 acres per 1,000 residents after implementation of the proposed project, a 1.4 percent decrease. Furthermore, the proposed project would provide 68,305 sf (1.57 acres) of common open space (including a 18,000 sf central area with amenities such as a pool and restroom building, shade structure with seating, BBQ counter with seating, and a turf area for passive lawn play). Additionally, the proposed project would be required to pay land dedication fees, as stated in WCMC Section 26-308. The proposed project would therefore not create the need for new or expanded park facilities and impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

[6] The acreage of recreational open space currently on the project was calculated in Google Earth Pro.

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Development of the proposed project would result in incremental impacts to the City's public services and facilities such as storm drain usage, solid-waste disposal, water usage, and wastewater disposal. These impacts are analyzed in Section 10, *Hydrology and Water Quality*, and Section 19, *Utilities and Service Systems*.

The project site is in an urban area already served by other commonly used public facilities such as public libraries, including the West Covina Library, and medical facilities. As discussed in Section 14, *Population and Housing*, if all new residents of the proposed project were new to the City, the proposed project would increase the City's existing population of 109,428 by 885 residents to 110,313 residents, which would be an increase of approximately 0.8 percent. This would be within SCAG's 2045 population forecast of 118,900 residents. Therefore, the proposed project would not generate an unforeseen population increase that would substantially affect existing public facilities or necessitate the provision of new public facilities. In addition, the West Covina Library is part of the County of Los Angeles Public Library system, which is financed by property taxes from the service area, general county funds, parcel tax, grants, feeds, and funds raised by the Library Foundation. As a result, the proposed project would contribute to the financing of library services through property taxes, which would mitigate the need for new or physically altered government facilities that support library use. Therefore, the proposed project would not substantially affect existing governmental facilities or require the need for new or altered governmental facilities. Impacts would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	■	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	■	☐

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

According to the CDOF, the City has an existing population of 109,428 (CDOF 2025). West Covina has 501.5 acres of existing parks and open space, which results in an estimated ratio of 4.7 acres per 1,000 residents (West Covina 2016b). The City is urbanized and nearly built out, with limited open space available to meet anticipated population growth or to increase the current level of service. However, as discussed in Section 15, *Public Services*, public schools within the City have an additional 287 acres of open space which provide potential recreational access for residents through joint use agreements between the City and school districts (West Covina 2016b). The proposed project would reduce the amount of school open space that is currently potentially available for recreational use by approximately 7.7[7] acres, from 287 to 279.3 acres, because it would replace approximately 7.7 acres of school open space currently on the project site with residential uses. Nonetheless, these 279.3 acres of school open space, added to the City's existing 501.5 acres of parks and open space, equals approximately 780.8 acres of parks and open space within the City, which results in a ratio of approximately 7.1 acres per 1,000 residents.

The nearest park to the project site is Del Norte Park located adjacent to the project site. Del Norte Park includes a baseball field, tennis courts, picnic tables, children's play areas, splash pads, and a dog park. Palmview Park, which includes walking paths, play structures, a baseball field, and a recreation center, is approximately 1.5 miles east (either driving or walking) of the project site. As discussed under impact discussion 15.a.4, the proposed project's influx of population would not substantially decrease the existing parkland-to-resident ratio because it would result in only a 1.4 percent decrease in this ratio; the proposed project would provide 68,305 sf of common open space (including a 18,000 sf central area with amenities such as a pool and restroom building, shade

[7] The acreage of recreational open space currently on the project was calculated in Google Earth Pro.

structure with seating, BBQ counter with seating, and a turf area for passive lawn play); and the proposed project would be required to pay land dedication fees, as stated in WCMC Section 26-308.

For reasons discussed above, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and it does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Impacts would therefore be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	■	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	■	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	■	☐
d. Result in inadequate emergency access?	☐	☐	■	☐

The following analysis is based on the findings of the following transportation studies done for the proposed project:

- *1501 Del Norte Street Residential Vehicle Miles Traveled (VMT) Screening Evaluation*, April 2025 (Appendix I)
- *Del Norte (Tentative Tract No. 044618) Traffic Study Scoping Agreement,* June 2025 (Appendix J)
- *Del Norte Traffic Engineering and Construction Evaluation,* July 2025 (Appendix K)

In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines. The amended CEQA Guidelines, specifically Section 15064.3, generally require the use of VMT as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. Therefore, the following trip generation and trip distribution information is provided for informational purposes rather than for purposes of impact analysis.

Trip Generation

Urban Crossroads estimated the proposed project's vehicle trip generation in their June 2025 Traffic Study Scoping Agreement. As explained in the Traffic Study Scoping Agreement, trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. Urban Crossroads used trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) to estimate the proposed project's vehicle trip generation. The following trip generation rates were utilized for calculating the proposed project's trip generation:

- Single Family Detached Housing (ITE Land Use Code 210) were used to derive site specific trip generation estimates for up to 34 dwelling units

- Single Family Attached Housing (ITE Land Use Code 215) were used to derive site specific trip generation estimates for up to 138 townhomes
- Multifamily Housing (Mid-Rise, 4-10 Floors) were used to derive site specific trip generation estimates for up to 110 4-story stacked flats

Using these rates, Urban Crossroads calculated the proposed project's estimated vehicle trip generation as shown in Table 17.

Table 17 Estimated Project Vehicle Trip Generation

ITE Land Use	Weekday Peak Hour AM	Weekday Peak Hour PM	Total Daily Trips
210: Single Family Detached	24	32	322
215: Single Family Attached: Townhomes	67	79	994
221: Multifamily (Mid-Rise): Stacked Flats	40	43	500
Total Trips	**131**	**154**	**1,816**

Source: Del Norte (Tentative Tract No. 044618) Traffic Study Scoping Agreement, June 2025 (Appendix J)

Trip Distribution

The proposed project's trip distribution represents the directional orientation of the trips generated by the proposed project to and from the project site. Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by project-generated traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered to identify the route where the proposed project's traffic would be distributed. The trip distribution patterns used by Urban Crossroads for their analysis of the proposed project are shown in Figure 12.

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The proposed project would be subject to various policies and regulations of the City of West Covina regarding the circulation system, including transit, roadway, bicycle and pedestrian facilities. The following discussion analyzes the proposed project's consistency with applicable policies and regulations, based on the Urban Crossroads traffic analyses listed above.

The proposed project would include an access point on Nora Avenue (secondary access) and another access point on Del Norte Street at the northerly extension of Hollow Avenue (primary access). In addition, the proposed project would include extending Del Norte Street from its existing terminus at Hollow Avenue easterly out towards Sunset Avenue, creating a new intersection. The new intersection of Sunset Avenue and Del Norte Street would be restricted to right-in/right-out access only, which would be physically controlled by the existing raised median on Sunset Avenue. The proposed project's entries are not proposed to be gated. The proposed project's anticipated Opening Year is 2029.

Figure 12 Project Trip Distribution

Pedestrian Connections

This section provides a review of existing pedestrian and transit facilities, and improvements to those site facilities that the proposed project would be responsible for. Per Chapter 7, Article 11 of the City of West Covina Municipal Code (WCMC), any person, owner, lessee or agent constructing commercial, residential, or industrial buildings shall also provide for the construction or installation to City Standards, of sidewalks, curbs, etc., unless such improvements already exist along all street frontages adjoining the lot on which the building is to be constructed.

Bicycle and Pedestrian Facilities

SIDEWALKS

In accordance with Chapter 19, Article II of the WCMC, the proposed project is responsible for the construction of sidewalks along the project site boundary in compliance with City Standards. For multiple-family residential projects, sidewalk widths must be a minimum of five feet. On full-width sidewalks, there should not be less than one tree well provided for each 40 linear feet. A greater distance between tree wells may be permitted if there are existing poles, signs, hydrants, etc., along the given area.

Concrete sidewalks will be provided along the residential units for internal circulation, and street sidewalks will be constructed along the project site's boundary on both Nora Avenue and Del Norte Street. The proposed project also includes a potential City park sidewalk that would connect the northeast region of the project site to the existing Del Norte Park located to the north. The proposed project will provide connections to the existing park via a connection with an overhead portal to the northwest end and northeast end of the project site. The proposed project will provide street trees along Nora Avenue and Del Norte Street, and accent trees along the project site's internal sidewalks.

CROSSWALKS

In accordance with Chapter 22, Article 6 of the WCMC, the traffic authority may establish, designate and maintain marked crosswalks at intersections and other places by appropriate devices, marks, or lines upon the surface of the roadway. The Project proposes two (2) driveway entrances, one along Nora Avenue, and another along Del Norte Street. The curb-to-curb length for both driveways is twenty-six (26) feet. The driveways are stop controlled for vehicles exiting the Project, giving pedestrians the right way when crossing. No formal crosswalk markings will be established at the Project driveways, but the corners will provide the required 2010 Americans with Disabilities Act (ADA) compliant ramps.

With the construction of the new right-in, right-out intersection of Sunset Avenue and Del Norte Street, the proposed project is responsible for constructing a north-south crosswalk connection along the project site's boundary. The proposed intersection of Sunset Avenue & Del Norte Street would be stop-controlled on the eastbound approach (vehicles exiting from Del Norte Street would make a right and head southbound on Sunset Avenue), allowing pedestrians that are accessing the existing Del Norte Park to safely use the proposed north-south crosswalk connection. Due to the existing median on Sunset Avenue, the proposed project does not include an east-west crosswalk connection from the project site across Sunset Avenue at Del Norte Street. There is also an existing marked mid-block pedestrian crosswalk to the north across Sunset Avenue at Rowland Avenue that provides direct access to Del Norte Park.

BIKE PATHS

The City of West Covina does not have an adopted bicycle plan. Chapter 22, Article III of the WCMC defines standards for Class I Bike Paths, Class II Bike Lanes, and Class III Shared Routes. A Class I Bike Path is an exclusive, off-road facility, and a Class III Shared Route is a street designated as a bicycle route (typically signed but not striped, shared space with vehicles). Class II Bike Lanes are divided into Class IIa (no parking) and Class IIb (parking permitted) categories and are striped, on-street facilities (typically curb-adjacent).

As stated in the City of West Covina General Plan, the City lacks any special facilities for cyclists outside of the Downtown area. No bicycle facilities have been identified surrounding the project site.

ADA RAMPS

Pursuant to Chapter 4, Section 406 Curb Ramps of the 2010 ADA Standards for Accessible Design, counter slopes adjoining road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20 (5%). Transitions between curb ramps, sidewalks, and streets must be flush and free of vertical changes in level. Curb landings shall be provided at the tops of curb ramps, and the landing clear length shall be thirty-six (36) inches minimum with the landing clear width being as wide as the curb ramp.

In addition to the 2010 ADA Standards, curb ramp construction in California must comply with the California Building Code (CBC), Chapter 11B. This includes stricter slope controls, clear landing dimensions, and detectable warning surface requirements. All curb ramps must have top landings of at least 36 inches in length (consistent with ADA), be aligned with the path of travel, and feature truncated dome detectable warnings in contrasting color and texture. Curb ramp design and construction must ensure flush transitions and no vertical level changes between the ramp and adjacent surfaces (also consistent with ADA). Compliance with these standards is required for all public and private projects and will be enforced during inspection and acceptance.

The proposed project is responsible for ensuring that the curb ramps at the project site driveways and at the proposed intersection of Sunset Avenue and Del Norte Street adhere to the ADA curb ramp design standards.

TRANSIT SERVICE

- The proposed project is currently served by Foothill Transit, a community-oriented public transit agency serving the San Gabriel Valley, Pomona Valley, and downtown Los Angeles. The transit line that runs along Sunset Avenue which could potentially serve the project site is Line 185: Azusa – West Covina – Puente Hills Mall via Irwindale. The following bus stops are in the project site vicinity: Sunset Avenue & Rowland Avenue (Northbound) – Stop 2524
- Sunset Avenue & Rowland Avenue (Southbound) – Stop 2525
- Sunset Avenue & Workman Avenue (Northbound) – Stop 2534
- Sunset Avenue & Workman Avenue (Southbound) – Stop 2535

Service times for the stops along Foothill Transit Route 185 are approximately every 30 minutes during the weekday peak hours. Transit service should be reviewed periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. As such, Urban

Crossroads recommends that the Project Applicant work in conjunction with the City to potentially provide bus service to the project site.

In January 2025, the City of West Covina phased out the Red and Blue shuttle services to shift towards the City's new Micro-Transit service, "Go West Covina." The new shuttle service started in November 2024 and aims to provide on-demand, app-based transit in vehicles. Go West Covina serves the City of West Covina free of charge Monday – Friday from 7AM to 7PM. Implementation of the City's new micro-transit service can serve the riders that once used the Red and Blue shuttle service stops along Sunset Avenue and Workman Avenue near the project site.

No transit improvements (bus stops, bus turnout, etc.) have been identified as part of the proposed project's construction along its frontages.

As described above, the proposed project would be responsible for complying with all applicable requirements of the WCMC (and other applicable regulations) related to the circulation system, including transit, roadway, bicycle and pedestrian facilities; the project site and its vicinity are already well-served by roadway, transit, and pedestrian facilities; and construction and operation of the proposed project would not hinder the continued operation of these facilities. For these reasons, the proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

LESS-THAN-SIGNIFICANT IMPACT

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines. The amended CEQA Guidelines, specifically Section 15064.3, generally require the use of VMT as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region.

The updated CEQA Guidelines allow for the lead agency's discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, CEQA Guidelines Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The Office of Planning and Research (OPR's; now titled the Office of Land Use and Climate Innovation) *Technical Advisory on Evaluating Transportation Impacts in CEQA* provides considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

This impact analysis is based on the *1501 Del Norte Street Residential Vehicle Miles Traveled (VMT) Screening Evaluation* completed by Urban Crossroads in April 2025 (Appendix I). The VMT screening evaluation presented in this report was developed based on the adopted City of West Covina City Resolution No. 2020-57.

VMT Screening

The City Guidelines recommends standardized VMT screening methods that can be used to identify when a proposed land use project is anticipated to result in a less than significant VMT impact thereby eliminating the need to conduct a full model-based analysis. The San Gabriel Valley Council

of Governments (SGVCOG) provides a VMT screening tool (Screening Tool) to assist with conducting VMT screening for individual land use projects. The Screening Tool is designed to assist in screening and estimating project-generated VMT for certain types of land use projects in the San Gabriel Valley and its member agencies. The City's screening methods are listed below, and a land use project need only meet one of the screening criteria to result in a less than significant impact:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening
- Affordable Housing Screening

Transit Priority Area (TPA) Screening

Consistent with City Guidelines, projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing "major transit stop" or an existing stop along a "high-quality transit corridor") may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project meets the following sub criteria:

- Has a Floor Area Ratio (FAR) of less than 0.75
- Includes more parking for use by residents, customers, or employees of the project than required by the City
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Southern California Association of Governments [SCAG]); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units

Based on the Screening Tool results included in Attachment B of the *(VMT) Screening Evaluation*, the project site is located within a TPA. As such, Urban Crossroads reviewed the applicable TPA sub-criteria to determine consistency with the City's VMT screening approach.

- The proposed project would develop a total of 461,687 square feet of inhabitable living space on 13.19 acres. This results in an estimated FAR of 0.8, which meets the City's minimum FAR requirement
- The proposed project includes a reduction in parking requirements below those outlined in the West Covina Municipal Code, as permitted under the proposed project's Specific Plan provisions
- The proposed project consists of residential uses located on parcels with a zoning designation that is also identified as residential and is consistent with the City's future development plans and the applicable Sustainable Communities Strategy
- The proposed project does not propose to replace any existing residential units

The project site is located within a TPA and meets all sub-criteria associated with the City's TPA screening requirements. The TPA screening criteria are therefore met.

Low VMT Area Screening

The City Guidelines state that projects that have a VMT per service population (population and employees) 15% below the baseline Citywide VMT per service population are presumed to have a less than significant impact. The parcels containing the project site were selected and the Screening Tool was run for VMT per service population (i.e., population and employment) measure of VMT.

The project site's transportation analysis zone (TAZ) 22306300 was found to generate 25.5 VMT per service population, whereas the Citywide baseline VMT per service population is 31.8 VMT per service population and a 15% below baseline threshold of 27.1 VMT per service population.

Based on the Screening Tool results presented in Attachment B of the *(VMT) Screening Evaluation*, the project site is located within a low VMT generating area and the Low VMT Area Screening criteria are therefore met.

Project Type Screening

As directed by the City Guidelines, local serving retail with buildings less than 50,000 square feet and other local serving essential services (e.g., day care centers, public schools, medical/dental office buildings, etc.) are presumed to have a less than significant VMT impact. In addition, City Guidelines recognize projects generating less than 110 daily trips, as having a less than significant impact on VMT.

The proposed project does not include any local serving retail, local essential services, nor is it expected to generate less than 110 daily trips. The Project Type Screening criteria is therefore not met.

Project Type Screening

The City Guidelines state residential or mixed-use development projects with units that are deed-restricted, income-qualified housing can be presumed to have a less-than-significant transportation impact and would not require a detailed VMT analysis.

The proposed project does not include any income-qualified units. The Affordable Housing Screening criteria is therefore not met.

Conclusion

Based on Urban Crossroad's review of applicable VMT screening thresholds as recommended by the SGVCOG, the proposed project would meet the TPA Screening and Low VMT Area screening criteria. The proposed project is therefore presumed to have a less than significant VMT impact; no further VMT analysis is required.

LESS-THAN-SIGNIFICANT IMPACT

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

Geometric Design Features

The proposed project would allow direct vehicular access to the project site from two driveways: one on West Del Norte Street and another on North Nora Avenue. West Del Norte Street would be extended from its current terminus at Hollow Avenue out to North Sunset Avenue to the east, creating a new intersection at North Sunset Avenue and West Del Norte Street. This new intersection would be restricted to right-in/right-out access only.

As defined by the American Association of State Highway Transportation Officials (AASHTO) Green Book Guidelines (i.e. AASHTO Green Book), sight distance is the length of the roadway ahead that is visible to the driver. The available sight distance on a roadway should be sufficiently long to enable a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path.

Urban Crossroad's July 2025 *Traffic Engineering and Construction Evaluation* (Appendix K) evaluated horizontal sight distance for Driveway 1 along Nora Avenue and Driveway 2 along Del Norte Street based on the AASHTO Green Book.

According to Urban Crossroad's July 2025 *Traffic Engineering and Construction Evaluation* (Appendix K), adequate visibility for vehicular and pedestrian traffic can be accommodated at the proposed project's driveways by limiting sight obstructions within the identified limited use area (shaded triangular area often referred to as "clear sight triangles"). Any landscaping/hardscape within the limited use area should not exceed 30 inches in height. The limited use area should be kept clear of any landscaping or any other obstructions that may impede the visibility of the driver, including on-street parking. As such, restrictions to on-street parking within the limited use areas are also necessary. Minimum horizontal sight distances for the proposed project's driveways are provided in Exhibit 6 of Urban Crossroad's July 2025 *Traffic Engineering and Construction Evaluation* (Appendix K); however, sight distance should be re-evaluated in the field once the driveways have been constructed. It is anticipated that the minimum 155-foot sight distance for both driveways can be accommodated. Driveway 1 should accommodate a 25-foot proposed red curb to the north of the driveway, and a 60-foot proposed red curb to the south of the driveway. Driveway 2 should accommodate an 80-foot proposed red curb to the east of the driveway, and a 25-foot proposed red curb to the west of the driveway. The sight distance lines, limited use area, and clear sight triangles per the AASHTO Green Book are illustrated in Exhibit 6 of Urban Crossroad's July 2025 *Traffic Engineering and Construction Evaluation* (Appendix K).

Construction Impacts

On-Site Construction Phasing

The proposed project is currently anticipated to be built in six construction phases with a duration of approximately 24 months. The construction phases include:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

The construction schedule utilized is presented in Table 18. Construction will begin January 2026 and would last through January 2028. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the *CEQA Guidelines*.

Table 18 Construction Duration

Construction Activity	Start Date	End Date	Days
Demolition	01/01/2026	02/11/2026	30
Site Preparation	02/12/2026	03/04/2026	15
Grading	03/05/2026	05/06/2026	45
Building Construction	05/07/2026	01/26/2028	450
Paving	12/16/2027	01/26/2028	30
Architectural Coating	40	43	500

Source: Del Norte (Tentative Tract No. 044618) Traffic Study Scoping Agreement, June 2025 (Appendix J)

CONSTRUCTION VEHICLES

The construction vehicle list presented in Table 19 has been developed based on information provided by the project applicant. Consistent with industry standards and typical construction practices, each of the construction vehicles listed is assumed to operate up to a total of eight hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City Code.

Table 19 Construction Vehicle Assumptions

Construction Activity	Equipment	Quantity	Hours
Demolition	Excavators	2	8
Rubber Tired Dozers	1	8	
Site Preparation	Crawler Tractors	1	8
Grading	Graders	1	8
Rubber Tired Dozers	1	8	
Scrapers	2	8	
Crawler Tractors	1	8	
Building Construction	Forklifts	1	8
Tractors/Loaders/Backhoes	2	8	
Paving	Pavers	1	8
Paving Equipment	1	8	
Rollers	2	8	

Source: Del Norte (Tentative Tract No. 044618) Traffic Study Scoping Agreement, June 2025 (Appendix J)

Traffic Control and Working Hours

Construction would occur Monday through Saturday between the hours of 7:00 AM and 8:00 PM pursuant to WCMC construction standards. The City may require the project applicant to prepare a construction management plan. The number of daily worker trips are based on the California Emissions Estimator Model (CalEEMod) defaults. It should be noted that for daily vendor trips, specifically, CalEEMod only assigns daily vendor trips to the Building Construction phase. Daily vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for daily vendor trips were adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity. Table 20 presents the construction trip assumptions based on the CalEEMod defaults.

Table 20 Construction Trip Assumptions

Construction Activity	Worker	Construction Activity	Worker
Demolition	10	2	19
Site Preparation	3	2	0
Grading	13	3	12
Building Construction	198	27	0
Paving	10	0	0
Architectural Coating	40	0	0

Source: Del Norte (Tentative Tract No. 044618) Traffic Study Scoping Agreement, June 2025 (Appendix J)

Conclusion

As discussed above, during construction and then operation of the proposed project the project site would continue to be served by and would not interfere with existing and planned roadway, pedestrian, and public transit facilities; and would be built according to all applicable standards regulating safety design features such as sight lines and turning radii. Furthermore, due to its nature as residential infill development in a residential area, the proposed project would not result in uses that would be incompatible with the existing land uses surrounding the project site. Therefore, implementation of the proposed project would not result in substantial hazards due to geometric design features or incompatible uses. No significant adverse impacts would occur, and this impact would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

d. Would the project result in inadequate emergency access?

As discussed in impact 17c above, during construction and then operation of the proposed project the project site would continue to be served by and would not interfere with existing and planned roadway, pedestrian, and public transit facilities. During proposed project operation, emergency response vehicles would be able to access the project site via the two proposed driveways on West Del Norte Street and North Nora Avenue, which would be built according to all applicable standards regulating safety design features such as sight lines and turning radii, which help ensure adequate access for emergency vehicles. The proposed project would not modify existing roadways in the vicinity in a way that would negatively affect emergency vehicle use of area roadways. In fact, extending West Del Norte Street to North Sunset Avenue would improve emergency vehicle access to the project site. Furthermore, site circulation plans would be reviewed by the City of West Covina Police Department and the West Covina Fire Department prior to occupancy to ensure that required fire protection safety features, including building sprinklers and emergency access, are implemented. Therefore, the project would result in less than significant impacts to emergency access.

LESS-THAN-SIGNIFICANT IMPACT

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	■	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	■	☐	☐

Assembly Bill 52 of 2014

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources" (TCRs). AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). AB 52 further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Senate Bill 18 of 2004

California Government Code Section 65352.3 (adopted pursuant to the requirements of SB 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Three tribes have requested notification of projects in West Covina: the Soboba Band of Luiseño Indians, Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation), and Gabrieleño/Tongva Nation. Per Public Resources Code (PRC) Section 21080.3.1, the City mailed AB 52 and SB 18 consultation letters to these tribes on May 14, 2025. On May 27, 2025, the City received an email from the Gabrieleño Band of Mission Indians – Kizh Nation (Kizh Nation) requesting government-to-government consultation regarding the proposed project. The City engaged consultation with the Kizh Nation in June 2025 that resulted in the City receiving a letter from the Kizh Nation that expressed their opinion that the project site has potential for intact, subsurface Tribal Cultural Resources, and requesting that specific mitigation measures included in their letter (including attachments) be implemented. The City of West Covina will continue to comply with all applicable tribal consultation requirements of Public Resources Code Section 21080.3.1 and all other applicable regulations as the proposed project progresses through the required review and approval process.

As described in Section 5, *Cultural Resources*, no archaeological resources were identified within or adjacent to the project site by the Cultural Resources Technical Report, which included a records search, Sacred Lands File search, Native American consultation support, and a cultural resources survey. The lack of surface evidence of archaeological materials does not preclude their subsurface existence, but the absence of substantial prehistoric or historic-period archaeological remains within the immediate vicinity, along with the existing level of disturbance in the project site, suggests there is a low potential for encountering intact subsurface archaeological deposits.

The possibility of encountering subsurface archaeological materials during construction of the proposed project cannot be ruled out. Additionally, the Kizh Nation, during the tribal consultation process expressed their opinion that the project site has potential for intact, subsurface Tribal Cultural Resources, and requested that specific mitigation measures be implemented. Implementation of Mitigation Measure CUL-1, which includes provisions for including a Native American representative in evaluation of subsurface archaeological finds if the find is determined to be prehistoric, would reduce this potential impact, but not to a less than significant level without incorporation of the measures requested by the Kizh Nation. Therefore, mitigation measures TCR-1 through TCR-3 are also required.

Mitigation Measures

TCR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned

construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

TCR-2 Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)

A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TCR-3 Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects

A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.
C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.
E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

Implementation of mitigation measures TCR-1 through TCR-3 would reduce potentially significant impacts to tribal cultural resources to a level of less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	■	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	■	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	■	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	■	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	■	☐

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Based on the applicant submittal package and the Preliminary Sewer Study for the proposed project by Moran Consulting Corporation, dated November 22, 2024 (Appendix L), all existing utility infrastructure on the project site would be demolished and removed and new on-site infrastructure

for water, wastewater transport, storm water drainage, electric power, and telecommunications facilities would be constructed as part of proposed project implementation. Existing easements will accommodate connections for electricity lines. New easements are proposed for water and sewer.

The proposed project would include installation of new water lines in West Del Norte Street that would create a looped system connecting to water lines in North Nora Avenue and North Sunset Avenue. Each residential unit in the proposed project would have its own water meter and the proposed project would include installation of backflow devices, low-flow fixtures, and water efficient irrigation systems, and all existing services and laterals would be connected to the new water main. These upgrades would ensure that the proposed project would have no impacts to potable water service in the area.

The City's Public Works Department provides local wastewater service, and the proposed project would connect to the public conveyance system. Wastewater from the City's system is treated at and disposed of by the San Jose Creek Water Reclamation Plant (SJCWRP) or the Whittier Narrows Reclamation Plant (WNRP), operated by the Sanitation Districts of Los Angeles County (LACSD). The two have a combined design capacity of 165.7 million gallons per day (mgd). The average daily flow into the two plants is approximately 73 mgd, leaving 42 mgd in available capacity to accommodate new development. The project site is in the SJCWRP tributary area (City of West Covina 2016b). The average daily flow to the SJCWRP is approximately 66 mgd, leaving approximately 34 mgd in available capacity (City of West Covina 2016b). Given the site is currently unoccupied and used minimally[8]include), existing flows from the site are negligible. The proposed project includes 34 single-family homes and 248 attached townhomes and stacked flat units. According to LACSD wastewater generation rates (LACSD, 2025), the expected increase in estimated average wastewater flow from the proposed project after its development is 57,200 gallons per day (gpd). Although the site is currently developed with former school buildings, these buildings are now vacant and used and do not contribute to existing wastewater flows. The net increase in wastewater generation compared to existing generation would therefore be 57,200 gpd The proposed project's estimated average daily flow of 57,200 gpd would be well within the SJCWRP's available capacity of 34 mgd.

The City's existing sewer system consists of interceptors and lift stations for conveyance of wastewater within the city, including over 227 miles of gravity sewer and three pump stations, and implementation actions in the City's General Plan (PlanWC) require the City to pursue enlargement or extension of sewage collection systems where necessary to serve new development, with development fees supporting this expansion (City of West Covina 2016a). The proposed sewer line that will collect the townhomes and stacked flats will be an 8" Sewer with a 35-foot lateral connecting to North Nora Avenue 8" existing Sewer line and a 713-foot lateral on West Del Norte Street connecting to an existing line along North Sunset Avenue. All single-family homes on the property's perimeter will have an individual lateral connection to the adjacent public sewer. The Preliminary Sewer Study found that, based on the criteria developed by the City of West Covina, the sewer system serving the proposed project site is adequate to serve the proposed project.

According to LACSD wastewater generation rates (LACSD, 2025), the proposed project's estimated average wastewater flow after its development is 57,200 gallons per day (gpd), which would equal 20,878,000 gallons of wastewater per year. By comparison, the project site, as discussed above, currently generates a negligible amount of wastewater. Therefore, the proposed project's estimated

[8] Current potential water-consuming activities on the project site include landscape irrigation, which consumes water but does not generate wastewater; and occasional use of a multi-purpose room and sports fields, which may include restroom use that would include both water consumption and wastewater generation.

net increase in wastewater generation compared to existing conditions is 57,200 gallons of wastewater per day, which would account for approximately 0.17 percent of the remaining available daily capacity of the SJCWRP of approximately 34 mgd. Therefore, the SJCWRP would have sufficient capacity to accommodate additional wastewater flows generated by the proposed project. The proposed project would not require the construction of new or expanded treatment facilities.

The proposed project's on-site drainage system would be maintained by the proposed project's homeowner's association. According to the site plans, proposed project implementation would result in 10 percent impervious surface to allow rainwater to percolate back into the groundwater table. According to proposed project plans, the grading plan is designed to drain all stormwater from within the project site into a private storm drain system. Catch basins and inlets would collect stormwater and convey water via 12-inch and 24-inch pipes to three infiltration galleries. Offsite drainage that currently flows towards the project site would be diverted via bio-swales along the north and east property lines that connect to the existing storm drain system in North Nora Avenue and West Del Norte Street. Drainage regulations require that stormwater be retained on site such that off-site flows are equal to or less than existing conditions. The project includes on-site catch basins to capture and manage these flows. The proposed project would not necessitate the construction of new stormwater drainage facilities or expansion of existing facilities.

As discussed in Section 6, *Energy*, the proposed project would not result in the wasteful, inefficient or unnecessary consumption of energy. The proposed project would conform to the latest version of California's Green Building Standards Code and Building Energy Efficiency Standards The proposed project would not require the construction of new electric power or natural gas facilities. Likewise, the project site is an infill site served by existing telecommunications facilities and would not require the expansion or construction of new telecommunications infrastructure.

The proposed project would not result in significant environmental impacts due to the construction of new utility facilities, and the proposed project would be served by a wastewater treatment plant with adequate capacity. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The project site is in an urbanized area served by existing utilities infrastructure. City of Azusa Light and Water (ALW) services the site with potable water (ALW 2021). On average, 65 percent of ALW's source water is local ground water pumped from wells out of the Basin, in which ALW holds adjudicated water rights to this groundwater. The remaining 35 percent of ALW's source water is surface water supplied from the San Gabriel River, from which ALW holds adjudicated diversion rights, and such water is treated at the Hsu Filtration Plant prior to being distributed to customers (ALW 2021).

As discussed in Section 10, *Hydrology and Water Quality*, the project site receives its water service from ALW. ALW's service area encompasses 8,900 acres in the San Gabriel Valley, servicing the cities of Azusa, Glendora, Covina, West Covina, Irwindale, and unincorporated Los Angeles County (ALW 2021). ALW relies upon three water supply sources: (1) groundwater from the Main San Gabriel Basin; (2) surface water from the San Gabriel River; and (3) water from the State Water Project. ALW does not use supplier-produced surface water, stormwater, recycled water, or desalinated water.

According to its 2020 Urban Water Management Plan (UWMP), ALW would have an adequate supply of water, with normal conservation efforts, to meet projected demand through 2045 in average year, single-dry year, and multiple-dry year scenarios (ALW 2021). Table 21 shows projected water supply and demand under normal year, single-dry year, and multiple-dry year conditions. These numbers reflect demand and supply for Suburban's entire service area.

Table 21 Normal Year and Multiple Dry Year Water Supply and Demand Comparison

	2025	2030	2035	2040	2045
Water Demand Normal Year[1]	18,552	18,853	19,160	19,472	19,788
Water Supply Normal Year[1]	38,450	38,450	38,450	38,450	38,450
Water Demand Single-Dry Year[1]	19,715	20,036	20,362	20,693	21,029
Water Supply Single-Dry Year[1]	25,677	25,677	25,677	25,677	25,677
Water Demand Multiple-Dry Year[1]	17,559	17,845	18,135	18,430	18,729
Water Supply Multiple-Dry Year[1]	23,447	23,447	23,447	23,447	23,447

[1] Water supply and demand totals are reported in acre-feet per year (AFY) and are for ALW's entire service area.

Source: ALW 2021

The proposed project would be constructed to all applicable CBC standards, including those that mandate water-efficient fixtures and features, and would be required to adhere to applicable water conservation measures for landscaping, specified in the City's Municipal Code Section 26-750.1300. According to CalEEMod results (see Appendix D), the proposed project would generate a net demand of 31,714 gallons of water per day for indoor use and 18,702 gallons of water per day for outdoor use. This equates to approximately 56.51 acre-feet per year of water, which would fit within the projected usage and supply shown in Table 21, and the existing water supply under all scenarios would be sufficient to accommodate increased use from proposed project operation. Therefore, existing water supply, as projected, would be adequate to serve the anticipated residents and other users of the proposed project. The proposed project's impact on water supply would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The City contracts with Athens Services to provide trash, recycling, and special pickup services for residents. After collection, waste is conveyed to the Athens Services Materials Recovery Facility in the City of Industry, which can process 5,000 tons of mixed material each day (City of West Covina 2016b). Diversion of solid waste from the project site into the recycling stream would substantially reduce the proposed project's impact on landfill capacity. Solid waste materials are transported to the Athens Services Materials Recovery Facility where recyclable materials are separated from disposable materials. This process and other waste reduction programs have increased the City's diversion rate to 58 percent, higher than the State-mandated 50 percent. After waste is sorted, materials that cannot be recycled are sent to the Victorville Sanitary Landfill, which has a permitted

maximum capacity of 3,000 tons per day and a current estimated remaining daily capacity of 79,400,000 tons (CalRecycle 2019). The estimated cease operation year would be 2047.

The proposed project plans indicate two 96-gallon trash carts could be available for each unit, where one cart is for combined recycling and trash that would be sorted as indicated above, and one would be for green waste if needed. The current diversion rate (58 percent) combined with West Covina's incentives to reuse and recycle would continue to exceed the State-mandated 50 percent diversion rate. According to the CalEEMod results operation of the proposed project would generate approximately 312 tons of solid waste per year. The project site is currently vacant and does not produce solid waste. Therefore, the proposed project would generate a net increase of six tons of solid waste per year, or 0.85 tons per day. Conservatively assuming none of this waste could be diverted for recycling, the estimated 0.85 tons per day equals 310.25 tons per year, well within the current estimated remaining capacity of 79,400,000 tons at the Victorville Sanitary Landfill. Therefore, the proposed project's impacts on solid waste would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	■	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	■	☐
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	■	☐

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The project site is in an urban area of West Covina. Undeveloped wildland areas are not close to the project site. The project site is not in any "Fire Hazard Severity Zone" (including the "Moderate," "High," or "Very High" zones) for wildland fires (CAL FIRE 2025). The nearest Very High Hazard Severity Zones are approximately 3.0 miles north of the project site on the northeastern edge of the Santa Fe Dam Open Space area; and 3.0 miles southeast of the project site in the San Jose Hills. The proposed project would construct residences on a lot currently occupied by vacant school buildings and surrounded by residential and commercial development. The proposed project would be served by existing water utilities, including fire hydrants along West Del Norte Street, as well as three new fire hydrants within the project site.

LESS-THAN-SIGNIFICANT IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	■	☐	☐
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	■	☐	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As discussed in Section 4, *Biological Resources*, there are no mapped essential habitat connectivity areas in the immediate vicinity of the project site. In addition, regional wildlife movement is restricted given the built-out nature of the project area, and no native resident or migratory fish or wildlife species, established native resident or migratory wildlife corridors, or native wildlife nursery sites exist on or immediately around the project site. However, the site currently contains mature trees which may provide nesting habitat for birds. Therefore, Mitigation Measure BIO-1 requires a pre-construction nesting bird survey and other measures should construction occur during the breeding season to avoid potential impacts to on-site nesting birds.

Of the 26 trees affected by implementation of the proposed project, 1 is significant and 25 are non-significant per the City's Tree Ordinance. No heritage trees were identified. As shown in Figure 10, seven of the non-significant trees are street trees located along North Nora Avenue outside of the project boundary and 18 are located within the project boundary within landscaped areas and adjacent to buildings. One non-significant tree (#30) is located adjacent to a single-family residence. The proposed project would remove all 26 trees identified in the Arborist Report. As shown in Figure 9, the proposed project would incorporate landscaping which would include a greater number of new trees than the number of trees to be removed, resulting in greater tree coverage on the proposed project site than what currently exists. Thus, this impact would be less than significant.

As discussed in Section 5, *Cultural Resources*, Section 7, *Geology and Soils*, Section 9, *Hazards and Hazardous Materials,* and Section 18, *Tribal Cultural Resources*, the proposed project would have a less than significant impact on or from unanticipated archaeological resources, paleontological resources, human remains, and tribal cultural resources with implementation of Mitigation Measures CUL-1 and GEO-1. Implementation of these mitigation measures, as well as adherence to existing local, State, and federal regulations and specific monitoring procedures related to the discovery of any unanticipated cultural resources, paleontological resources, tribal cultural resources, and human remains during construction activity, would reduce these potential impacts to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

As concluded in Sections 1 through 20, the proposed project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated, with respect to all environmental issues considered in this document. Cumulative impacts related to several other resource areas have been addressed in the individual resource sections of this IS-MND, including air quality, GHG emissions, noise, transportation, and utilities (see CEQA Guidelines Section 15064(h)(3)). As discussed in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, the proposed project would result in less than significant impacts associated with air quality and GHG emissions during both project construction and operation. The impact analyses in these sections use thresholds that already account for cumulative (regional) impacts. Therefore, air quality and GHG emissions associated with operation and construction would be less than significant and not be cumulatively considerable.

As discussed in Section 13, *Noise*, the proposed project would not generate significant construction noise impacts because construction would occur during hours between 7:00 a.m. and 8:00 p.m., consistent with WCMC Section 15-95. Furthermore, implementation of Mitigation Measure N-1 and N-2, and compliance with the construction hours requirements of the WCMC, would reduce construction noise impacts to a less than significant level. The noise and traffic analyses in this IS-MND both considered increases in traffic and traffic noise under Existing plus Project conditions and contribution to VMT and concluded that impacts would be less than significant.

As discussed in Section 19, *Utilities and Service Systems*, potential impacts to the City's sewer system related to the proposed project's contribution to sewer flows would be less than significant.

This IS-MND determined that, for some of the other resource areas (e.g., agricultural and mineral), the proposed project would have no impact in comparison to existing conditions. Therefore, the proposed project would not contribute to cumulative impacts related to these issues. Other issues (e.g., biological resources, cultural resources, geology, hazards, hazardous materials, and tribal cultural resources) are by their nature project-specific and impacts at one location do not add to impacts at other locations or create additive impacts.

Based on the analysis above, the proposed project's contribution to cumulative impacts would be less than significant with mitigation incorporated (not cumulatively considerable).

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c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in analyses for air quality, hazards and hazardous materials, and noise, the proposed project would not result, either directly or indirectly, in adverse hazards related to air quality, hazardous materials or noise. Compliance with applicable rules, regulations, and mitigation measures included in this IS-MND (including Mitigation Measure HAZ-1, which would reduce potential impacts related to ACMs, lead-based paint, and PCBs during proposed project construction; Mitigation Measure HAZ-2, which requires near-surface soil testing and a soil management plan to avoid significant impacts from potentially contaminated soils; Mitigation Measure N-1 and N-2, which requires various construction noise reduction measures; Mitigation Measure N-2, which requires construction equipment measures for construction activity near noise-sensitive receptors near the project site; Mitigation Measure TCR-1, which requires a Native American monitor to observe grading activities; Mitigation Measure TCR-2, which includes direction if tribal cultural resources are uncovered during grading; and TCR-3, which includes direction if human remains or ceremonial objects are discovered during grading would reduce potential impacts on human beings to a less than significant level.

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References

Bibliography

California Air Pollution Control Officers Association (CAPCOA). 2023. California Emissions Estimator Model User's Guide Version 2022.1. April. https://caleemod.com/documents/user-guide/01_User%20Guide.pdf. Accessed June 2025.

California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. December 14, 2017. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed June 2025. ____. 2022a. 2022 Scoping Plan for Achieving Carbon Neutrality. November 16. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp.pdf. Accessed June 2025.

____. 2022b. "Regional Plan Targets." https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed December 2024.

California Department of Conservation (DOC). 2010. Mineral Land Classification. https://maps.conservation.ca.gov/cgs/minerals/?page=Mineral-Land-Classification#data_s=id%3AdataSource_335-18a47b5b8e5-layer-10-192c08351d6-layer-28%3A35 (accessed May 2025).

_____. 2019. Los Angeles County Important Farmland Maps. https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx (accessed May 2025).

_____. 2025a. California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed May 2025).

_____. 2025b. Williamson Act Enrollment Finder. https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/ (accessed June 2025).

_____. 2025c. Tsunami Hazard Area Map. https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/ (accessed June 2025).

California Department of Finance (CDOF). 2025. E-5 Population and Housing Estimates for Cities, Counties, and the State: 2020-2025. https://dof.ca.gov/Forecasting/Demographics/Estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2025/ (accessed May 2025).

California Department of Fish and Wildlife. 2023. California Natural Community Conservation Plans. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline (accessed March 2025).

_____. 2025a. California Natural Diversity Database, Rarefind V5. Accessed March 2025.

_____. 2025b. Biogeographic Information and Observation System. Accessed March 2025.

_____. 2025c. Special Animals List. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406. Accessed March 2025.

_____. 2025d. California Natural Community List. February 27, 2025. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline. Accessed April 2025).

California Department of Forestry and Fire Protection (CAL FIRE). 2025. Fire Hazard Severity Zones in State Responsibility Area. https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008 (accessed May 2025).

California Department of Resources Recycling and Recovery (CalRecycle). 2019. SWIS Facility/Site Activity Details Victorville Sanitary Landfill. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652 (accessed April 2025).

California Department of Toxic Substances and Control (DTSC). 2025a. EnviroStor. https://www.envirostor.dtsc.ca.gov/public/ (accessed April 2025).

_____. 2025b. Cortese List Data Resources. https://calepa.ca.gov/sitecleanup/corteselist/ (accessed April 2025).

California Department of Transportation (CalTrans). 2025a. California State Scenic Highways. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed May 2025).

_____. 2025b. California State Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed May 2025).

California Energy Commission (CEC). 2025. 2025 Building Energy Efficiency Standards. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency (accessed June 2025).

California Geological Survey. 2025. Earthquake Zones of Required Investigation. https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/ (accessed May 2025).

California Native Plant Society. 2025. Inventory of Rare and Endangered Plants. v9-01 1.5. www.rareplants.cnps.org. Accessed March 2025.

California State Water Resources Control Board (SWRCB). Geotracker. https://geotracker.waterboards.ca.gov/map/?myaddress=California&from=header&cqid=5108716666# (accessed April 2025).

City of West Covina, Community Development, Planning Division. 2024. City Ordinance No. 2519 – Development Code Ordinance Update. https://www.westcovina.org/home/showpublisheddocument/23694/6386. Accessed March 2025.

City of Azusa Light and Water. 2021. Azusa Light and Water 2020 Urban Water Management Plan. https://www.azusaca.gov/DocumentCenter/View/43689/ALW-2020-Urban-Water-Management-Plan (accessed April 2025).

Education Data Partnership (Ed-Data). 2025. West Covina Unified. https://www.ed-data.org/district/Los-Angeles/West-Covina-Unified (accessed May 2025).

Federal Emergency Management Agency (FEMA). 2025. FEMA's National Flood Hazard Layer (NFHL) Viewer. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd (accessed May 2025).

Los Angeles County Fire Department (LACFD). 2025. Health Hazardous Materials Division. https://fire.lacounty.gov/health-hazardous-materials-division/#:~:text=Health%20Hazardous%20Materials%20is%20a%20Certified%20Unified%20Program%20Agency%20that,Cal%2DARP)%2C%20the%20Aboveground (accessed April 2025).

Los Angeles County Sanitation District (LACSD). 2025. Consolidated Agenda for March 11, 2025 Board of Directors Meeting. https://file.lacounty.gov/SDSInter/bos/supdocs/200669.pdf (accessed June 2025).

NatureServe. 2025. Definitions of NatureServe Conservation Status Ranks. https://help.natureserve.org/biotics/content/record_management/Element_Files/Element_Tracking/ETRACK_Definitions_of_Heritage_Conservation_Status_Ranks.htm (accessed April 2025).

Rincon Consultants, Inc (Rincon). 2025. Arborist Report for the 1501 Del Norte Street Residential Project. Los Angeles, California. April 2025.

SA Geotechnical, Inc. 2024. Geotechnical Due Diligence Study. June 2024.

South Coast Air Quality Management District (SCAQMD). 2008. Final Localized Significance Threshold Methodology. July 2008. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf. Accessed June 2025.

_____. 2010. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15. September 2010. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf. Accessed June 2025. Southern California Association of Governments (SCAG). 2020. Connect Socal 2020. https://scag.ca.gov/sites/default/files/2024-05/0903fconnectsocal-plan_0.pdf (accessed May 2025).

_____.2024. 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy, Connect SoCal 2024. SCAG Connect SoCal 2024 - A Plan for Navigating to a Brighter Future, Adopted, April 4, 2024 - COMPLETE BOOK. Accessed June 2025.

State of California. 2018. California's Fourth Climate Change Assessment Statewide Summary Report. August 27, 2018. https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf. Accessed June 2025.

State Water Resources Board (SWRCB). 2025. Geotracker. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Search+GeoTracker# (accessed May 2025).

United States Department of Agriculture (USDA). 2025. Natural Resources Conservation Service (NRCS) Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed March 2025.

United States Environmental Protection Agency (USEPA). 2019. SEMS Search. https://enviro.epa.gov/envirofacts/sems/search/results?q=N4Ig7glgJg5gpgFwMIEMA2aQC4Bm6DOcANCFBPgA5ooCeSAThAnIytsAL4l4DGAynDRweCCAHsAduxBiKoyQJT0eACwAqNCnGwgARnBgQJAdSYqQXEPDEx6KCipqLl5rKBRQo9OPnzSAXhAUSGJQ2lggICQeXj74ADJG4SAAjACsAAwpAARhaNkSYvTM2fgI3ohRIDxMNDpgPgjZPGIAbkZsJC0ArhIIdRFoYvjZKBLwQn4kZSjM0i1hOkgAglVh%2BDyMcuJSEahoEDhFEhBsljH0zqoaWjr6hiZmFiQSVDrP1ZIIKAC2HX3vDhAA (accessed April 2025).

United States Fish and Wildlife Service (USWFS). 2025a. Information for Planning and Consultation. Available at: http://ecos.fws.gov/ipac/. Accessed March 2025.

_____. 2025b. Critical Habitat for Threatened and Endangered Species. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77. Accessed March 2025.

_____. 2025c. National Wetlands Inventory. https://www.fws.gov/wetlands/data/mapper.html Accessed March 2025.

West Covina, City of. 2011. City of West Covina Energy Action Plan. https://www.ca-ilg.org/sites/main/files/file-attachments/cwc_energy_action_plan.pdf (accessed April 2025).

_____. 2016a. West Covina General Plan (PlanWC). https://www.westcovina.org/home/showdocument?id=18138 (accessed November 2020).

_____.2016b. General Plan Update and Downtown Plan and Code Final Environmental Impact Report. https://www.westcovina.org/home/showdocument?id=18142 (accessed November 2020).

_____. 2020. West Covina Manor Ridge Crest Senior Living Initial Study/Mitigated Negative Declaration. March 2020. https://www.westcovina.org/home/showdocument?id=18089 (accessed May 2025).

West Covina Police Department (WCPD). 2025. Phone Call with Catherine Bayutas, Senior Administrative Assistant on June 3rd 2025.

City of West Covina Municipal Code (WCMC). 2022. Code of Ordinances, Chapter 26, Article VI, Division 9. Available at: https://file.lacounty.gov/SDSInter/acwm/216029_WestCovinaMC.pdf. Accessed April 2025.

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Appendix A

1501 Del Norte Specific Plan

CITY OF WEST COVINA

DEL NORTE

DRAFT SPECIFIC PLAN

2025

DRAFT DEL NORTE SPECIFIC PLAN

Prepared for:
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EXECUTIVE SUMMARY

The Del Norte Specific Plan encompasses approximately 13.19 acres of land located at the northwest corner of North Sunset Avenue and West Del Norte Street in the City of West Covina, California. **Exhibit 1.1: Vicinity Map**, illustrates the location and setting of the specific plan area.

The existing project site includes a former regional occupation center. The site consists of various buildings, parking lots, a large grass field, and a number of mature trees.

The site is surrounded by Del Norte Park and West Rowland Avenue to the north; North Sunset Avenue to the east, North Nora Avenue to the west, West Del Norte Street to the south. Single-family homes are located around the eastern, western, and southern boundaries of the specific plan area. Interstate 10 (I-10) provides regional access to the site, with on- and off-ramps available at North Vincent Avenue and North Sunset Avenue. Downtown West Covina is located immediately south of I-10, less than a quarter mile from the project site. Regional mass transit, provided by Foothill Transit, is available via bus stops located on North Sunset Avenue.

As illustrated in **Exhibit 1.2: Conceptual Site Plan**, the Del Norte community consists of 34 two-story detached single family homes, 138 three-story attached townhomes, and 110 four-story stacked flats (282 total homes) arranged around a common recreation area. The community design creates a transition between existing single-family residential neighborhoods and more dense multi-family uses. The centralized common area includes amenities and opportunities for relaxation, recreation, and social interaction.

The architectural design of the project includes a blend of traditional and transitional architectural styles consistent with the design character of adjacent neighborhoods. Detached homes consist of two-story Spanish and Seaside styles that complement single-family homes along North Nora Avenue and West Del Norte Street. Three-story townhome and four-story stacked flat buildings are designed in a Spanish and Seaside style that blends traditional and contemporary design elements to convey a more urban character along Del Norte Park and North Sunset Avenue, a busy principal arterial that transitions from single family homes near West Workman Avenue to commercial uses as it approaches the I-10 Freeway and Downtown West Covina to the south.

Construction is anticipated to occur in two (2) phases:

(1) Phase one consists of demolishing the existing school buildings and associated improvements, site preparation and grading, and utility installation. This phase is anticipated to last approximately six (6) months.

(2) Phase two will consist of roadway improvements and building construction. Phase two may be further divided into sub-phases and is anticipated to last approximately twenty four (24) months depending upon market conditions.

The project site is currently zoned Single Family (R-1) and with a General Plan designation of Civic: School. Entitlements required for the project include the following:

(1) Adoption of a General Plan Amendment to change the land use designation from Civic: School to Neighborhood Medium Density (9 to 20 units per acres) & High Density Residential (21 to 54 units per acres)

(2) A Zone Change to Specific Plan (SP-30: Del Norte) to accommodate the proposed density and design.

(3) Adoption of this Specific Plan.

(4) Approval of a Precise Plan and Tentative Tract Map.

(5) Approval of a Tree Removal Permit for one (1) Oak Tree on site.

Environmental review for the project will comply with the requirements of the California Environmental Quality Act (CEQA).

The Del Norte Specific Plan is organized into the following sections:

Chapter 1 - Introduction: Introduces the reader to the project setting, regulatory context, relationship to the General Plan, Specific Plan Objectives, and Community Overview.

Chapter 2 - Circulation, Land Use & Standards: Describes the land use and circulation for the site; establishes permitted uses and development intensity; Provides development standards for privative roadways and each land use including minimum setbacks, building height limits, parking requirements, and more.

Chapter 3 - Architectural Design Guidelines: Provides graphic conceptual representations of the intended architectural design including styles, colors and materials, and other design guidelines.

Chapter 4 - Landscape Design Guidelines: Provides a graphic representation of the intended landscape design for the community including plant palettes and specifications for design elements such as mailboxes, seating, signage, and more.

Chapter 5 - Utilities & Services: Describes the required infrastructure and services needed to support the project including grading, water, sewer, stormwater drainage and treatment, waste management, energy, emergency access and services, and more.

Chapter 6 - Administration and Implementation: Describes the review process for subsequent development applications and how the proposed improvements will be financed.

Appendix A - General Plan Consistency Analysis: Provides a detailed analysis of the specific plan's consistency with general plan polices and actions as required by the Land Use and Climate Innovation (LCI).

1 - INTRODUCTION

1.1 LOCATION & SETTING

The Del Norte Specific Plan encompasses approximately 13.19 acres of land located at the northwest corner of North Nora Avenue and West Del Norte Street in the City of West Covina, California. Exhibit 1.1: Vicinity Map illustrates the location and setting of the specific plan area.

The specific plan area is located less than a half mile north of Interstate 10 (I-10) at 1501 West Del Norte Street. Two major shopping centers, the Plaza West Covina (Westfield Shopping Town) and the Marketplace at the Lakes, are located across the freeway less than a mile south. These two shopping centers represent the northerly end of West Covina's downtown.

North Nora Avenue and West Del Norte Street form the western and southern edge of the specific plan area. West Garvey Avenue North on- and off-ramps to I-10 and leads into North Sunset Avenue with

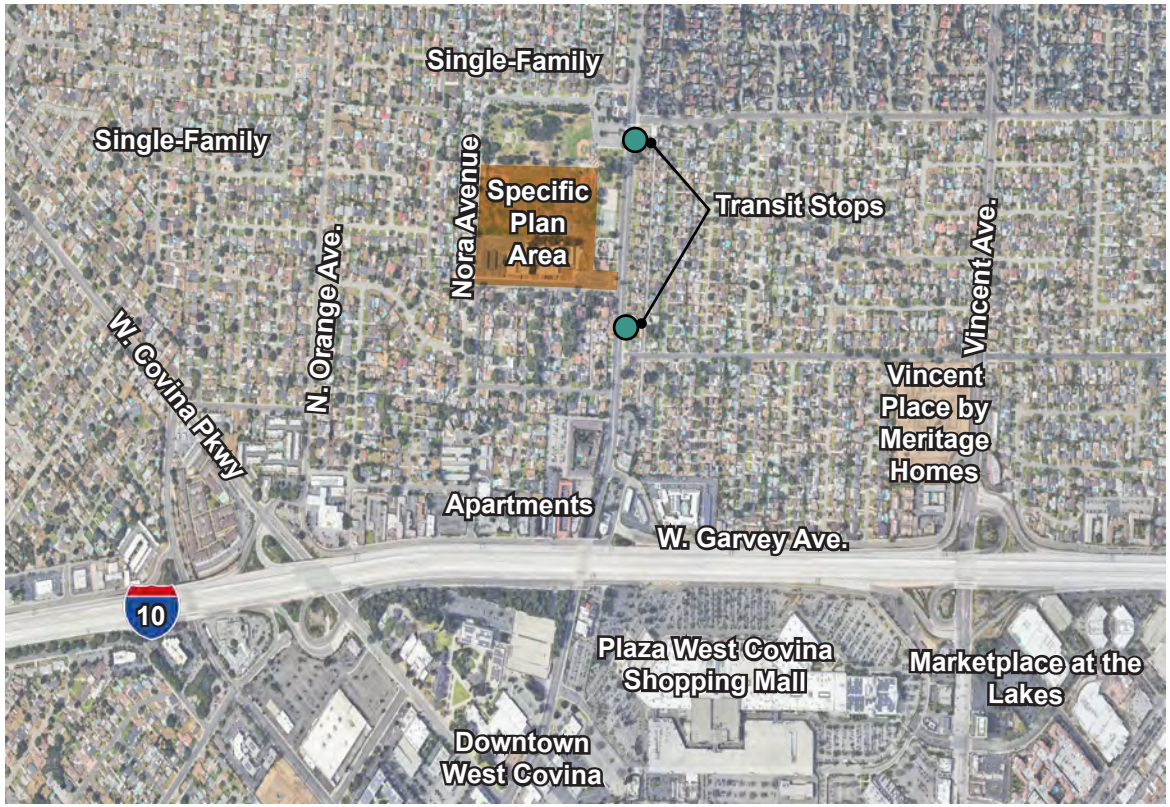
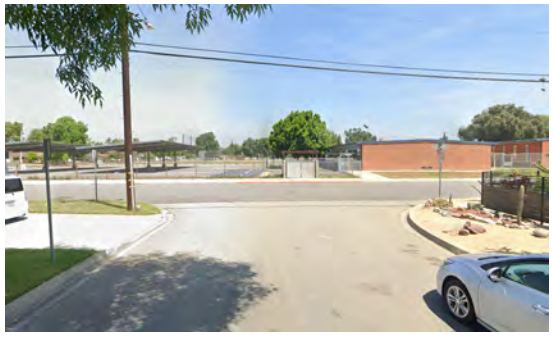


Exhibit 1.1: Vicinity Map
Not to Scale

Existing W Del Norte Street and N Nora Avenue intersection; Specific plan area is in the center.

Existing N Sunset Avenue looking East; Specific plan area is on the right.



Existing N. Foxdale Ave looking Northeast; Specific plan area is straight ahead.

apartments and a hotel, transitioning in the residential neighborhood. Single-family homes are located around the eastern, western, and southern boundaries of the specific plan area.

The specific plan area is the former site of the East San Gabriel Valley ROP Technical Center, a occupation center operated by San Gabriel Valley ROP and owned by West Covina Unified School District. The ROP Technical Center has relocated to Glendora. The site contains various buildings, a parking lot, a large grass field, and a number of mature trees.

Bus stops on N Sunset Avenue provide access to Line 185. Line 185 is operated by Foothill Transit and serves Azusa, Irwindale, Vincent, West Covina, Valinda, La Puente, City of Industry, and Hacienda Heights. These stops service the following stops: Irwindale Raceway, Santa Fe Dam Recreation Area, Tri-Community Adult Education - Griswold Center, East San Gabriel Valley Regional Occupational Program And Technical Center, Marinello School Of Beauty, West Covina Community Services, Intercoast Colleges, Hacienda La Puente Adult Education - Hudson Campus, La Puente Live Farmers Market, Workman, Temple Family Homestead Museum, Hacienda La Puente Unified School District-Adult Education, William Steinmetz Park, Dibble Adult School, Thomas S. Burton Park, Pepperbrook Park, Countrywood Park, and Schabarum Regional Park.

Additional transit service is available at Plaza West Covina (Westfield Shopping Town), located across the freeway less than a mile south. Several Foothill Transit lines run through the station providing access to Los Angeles and other distant destinations. Go West also operate services in the Plaza West Covina transit center. The Go West Shuttle service consists of three (3) alignments (Red, Blue, and Green) that serve destinations throughout the city including Plaza West Covina, Eastland Shopping Center, Heights Shopping Center, West Covina Civic Center, West Covina Senior Center, Cameron Community Center, and many more.

1.2 REGULATORY CONTEXT

As part of the specific plan process, a General Plan Amendment was processed concurrently to change the land use designation of the specific plan area from Civic: School to Neighborhood Medium and High Density Residential, which allows for a density 9 to 20 dwelling units per acre and 21 to 54 dwelling units per acre respectively.

A Zone Change was also processed concurrently to rezone the property from Single-Family Residential (R-1) to Specific Plan (SP-30: Del Norte), thereby implementing the Neighborhood Medium and Neighborhood High Density Residential General Plan designations and requiring the preparation of this specific plan.

Sections 65450 through 65457 of the California Government Code authorize local jurisdiction to adopt specific plans. A specific plan is a legislative tool for the systematic implementation of the general plan. Specific plans can range from general policy documents to very detailed regulatory documents that specify every facet of development. This specific plan is regulatory in nature and serves as the zoning law for the specific plan area. As such, this specific plan will be adopted by ordinance. All subsequent development plans, tentative parcel and/or tract map(s) and/or similar entitlements for projects within the specific plan area shall be consistent with the regulations set forth in the Del Norte Specific Plan and with other applicable City of West Covina regulations. Where the Del Norte Specific Plan is silent, the West Covina Municipal Code (WCMC) shall govern.

If any section, subsection, sentence, clause, phrase, or portion of the Del Norte Specific Plan, or any future amendments or additions, is for any reason held to be invalid or unconstitutional by the decision of any court or competent jurisdiction, such decision shall not affect the validity of the remaining portions of this specific plan or any future amendments or additions.

1.2.1 Statutory Requirements

Section 65451 of the Government Code mandates that a specific plan shall include all of the following in detail:

(1) The distribution, location, and extent of land uses, including open space (please see Land Use in Chapter 2).

(2) The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed and needed to support the land uses described in the plan (please see Chapter 2 for transportation, i.e. circulation, and Chapter 5 for utilities and services).

Existing W Del Norte Street and school site buildings; Specific plan area is to the right.

Existing school site parking lot on W Del Norte Street; Specific plan area is on the left.

Existing N Nora Ave. looking North; Specific plan area is on the right.

(3) Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable (please see Development Standards in Chapter 2).

(4) A program of implementation measures including regulations, programs, public works projects, and financing measures (please see Chapter 6).

In addition, the specific plan shall include a statement of the relationship of the specific plan to the General Plan.

1.2.2 General Plan Relationship

The primary purpose of a specific plan is to implement the General Plan. State law requires specific plans to include a statement about the relationship between the specific plan and the adopted General Plan. Specific plans are required to be consistent with the adopted General Plan of the jurisdiction in which it is located. In turn, all subsequent subdivisions and development plans must also be consistent with the General Plan.

A major theme of the General Plan is to direct development toward the downtown area. Although the specific plan area is not directly located in the downtown, it is immediately adjacent and meets the intent of providing infill development that supports downtown uses.

The Del Norte Specific Plan also implements the General Plan creating a diversity of housing options; providing infill development; and providing new growth that completes, enhances, and reinforces the form and character of West Covina neighborhoods. Please refer to Appendix A for an in-depth analysis of all applicable General Plan policies and actions.

1.3 SPECIFIC PLAN OBJECTIVES

To ensure the implementation of the goals and policies of the general plan, the following objectives have been established for the Del Norte Specific Plan:

(1) Locate lower density housing adjacent to existing single-family homes and higher density housing adjacent to existing park and office uses.

(2) Require new development to include design features that preserve the privacy of existing adjacent residential backyards.

(3) Design new homes that improve the Sunset Avenue corridor as a transitional gateway to West Covina's downtown while respecting the residential character of the adjacent neighborhood.

(4) Engage the surrounding neighborhood by facing front doors toward public streets and providing porches, patio walls, and similar features that define the street edge and add pedestrian scale.

(5) Enhance community design through landscaping and recreational amenities that promote a high-quality living environment.

(6) Implement sustainable development practices that promote water and energy efficiency, minimize impacts to stormwater, and support alternative modes of travel.

(7) Establish a Homeowners Association (HOA) to ensure that the Del Norte Community is well maintained and remains an asset to the neighborhood.

1.4 COMMUNITY OVERVIEW

The Del Norte Specific Plan proposes to redevelop a former school site with 282 residential homes, including 34 detached homes, 138 three-story attached townhomes, and 110 four-story stacked flats arranged around a centralized common recreational area. Please refer to Exhibit 1.2: Conceptual Site Plan.

The Conceptual Site Plan has been designed to create the transition between existing single-family neighborhoods and more dense multi-family uses.

Two-story detached homes are located along the southern and western boundary, adjacent to existing single-family neighborhoods. Homes along North Nora Avenue and West Del Norte Street have been oriented with front doors facing the street to complete and complement the residential streetscene across the street. Architectural styles reflect the traditional character of the surrounding neighborhood. Porch elements support the traditional style of the streetscape and provide variety and pedestrian scale.

Three-story attached townhomes are located on the interior of the project as a transitions between the single family homes and stacked flats. Development standards, including height and parking requirements, are based on development standards for the MF-20 zone to ensure consistency with adjacent properties.

Four-story stacked flats are located along the northern and eastern boundaries and help frame the central open space area. Similar to the three-story townhomes the development standards, including height and parking requirements, are based on development standards for the MF-20 zone.

Detached Homes

- 34 two-story homes provide a transition between single family and multi-family uses
- Complete the single family streetscene of the existing neighborhood
- Oriented to face front doors toward N Nora Ave and W Del Norte Street.

Secondary Entry

- Minor entry provides efficient circulation and access
- Minor monumentation features announce entry

Attached Townhomes

- 138 three-story homes
- Garages accessed from a rear private alley
- Interior to the site, front doors face paseos and common areas

Central Park

- Central Recreation area with pool, picnic area, barbecues, open turf area, mailboxes, and more
- Provides a social space for residents to gather

Primary Entry

- Formal entry with restricted parking, sidewalks on both sides, enhanced paving and landscaping, and monumentation
- Designed to align with N Hollow Avenue

Four Story Stacked Flats

- 110 four-story stacked flats
- Garages accessed from a rear private alley
- Oriented in the center and back of the site as to not interfere with the single homes on N Nora Avenue

Exhibit 1.2: Conceptual Site Plan

Not to Scale

For conceptual purposes only. Site Plan may vary at Final provided it is in substantial conformance with the Specific Plan. Please refer to Chapter 6.

2 - CIRCULATION, LAND USE & STANDARDS

2.1 LAND USE

The Del Norte Specific Plan allows for two separate General Plan designations. The single family and townhome portion of the site (9.27 acres) will be designated as Medium Density (18.5 dwelling units per acre) consistent with the General Plan designation of Neighborhood Medium Density (9 - 20 units per acre). The four-story stacked flat area of the site (3.92 acres) will be designated as High Density (28.06 dwelling units per acre). The High Density designation is consistent with the General Plan Neighborhood High Density (21-54 dwelling units per acre).

In order to implement the General Plan policy of providing diverse housing types, the property has been rezoned to Specific Plan. The Specific Plan zoning designation allows for the adoption of Specific Plan land uses that further define the location and intensity of proposed development and allow for the creation of unique development standards and housing types that would not otherwise be permitted by the current zoning code.

One of the Specific Plan's objectives is to transition density across the site to "locate lower density housing adjacent to existing single-family homes and higher density housing adjacent to existing park and office uses" In keeping with this objective, the Specific Plan establishes two land uses:

- Residential Detached (RD) permits the development of up to 34 two-story detached homes and ancillary uses. This type of home bridges the gap between townhomes and traditional single-family homes by offering the equivalent of a detached townhome with a full driveway and small rear yard.
- Residential Attached (RA) permits the development of up to 138 three-story attached townhomes and 110 four-story stacked flats and ancillary uses.

Permitted ancillary uses within both land uses include the keeping of household pets and home occupations as permitted by the WCMC in Multi-Family Zones, recreational amenities, parking, landscaping and similar uses that support urban living.

2.2 CIRCULATION

North Sunset Avenue is classified as a Commercial/Mixed Use throughfare in the West Covina General Plan. Residential Connectors serve high volumes of regional traffic, located adjacent to primarily commercial or high-density residential parcels, with 40 mph speed design, and four to six continuous travel lanes.

The primary access to the specific plan area shall be provided via W Del Norte Street. A new sidewalk and parkway, curb, and gutter as well as a new curb cut at the entry will be provided. North Nora Avenue and W Del Norte Street are classified as Residential Streets.

Legend

- Residential Detached (RD)
- Residential Attached (RA)
- Private Primary Entry Lane
- Private Lanes
- Private Alleys

Exhibit 2.1: Land Use & Circulation Map

Not to Scale

Residential Streets primarily provide direct access to abutting residential properties with two continuous travel lanes and 25 mph speed design.

Secondary access shall be provided from North Nora Avenue. Frontage improvements include a new sidewalk and parkway. New curb and gutter and a new curb cut at the entry will also be provided. Existing street trees will be removed and new trees will be planted within the parkway.

Access and circulation through the project is provided by a series of private lanes and alleys as illustrated in **Exhibit 2.1: Land Use & Circulation Map.** Onsite circulation is designed to follow a hierarchy as described below:

(1) The Primary Entry Lanes are specially designed to announce arrival into the community.

(2) Lanes provide primary vehicular access and sidewalks through the community and a loop for fire and waste collection vehicles.

(3) Alleys provide garage access to attached townhomes and stacked flats.

Exhibit 2.2: Typical Private Circulation Cross Sections illustrates the minimum design standards for each type of drive.

Private lanes that provide emergency vehicle access are required to provide a minimum width of 26 feet and a minimum outside turning radius of 45 feet. Please refer to Chapter 5 for the Fire Access Plan. All other alleys and shared driveways shall maintain a minimum width of 20 feet.

2.3 DEVELOPMENT STANDARDS

Development standards are generally based on the City of West Covina's existing Multi-Family standards for communities with a density of 20 unit per acre (MF-20); however, some standards have been added or modified to better address the unique site adjacencies, the proposed housing types, and the objectives of this Specific Plan.

Any situations not specifically addressed by the Del Norte Specific Plan shall be subject to the WCMC.

2.3.1 Residential Detached

Development standards for Residential Detached uses are provided in **Table 2.1: Residential Detached Development Standards** and illustrated in **Exhibit 2.3: Dimensioned Site Plan.**

2.3.2 Residential Attached

Development standards for Residential Attached uses are provided in **Table 2.2: Residential Attached Development and Table 2.3: Residential Attached Development Standards** and illustrated in **Exhibit 2.3: Dimensioned Site Plan**.

2.3.3 Common Open Space

Common open space areas provide a connection to the outdoors and opportunities for residents to relax, play, and socialize. These spaces contribute greatly to the livability of high density communities by providing a focal point for neighborhood design and softening the environment with rich textures, vibrant colors, and pleasing aromas.

The Del Norte Specific Plan requires a minimum of 150 square feet of common area per home for a total of 42,300 square feet. This shall consist of the following:

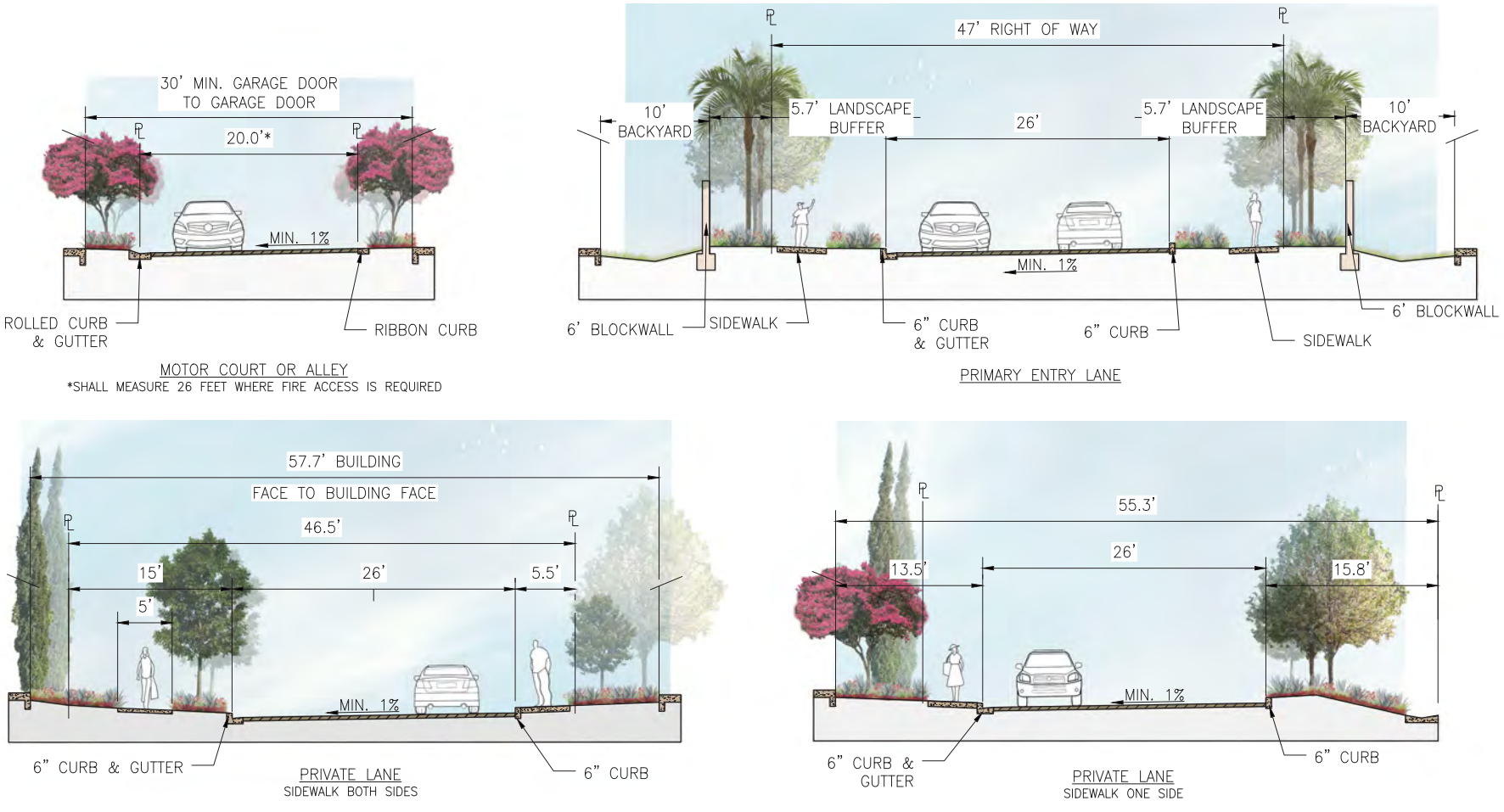


Exhibit 2.2: Typical Private Circulation Cross Sections

Not to Scale

(1) A centralized space consisting of a minimum area of 10,000 square feet, a minimum dimension of 75 feet, and at least one (1) major amenity such as a play structure, sport court, picnic pavilion, pool, or similar.

(2) Smaller secondary common open space areas with a minimum dimension of 10 feet may include walkways, landscaping, benches, and other passive or active amenities.

2.3.4 Parking Regulations

The number of parking spaces provided shall be in accordance with the WCMC standards for condominiums, which require a minimum of two (2) resident spaces per unit and one (1) guest spaces per every four (4) units.

For purposes of this specific plan, resident spaces shall be provided within a garage. Each garage space shall provide an unobstructed minimum area of 10'x20' with a vertical clearance for 7'6". Spaces may be provided side-by-side or in a tandem configuration. Garage spaces shall be used for parking of vehicles only and shall be strictly enforced through the community's Covenants, Conditions, and Restrictions (CC&Rs). Electric Vehicle (EV) charging and bicycle parking shall

Table 2.1: Residential Detached Development Standards

Standard	Requirement
Maximum Height	Two Stories and 27'
Max. Building Coverage	70%
Minimum Lot Area[1]	2000 SF
Minimum Building Setbacks	
Front	16'
Side[2]	5'
Rear[2]	10'
Garage	18'
Specific Plan Boundary	10'
Minimum Building Separation	
All other Separations	10'
Private Outdoor Space	
Minimum Area Required	150 SF
Minimum Dimension in any Direction	5'

1. Lot size requirements do not apply to commonly owned parcels.

2. Canopy structures are permitted in private rear or side ground level yards. Canopy structure with a projected canopy area of one hundred twenty (120) sqaure feet and a height of seven (7) feet are permitted, with the exception that canopy structures encroaching into the interior side yard and/or the rear five (5) feet of the rear yard shall only be permitted with a projected canopy area of less than one hundred twenty (120) square feet and a height of less than seven (7) feet. All canopy strutures must be approved by the HOA.

Table 2.2: Residential Attached Townhome Development Standards

Standard	Requirement
Maximum Height	Three (3) Stories and 39’
Max. Building Coverage	None
Minimum Lot Area	None
Minimum Building Setbacks	
To Specific Plan Boundary[3]	10’
To Private Lane	
Front[2] of Building to Back-of-Walk[1]	5’
Side of Building to Face-of-Curb	5’
Minimum Building Separation	
Face of Garage Door to Face of Garage Door	30’
Front to Front/Front to Side[2]	20’
All Other Separations	10’
Private Outdoor Space	
Minimum Area Required	60 SF
Minimum Dimension in any Direction	5’6”

1. Patio walls may encroach into setbacks. Patio walls shall be setback a minimum of 3-feet from back of walk. Please refer to Section 2.3.7 for wall and fence development standards.
2. The front of building shall be defined as the longest edge of the building that provides front-door access to the majority of homes within the building.
3. Canopy structures are permitted in private rear or side ground level yards. Canopy structure with a projected canopy area of one hundred twenty (120) sqaure feet and a height of seven (7) feet are permitted, with the exception that canopy structures encroaching into the interior side yard and/or the rear five (5) feet of the rear yard shall only be permitted with a projected canopy area of less than one hundred twenty (120) square feet and a height of less than seven (7) feet. All canopy strutures must be approved by the HOA.

Table 2.3: Residential Attached Stacked Flats Development Standards

Standard	Requirement
Maximum Height	Three (3) Stories and 39’
Max. Building Coverage	None
Minimum Lot Area	None
Minimum Building Setbacks	
To Specific Plan Boundary	10’
To Private Lane	
Front[2] of Building to Back-of-Walk[1]	5’
Side of Building to Face-of-Curb	5’
Minimum Building Separation	
Face of Garage Door to Face of Garage Door	30’
Front to Front/Front to Side[2]	21’
All Other Separations	10’
Private Outdoor Space	
Minimum Area Required	60 SF
Minimum Dimension in any Direction	5’6”

1. Patio walls may encroach into setbacks. Patio walls shall be setback a minimum of 3-feet from back of walk. Please refer to Section 2.3.7 for wall and fence development standards.
2. The front of building shall be defined as the longest edge of the building that provides front-door access to the majority of homes within the building.

For conceptual purposes only. Site Plan may vary at Final provided it is in substantial conformance with the specific plan. Please refer to Chapter 6.

Exhibit 2.3: Dimensioned Site Plan

Not to Scale

be provided in accordance with California Green Building Standards Code. Garage back up space shall be a minimum of 26 feet, which may include the driveway apron. Vehicles may only be parked in driveways with a minimum depth of 18 feet as measured to the back of sidewalk or curb, whichever is closest. Parking in driveways that do not meet this dimension shall be restricted by the CC&Rs.

Guest parking may be provided as perpendicular. Perpendicular spaces shall provide a minimum dimension of 9'x20'.

Guest parking shall be permanently maintained. Parking of commercial, recreational, and nonoperational vehicles in guest parking spaces shall be prohibited by the CC&Rs.

All parking and circulation areas within the specific plan area shall be surfaced with or paved with asphalt concrete, or other surface approved by the City Public Works Department, and shall thereafter be maintained in good condition by the HOA.

2.3.5 Landscape Regulations

All landscape plans shall conform to the landscaping criteria for multiple-family zones as specified in the WCMC, except as contained herein.

2.3.6 Mechanical Equipment & Utilities

All utilities shall be placed underground whenever feasible. Above-ground equipment such as back flow preventers, pad-mounted transformers, and other pad-mounted equipment shall be screened to the extent permitted by the utility provider.

No mechanical equipment (air-conditioning, heating units, etc.) shall be mounted on, or attached to, any pitched roof. Ground mounted equipment shall be located in a fenced rear yard, behind patio walls, or otherwise screened with fencing or landscaping to minimize the visual impact of equipment on streetscapes and common open space areas. Mechanical equipment screens are not considered walls or fences and are permitted to encroach into required setbacks. Mechanical devices such as exhaust fans, vents, and pipes shall be painted to match adjacent roof and wall surfaces.

Electrical meters shall be mounted onto the external wall of the building. Builder shall contact the utility provider for minimum clearances.

2.3.7 Walls & Fences

Walls and fences shall comply with the WCMC except as described herein.

(1) The height of all walls shall be measured from finished grade to top of wall. Pilasters may exceed maximum height up to eight (8) feet. The park portal into the project from Del Norte Park will not exceed twelve-foot, four-inches (12'-4").

(2) All walls shall be architecturally compatible with adjacent buildings and shall be of a consistent type, texture, and color throughout the specific plan area.

(3) Walls adjacent to public rights-of-way shall consist of concrete, masonry, stucco, or decorative block. Tubular steel fencing shall also be permitted. Gates may consist of tubular steel or similar materials.

(4) Patio walls within the required building setbacks along North Nora Avenue and West Del Norte Street and within paseos shall have a maximum height of forty-two (42) inches and shall consist of concrete, masonry, stucco, or decorative block. Patio gates may consist of tubular steel or similar materials. Other materials may be used if approved by the planning director. Patio walls shall be set back a minimum of three (3) feet from any public right-of-way or back of sidedwalk and this setback area shall be landscaped.

(5) All other walls and fences 6-feet in height or taller, adjacent North Nora Avenue, West Del Norte Avenue, and North Sunset Avenue, shall be setback a minimum of three (3) feet from right-of-way. Solid walls shall be screened with landscaping to soften their visual impact on the streetscape and to assist in deterring graffiti.

(6) Except for patio walls, walls and fencing within the specific plan area shall have a maximum height of six (6) feet, unless otherwise required to attenuate sound pursuant to an approved acoustical study.

(7) Walls and fencing adjacent to North Nora Avenue, West Del Norte Street, and North Sunset Avenue shall be maintained by the HOA to ensure they maintain a consistent appearance and remain in good condition.

(8) Graffiti-resistant coatings shall be used on all walls and fences to assist in deterring graffiti.

2.3.8 Storage

Each unit shall provide a minimum of 160 cubic feet of exclusive and secure storage. The storage area shall be located within a garage or in closets within the unit. Storage may be distributed in multiple location; however, no inside dimension of such storage area shall be less than two (2) feet. The storage of furniture, appliances, and other similar equipment shall be within permanent buildings and completely screened from public view. Storage areas shall not obstruct any garage parking space's vertical or horizontal minimum dimensions as specified in Section 2.3.4.

All trash, garbage, recycling, and refuse carts shall be stored in a garage or private fenced yard such that they are screened from public view.

2.3.9 Lighting

Lighting shall be evaluated as part of the development review process and shall comply with following requirements:

(1) Lighting devices shall be protected by weather resistant and vandalism resistant covers.

(2) All lighting of buildings, landscaping, parking areas, or similar facilities shall be hooded and directed to reflect light away from adjoining properties and to minimize skyglow.

(3) Lighting shall be designed to provide the lowest level of illumination required, to the extent feasible, to minimize skyglow.

(4) Aisles, passageways, and recesses within the specific plan area shall be illuminated with an intensity of 0.25 footcandles at the ground level during the hours of darkness.

(5) Open parking lots shall be provided with a maintained minimum of 0.5 footcandle of light on the parking surface during the hours of darkness, in accordance with the Dark Sky Society's recommendations for private parking lots.

2.3.10 Signage

All signage shall comply with the WCMC. Graffiti-resistant coatings shall be used on sign structures, glass panels or similar structures to assist in deterring graffiti.

3 - ARCHITECTURAL DESIGN GUIDELINES

3.1 PURPOSE

The purpose of this section is to ensure that all development within the Del Norte Specific Plan fulfills the specific plan objective of providing high quality architecture that responds to the adjacent neighborhood and corridor conditions.

3.2 DESIGN GUIDELINES

The following design guidelines provide general design guidance to all architecture with the specific plan area. These design guidelines are intended to be flexible such that alternative designs are permitted as long as they meet the level of quality and character envisioned by this specific plan. All floorplans, elevations, and color schemes contained herein are conceptual in nature and may vary at final design.

3.2.1 Elevations

All publicly visible elevations shall incorporate building form, massing, roof designs, authentic details, and accent features at a comparable level of detail as those expressed on the elevations contained herein. The features of the elevation should be consistent with the intended architectural style of the home and coordinate together to create a balanced and harmonious composition.

3.2.2 Roof Forms

A variety in roof forms, ridge and eave heights, and direction of hips or gables shall be required to avoid a monotonous roof lines as viewed from neighborhood streets, open space, and other public and common outdoor spaces

Roof materials should consider authenticity of style while balancing durability and building code requirements. Fascia elements should be consistent with the architectural style of the building.

3.2.3 Windows

Window details, including header, sill and trim elements shall be consistent with the architectural style of the building.

Window shapes and mullion patterns shall be consistent with the architectural style of the building. The shape and size of shutters shall be compatible with the window opening.

3.2.4 Details & Lighting

Exposed gutters and downspouts shall be colored to either match or complement the surface to which they are attached.

Carriage lights are permitted and shall be consistent with the architectural style of the building.

3.2.5 Sustainability

New homes shall be designed in accordance with the California Building Code, the most sustainable building code in the nation. The code requires features that promote energy and water efficiency, the use of alternative modes of transportation, improved indoor air quality, and more.

3.3 DETACHED RESIDENTIAL

Detached homes are intended to create a transition between existing single-family neighborhoods to the west and south and the proposed townhomes and flats within the specific plan area. These homes are plotted along the southerly and westerly boundaries, adjacent to single-family neighborhoods, as illustrated in **Exhibit 3.1: Detached Home Conceptual Plotting Plan**.

Detached residential homes shall be designed to engage North Nora Avenue and West Del Norte Street and reflect the existing traditional single-family character of this neighborhood. This shall be achieved as follows:

- Orient homes to provide an inviting front door presence along North Nora Avenue and West Del Norte Street.
- Include porches, stoops, or similar design features that engage the sidewalk and provide pedestrian scale.
- Design homes in traditional styles such as Seaside and Spanish as illustrated in **Exhibit 3.2b** and **Exhibit 3.3b**. Other complementary traditional styles are permitted, subject to review and approval of the planning director.

There shall be a minimum of two (2) detached floor plans, two (2) elevations per floor plan, and two (2) color schemes per elevation style. This will create 16 different variations of detached homes that will be plotted in both standard and mirrored, i.e. reversed, orientations to ensure diversity along the streetscene.

LEGEND

Plan 3222 = 16 Homes

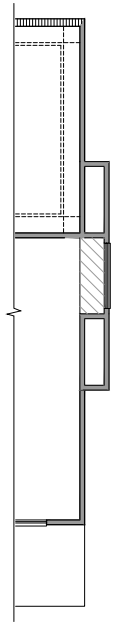
Plan 3522 = 18 Homes

Total = 34 Homes

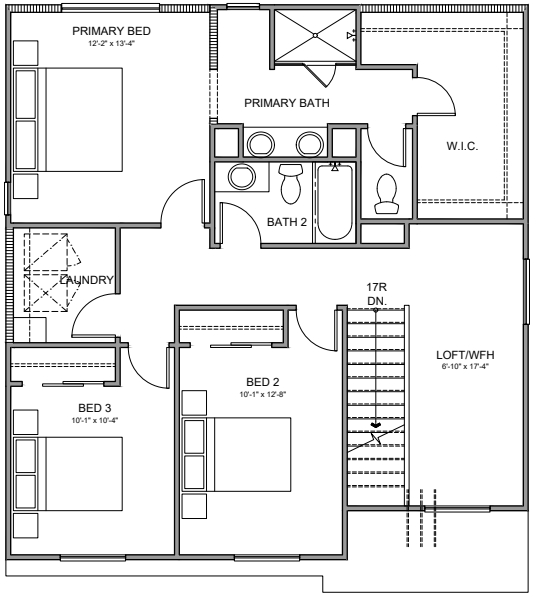
For conceptual purposes only. Site Plan may vary at Final provided it is in substantial conformance with the specific plan. Please refer to Chapter 6.

Exhibit 3.1: Detached Home Conceptual Plotting Plan

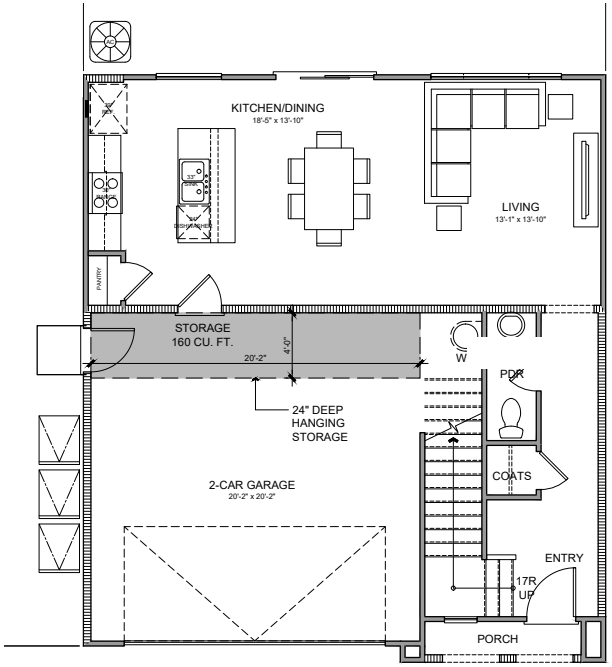
Not to Scale



Second Floor
Enhanced occurs at
Units 7, 12 and 34



Second Floor



First Floor

PLAN 3222
3 BEDROOM, 2.5 BATH, LOFT

Exhibit 3.2a: Plan 3222 Floor Plan

Not to Scale

LEGEND

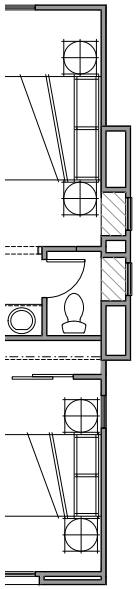
1. Stucco
2. Low Profile Concrete "S" Roof Tile
3. Round Faux Clay Gable End Vent
4. Fascia
5. Stucco Sill Trim
6. Vinyl Window
7. Stucco o/ Foam Corbel
8. Trellis
9. Stucco Arched Soffit
10. Metal Railing
11. Fiberglass Entry Door
12. Decorative Exterior Lights & Address Sign
13. Metal Sectional Garage Door
14. Shutter
15. Sliding Door
16. Faux Finial

Spanish - Elevation

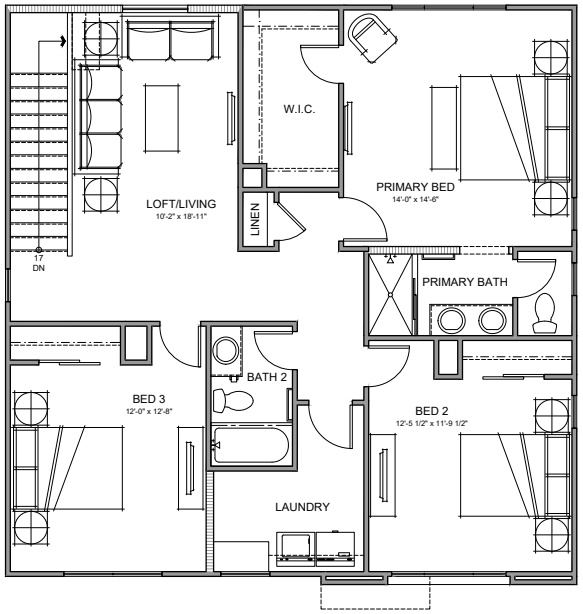
Seaside - Elevation

Exhibit 3.2b: Plan 3222 Elevations

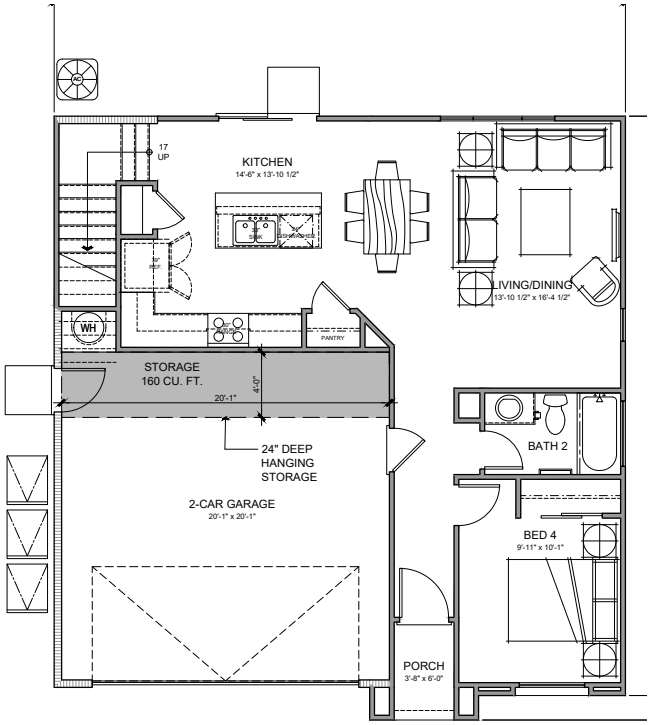
Not to Scale



Second Floor
Enhanced occurs at
Units 1, 8, 27 and 28



Second Floor



First Floor

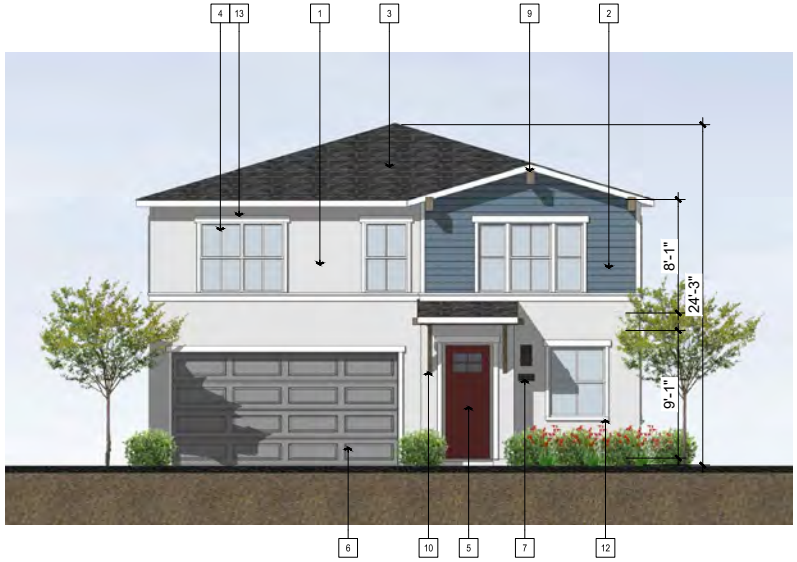
PLAN 3522
4 BEDROOM, 3 BATH, LOFT

Exhibit 3.3a: Plan 3522 Floor Plan

Not to Scale

LEGEND

1. Stucco
2. Horizontal Siding
3. Composite Shingle Roof
4. Vinyl Windows
5. Fiberglass Entry Door
6. Metal Sectional Garage Door
7. Decorative Exterior Lights & Address Sign
8. Railing
9. Outrigger
10. Kicker
11. Trellis
12. Window/Opening Trim
13. Window/Opening Header
14. Faux Corbel
15. Sliding Door



Seaside - Elevation

Spanish - Elevation

Exhibit 3.3b: Plan 3522 Elevations

Not to Scale

3.4 ATTACHED RESIDENTIAL: TOWNHOMES

The following provides design guidance that is specific to the Attached Residential: Townhome uses.

North Sunset Avenue is a busy street with residential and commercial uses along its corridor. This corridor provides a connection between existing single-family neighborhoods and a public park located north and east of the specific plan area to multi-family uses, retail, downtown, and Interstate-10 located south of the specific plan area. Attached residential homes shall be designed to engage North Sunset Avenue and Del Norte Park to create a more urban streetscape. This shall be achieved as follows:

- Orient buildings to create a semi-public wall that defines the edges of Del Norte park and still allows a visual barrier of a private community as illustrated in **Exhibit 3.5: Attached Townhome Conceptual Plotting Plan**.

- Design homes to provide as a trasition from the single family detached homes along W Del Norte Street and North Nora Avenue as illustrated **Exhibit 3.4: Attached Townhome Streetscene**.

The Spanish and Seaside architectural style used for attached residential buildings combines traditional design features with contemporary design features as illustrated in **Exhibits 3.6a** through **3.8d**. Other transitional styles are also permitted, subject to review and approval of the planning director.

Within the community, buildings should be oriented toward internal streets and common open space areas. Front patios may be included, where appropriate, to provide additional private open space areas and create a transition between private and common areas. Buildings may be plotted in both standard and mirrored, i.e. reversed, orientations to provide diversity.

Exhibit 3.4: Attached Townhome Streetscene

Not to Scale

For conceptual purposes only. Site Plan may vary at Final provided it is in substantial conformance with the specific plan. Please refer to Chapter 6.

Exhibit 3.5: Attached Townhome Conceptual Plotting Plan

Not to Scale

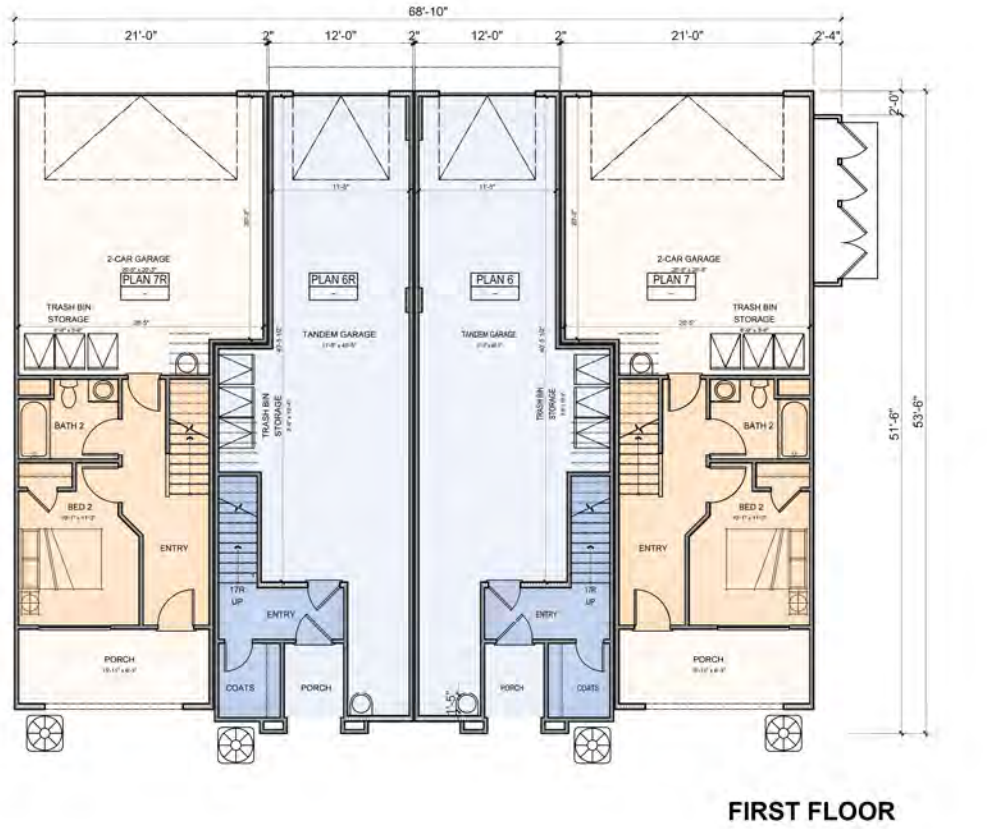
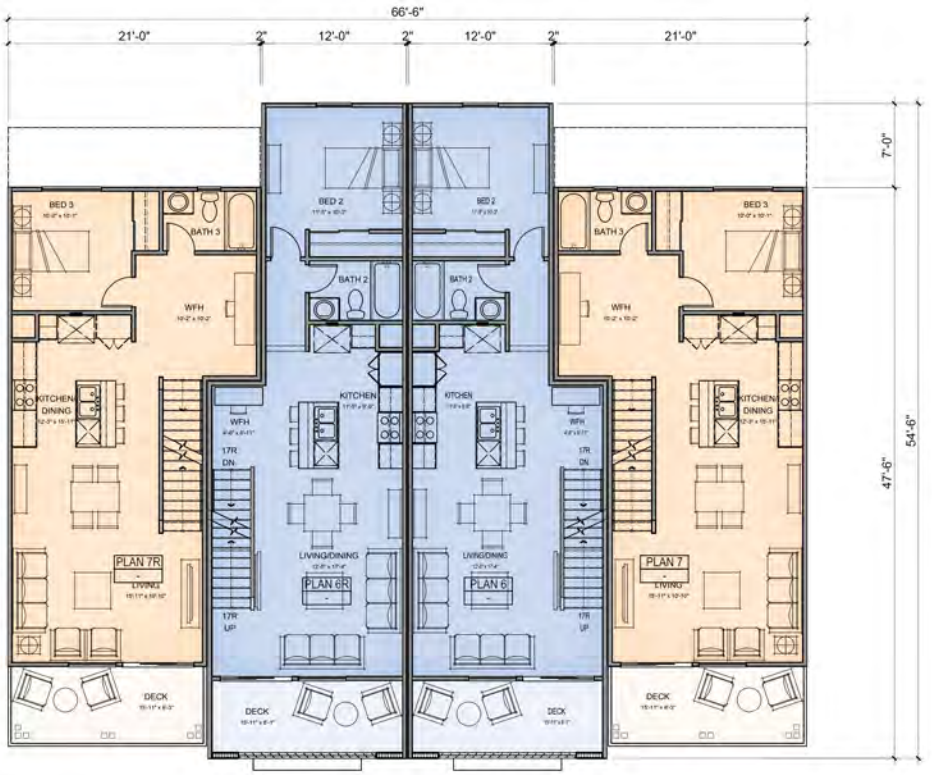


Exhibit 3.6a: Composite A (4-Plex) Townhome Floor Plans

Not to Scale



SECOND FLOOR

Exhibit 3.6b: Composite A (4-Plex) Townhome Floor Plans

Not to Scale

THIRD FLOOR

Exhibit 3.6c: Composite A (4-Plex) Townhome Floor Plans

Not to Scale

LEGEND

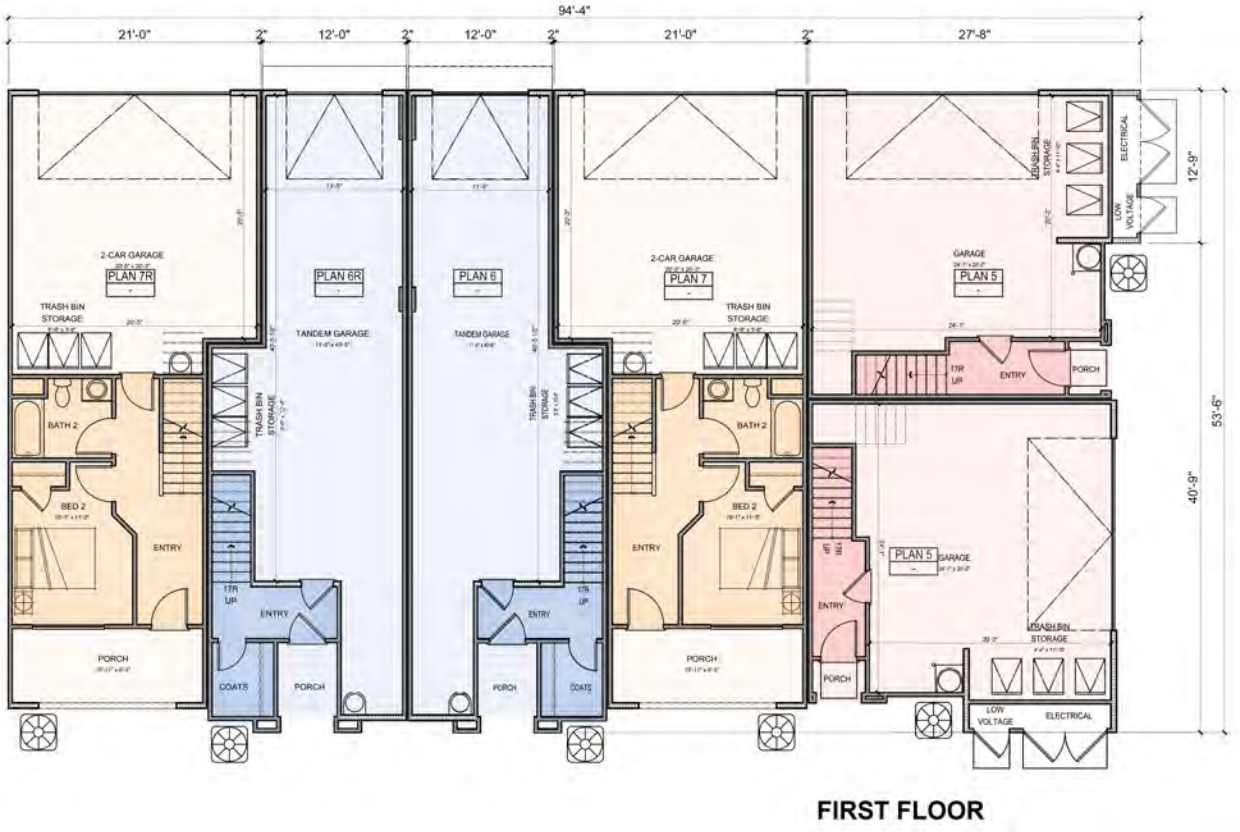
1. Stucco
2. Horizontal Siding
3. Composite Shingle Roof
4. Vinyl Windows
5. Fiberglass Entry Door
6. Metal Sectional Garage Door
7. Decorative Exterior Lights & Address Sign
8. Railing
9. Outrigger
10. Kicker
11. Trellis
12. Window/Opening Trim
13. Window/Opening Header
14. Faux Corbel
15. Sliding Door

Seaside - Elevation

Spanish - Elevation

Exhibit 3.6d: Composite A (4-Plex) Townhome Elevations

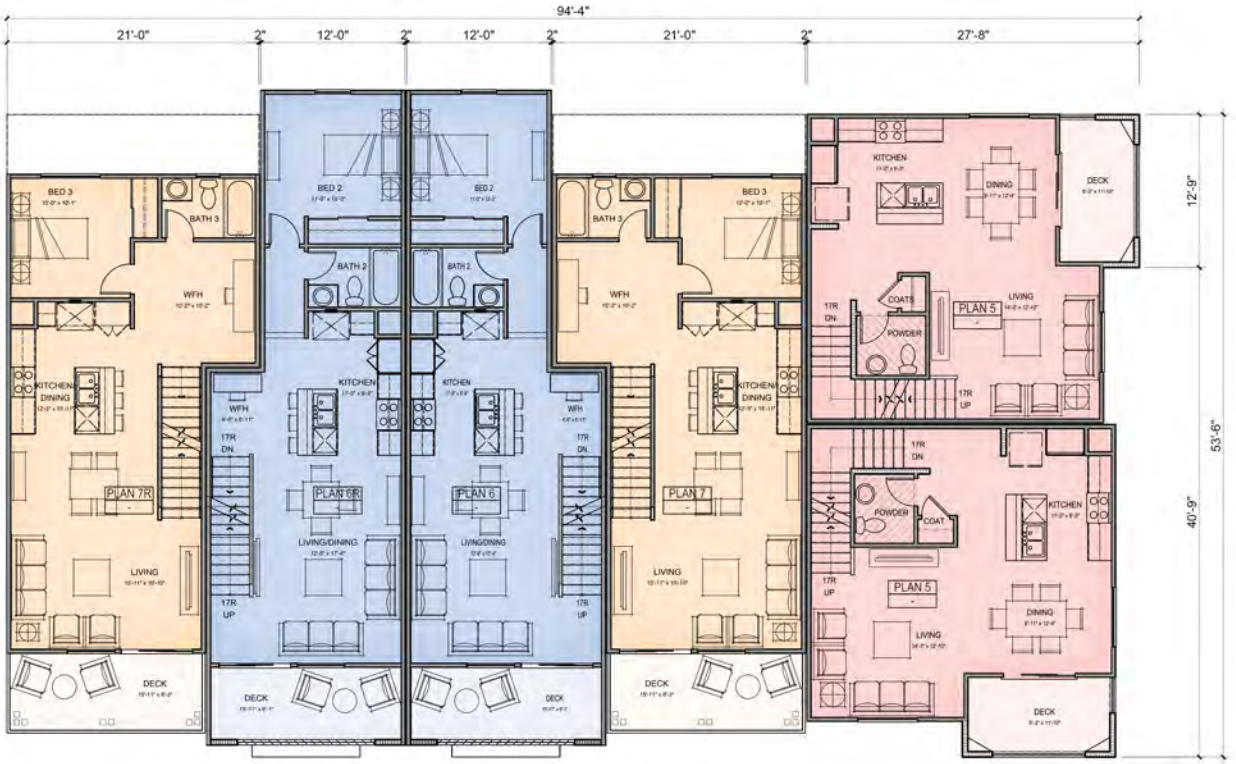
Not to Scale



FIRST FLOOR

Exhibit 3.7a: Composite B (6-Plex) Townhome Floor Plans

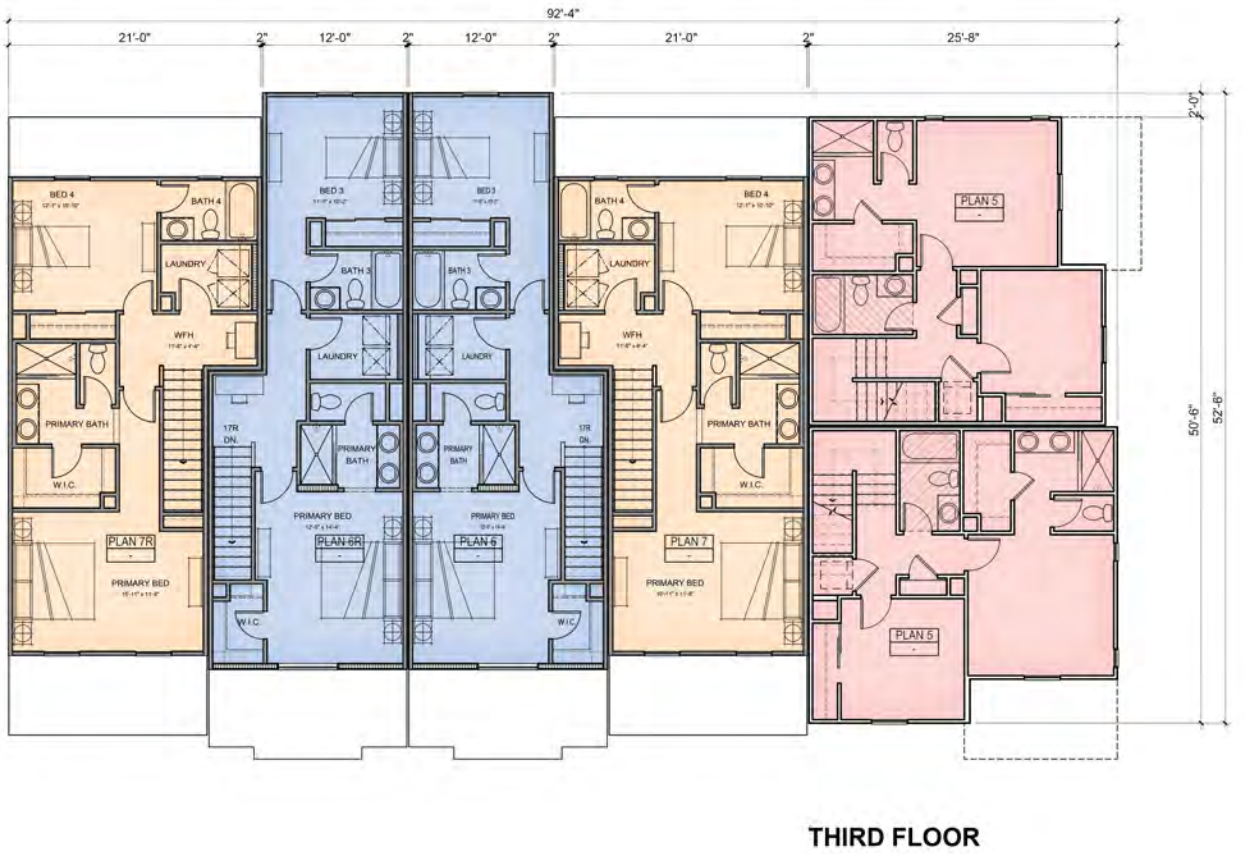
Not to Scale



SECOND FLOOR

Exhibit 3.7b: Composite B (6-Plex) Townhome Floor Plans

Not to Scale



THIRD FLOOR

Exhibit 3.7c: Composite B (6-Plex) Townhome Floor Plans

Not to Scale

LEGEND

1 Stucco
2 Horizontal Siding
3 Composite Shingle Roof
4 Vinyl Windows
5 Fiberglass Entry Door
6 Metal Sectional Garage Door
7 Decorative Exterior Lights & Address Sign
8 Railing
9 Outrigger
10 Kicker
11 Trellis
12 Window/Opening Trim
13 Window/Opening Header
14 Faux Corbel
15 Sliding Door

Seaside - Elevation

Spanish - Elevation

Exhibit 3.7d: Composite B (6-Plex) Townhome Elevations

Not to Scale

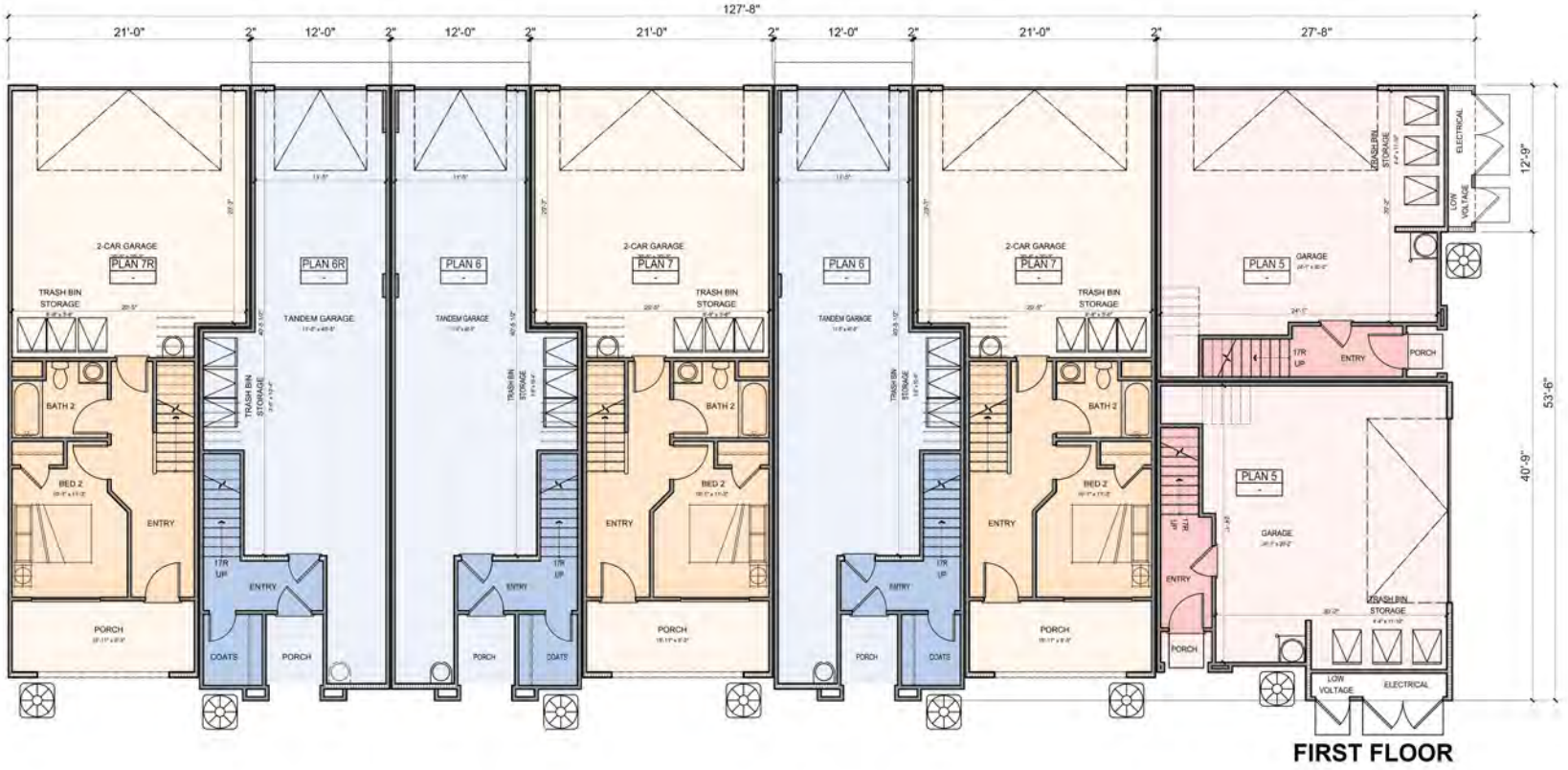


Exhibit 3.8a: Composite C (8-Plex) Townhome Floor Plans

Not to Scale

SECOND FLOOR

Exhibit 3.8b: Composite C (8-Plex) Townhome Floor Plans

Not to Scale

Exhibit 3.8c: Composite C (8-Plex) Townhome Floor Plans

Not to Scale

LEGEND

1. Stucco
2. Horizontal Siding
3. Composite Shingle Roof
4. Vinyl Windows
5. Fiberglass Entry Door
6. Metal Sectional Garage Door
7. Decorative Exterior Lights & Address Sign
8. Railing
9. Exposed Truss Tails
10. Kicker
11. Trellis
12. Window/Opening Trim
13. Window/Opening Header
14. Faux Corbel
15. Sliding Door

Seaside - Elevation

Spanish - Elevation

Exhibit 3.8d: Composite C (8-Plex) Townhome Elevations

Not to Scale

3.5 ATTACHED RESIDENTIAL: STACKED FLATS

The following provides design guidance that is specific to the Attached Residential: Stacked Flat uses.

The decision to place the four-story stacked buildings in the northeast corner of the Specific Plan is strategic and intentional. This corner is framed by Del Norte Park and North Sunset Avenue offering accessibility and making it an ideal location. The height and density of the structure maximize the use of valuable real estate, while also serving as a buffer between the bustling park and the quieter interior of the development. Additionally, the buildings locations enhances the project's urban presence and connectivity, supporting walkability and providing an opportunity for park-level activation.

Attached residential stacked flats shall be designed to engage Del Norte Park. This shall be achieved as follows:

- Orient buildings to create a semi-continuous street wall that defines the edges of Del Norte Park as illustrated in **Exhibit 3.10: Attached Stacked Flat Conceptual Plotting Plan**.

The Seaside and Spanish architectural style used for attached residential buildings combines traditional design features with contemporary design features as illustrated in **Exhibits 3.11a** through **3.11e**. Other transitional styles are also permitted, subject to review and approval of the planning director.

Within the community, buildings should be oriented toward internal streets and common open space areas. Front patios may be included, where appropriate, to provide additional private open space areas and create a transition between private and common areas. Buildings may be plotted in both standard and mirrored, i.e. reversed, orientations to provide diversity.

Exhibit 3.9: Stacked Flat Streetscene

Not to Scale

LEGEND

(33) Plan 1 Stacked Flats

(22) Plan 2 Stacked Flats

(33) Plan 3 Stacked Flats

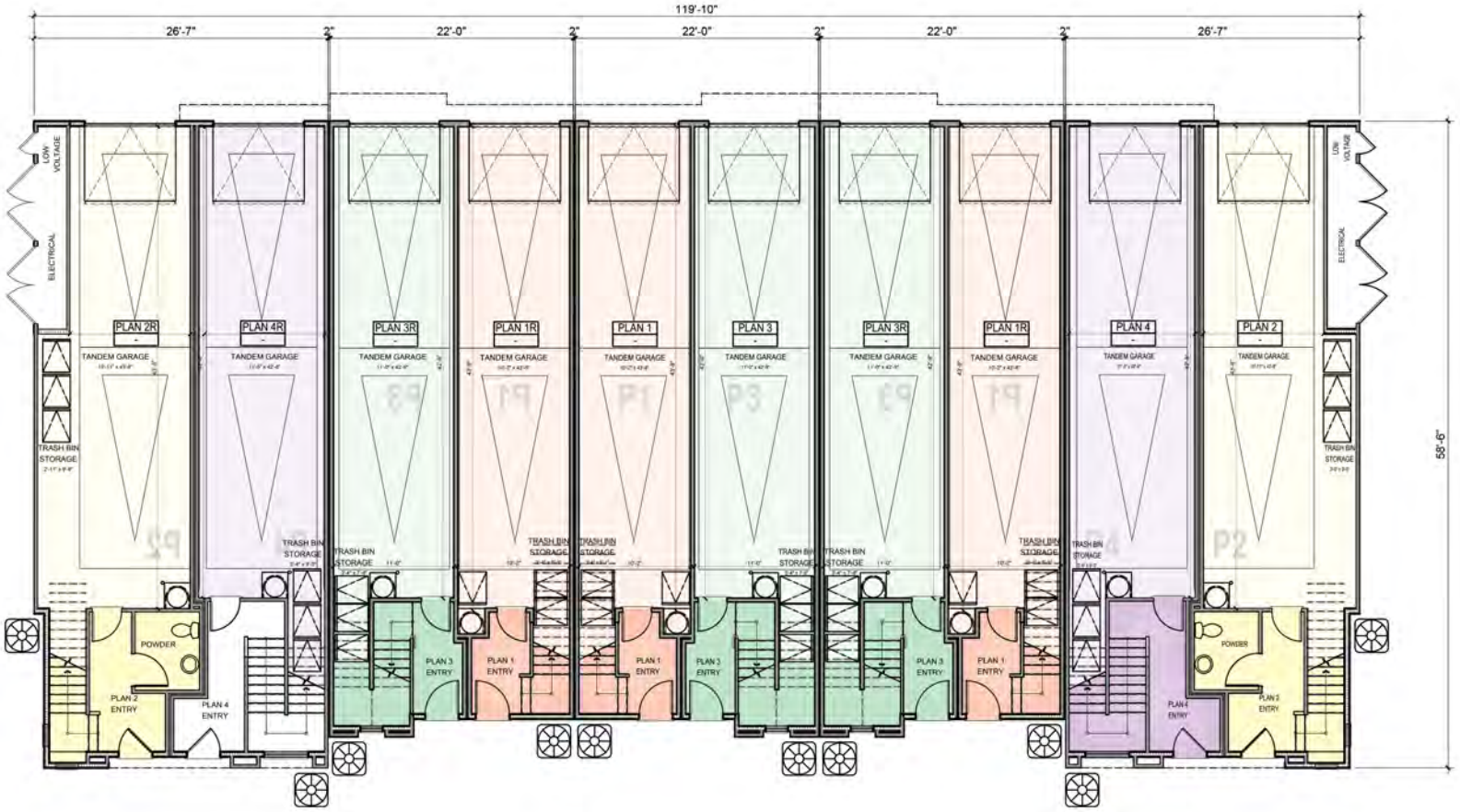
(22) Plan 4 Stacked Flats

Total Stacked Flats: 110

For conceptual purposes only. Site Plan may vary at Final provided it is in substantial conformance with the specific plan. Please refer to Chapter 6.

Exhibit 3.10: Stacked Flats Conceptual Plotting Plan

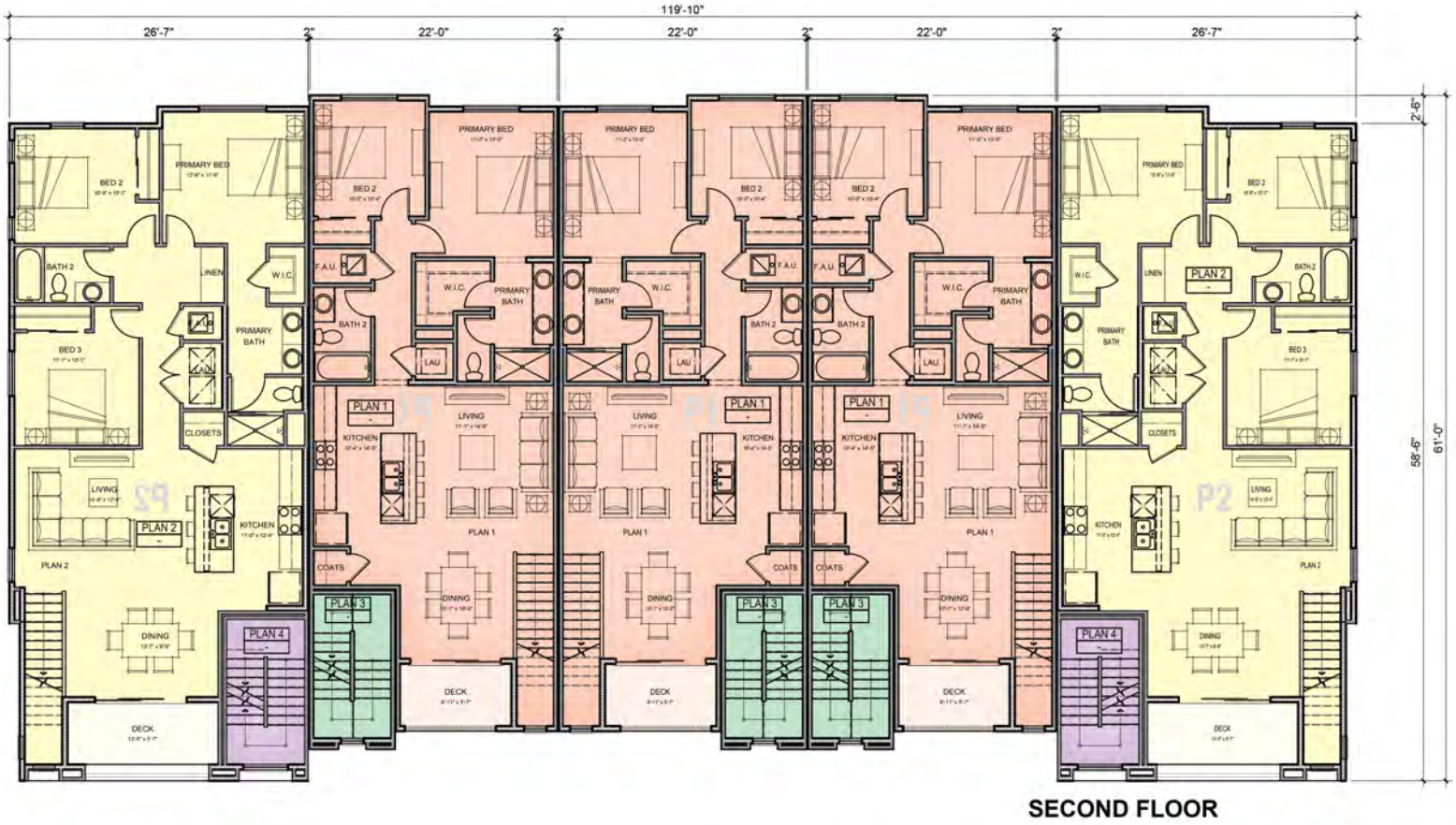
Not to Scale



FIRST FLOOR

Exhibit 3.11a: Composite D (10-Plex) Stacked Flats Floor Plans

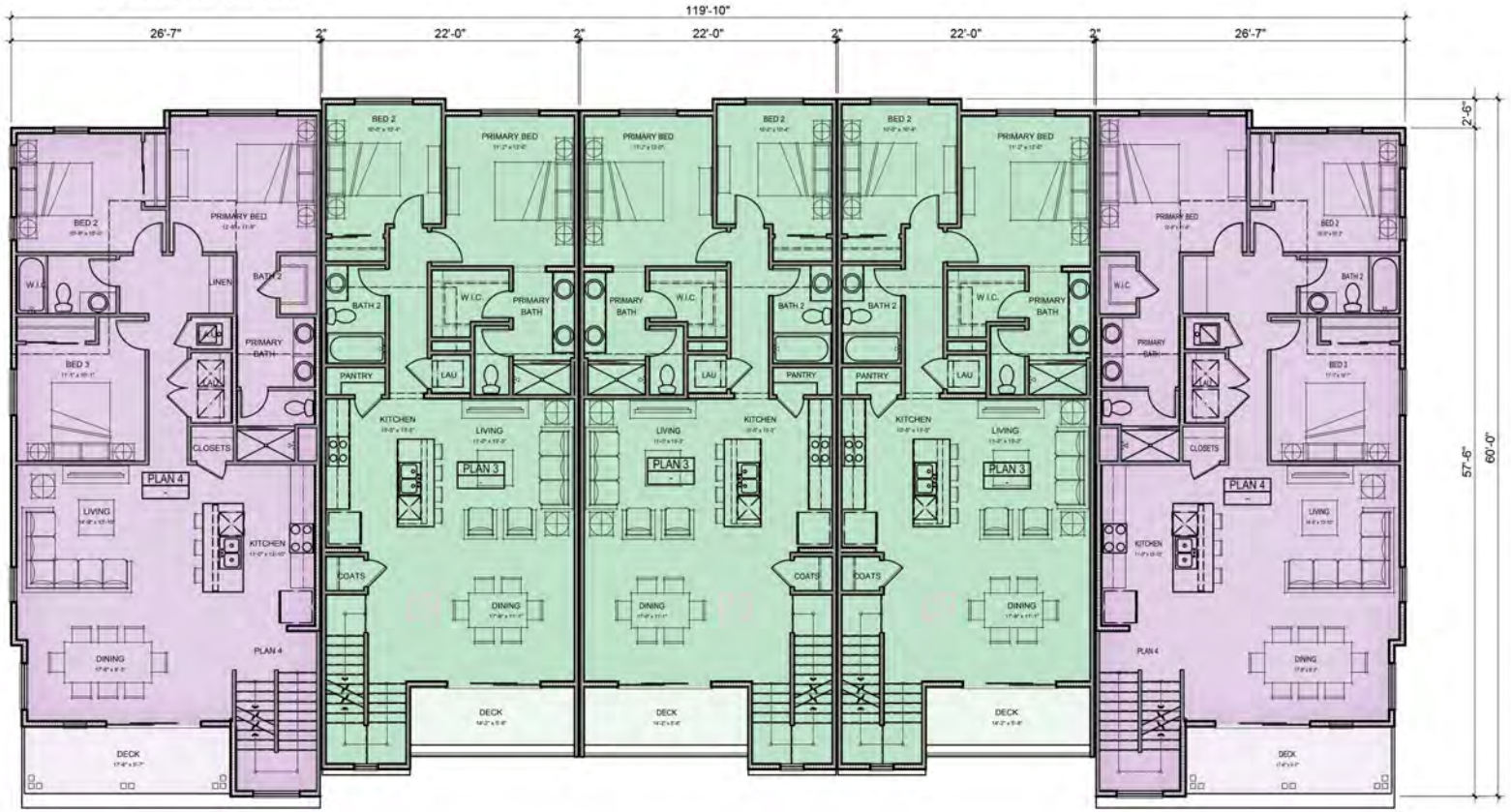
Not to Scale



SECOND FLOOR

Exhibit 3.11b: Composite D (10-Plex) Stacked Flats Floor Plans

Not to Scale



THIRD FLOOR

Exhibit 3.11c: Composite D (10-Plex) Stacked Flats Floor Plans

Not to Scale

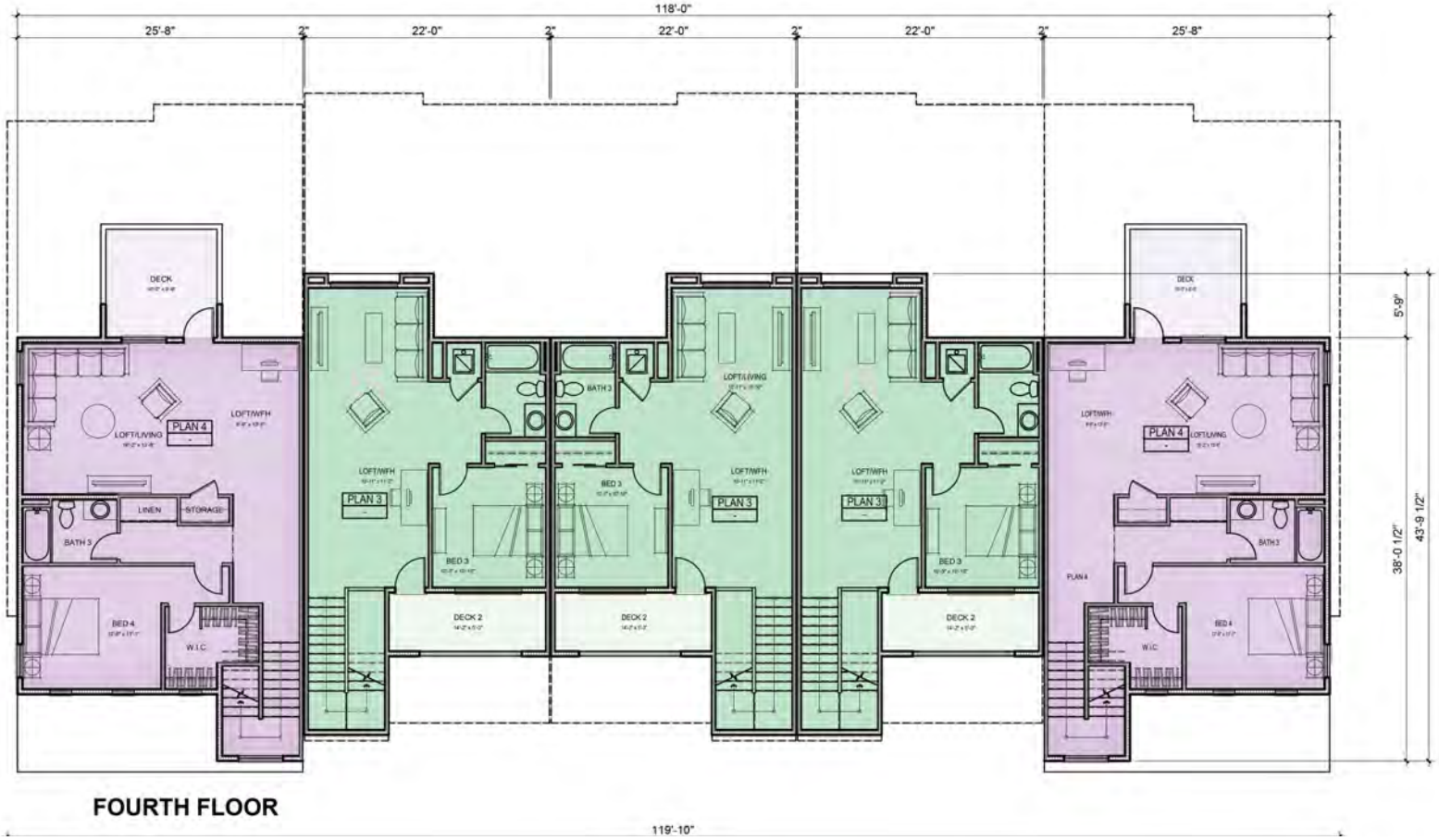


Exhibit 3.11d: Composite D (10-Plex) Stacked Flats Floor Plans

Not to Scale

LEGEND

1. Stucco
2. Low Profile Concrete "S" Roof Tile
3. Round Faux Clay Gable End Vent
4. Fascia
5. Stucco Sill Trim
6. Vinyl Window
7. Stucco o/ Foam Corbel
8. Trellis
9. Stucco Arched Soffit
10. Metal Railing
11. Fiberglass Entry Door
12. Decorative Exterior Lights & Address Sign
13. Metal Sectional Garage Door
14. Shutter
15. Sliding Door
16. Faux Finial

Seaside - Elevation

Spanish - Elevation

Exhibit 3.11e: Composite D (10-Plex) Stacked Flats Elevations

Not to Scale

4 - LANDSCAPE DESIGN GUIDELINES

4.1 PURPOSE

The purpose of this section is to ensure that all landscaping within the Del Norte Specific Plan fulfills the specific plan objective of enhancing community design through landscape and recreational amenities that promote a high-quality living environment. These design guidelines are intended to be flexible such that alternative designs are permitted as long as they meet the level of quality and character envisioned by this specific plan.

4.2 LANDSCAPE CHARACTER

Exhibit 4.1a: Conceptual Landscape Plan illustrates the overall landscape design concept for the community, which is described in greater detail in this chapter. In accordance with state and local requirements, plants will consist of drought tolerant, non-invasive species. Please refer to **Exhibit 4.2a Conceptual Planting Palette** for a list of species that are permitted within the specific plan area. Mulching, hydrozoning, and smart irrigation controllers will be used to maximize water efficiency, implementing Objective 6 of this specific plan.

4.3 PUBLIC STREETSCAPES

Streetscapes immediately adjacent to the specific plan area should be designed to support and enhance the architectural design character of each corridor as described herein.

Five-foot sidewalks will be separated from the street by a five-foot landscaped parkway. Behind the sidewalk, private front yards will be layered with groundcovers, low shrubs, flowering and accent plants and grasses, with a mix of larger trees (Tipu Tree or similar) and smaller trees (Strawberry Tree or similar) to create compositions that complement the traditional character of the adjacent architecture. Individual walks will connect front porches and entries to the sidewalk to create a welcoming and charming entry. Walls that define private yards will consist of concrete, masonry, or decorative block that will maintain a consistent design along the street.

4.3.1 Corner Landscape

The eastern edge along North Sunset Avenue and West Del Norte Streeet is a highly visible corner and provides an opportunity to provide enhanced landscaping or community signage. If signage is not provided as part of the wall design, landscaping should be used to soften the walls appearance and define the corner.

4.3.2 West Del Norte Street

The West Del Norte Street streetscape will consist of public sidewalk and parkway with layering of trees, shrubs, plants, and ground cover.

For conceptual purposes only. Site Plan may vary at Final provided it is in substantial conformance with the specific plan. Please refer to Chapter 6.

Exhibit 4.1a: Conceptual Landscape Plan

Not to Scale

1. Project entry with enhanced paving.
2. Entry sinage pilaster.
3. Portal monument wall.
4. Concrete sidewalk.
5. Townhome private patio.
6. Proposed recreation center (See exhbit 4.2).
7. Social open space (See exhbit 4.2).
8. Green paseo.
9. Mailbox cluster.
10. Transformer.
11. Park connection with overhead portal.
12. Permeter wall.
13. Entry speciman tree.
14. Street tree.
15. Accent tree.
16. Shade tree.
17. Evergreen conncetion tree.
18. Screen hedge.
19. Vine planting to scren wall.
20. Potential City Park sidewalk.

Exhibit 4.1b: Conceptual Landscape Plan Key

Not to Scale

Exhibit 4.2a: Conceptual Planting Palette

Not to Scale

TREE SCHEDULE:

BOTANICAL NAME	COMMON NAME	SIZE
Arbutus unedo	Strawberry Tree	15 gal min
Archontophoenix cunninghamiana	King Palm	15 gal min
Cercidium 'Desert Museum'	Desert Museum Palo Verde	15 gal min
Cercis occidentalis	Western Redbud	15 gal min
Chilopsis linearis	Desert Willow	15 gal min
Cupressus sempervirens	Italian Cypress	15 gal min
Dracaena draco	Dragon Tree	15 gal min
Magnolia g. 'St. Mary's'	Magnolia	15 gal min
Olea europaea 'Swan Hill'	Swan Hill Olive	15 gal min
Podocarpus gracilior	Fern Podocarpus	15 gal min
Platanus racemosa	California Sycamore	15 gal min
Pyrus calleryana 'Chanticleer'	Chanticleer Callery Pear	15 gal min
Quercus ilex	Holly Oak	15 gal min
Rhus lancea	African Sumac	15 gal min
Tipuana tipu	Tipu Tree	15 gal min
Tristania conferta	Brisbane Box	15 gal min
Ulmus parvifolia	Chinese Elm	15 gal min

SHRUB SCHEDULE:

BOTANICAL NAME	COMMON NAME	SIZE
Agapanthus 'Peter Pan'	Dwarf Lily of the Nile	1 gal
Agapanthus 'Queen Anne'	Lily of the Nile	1 gal
Agave desmettiana 'Variegata'	Variegated Smooth Agave	15 gal
Aloe vera	Aloe Vera	5 gal
Bougainvillea 'Oo La La'	Bougainvillea	5 gal
Calliandra haematocephala	Pink Powder Puff	5 gal
Carissa m. 'Boxwood Beauty'	Boxwood Beauty Natal Plum	5 gal
Dietes bicolor	Fortnight Lily	5 gal
Hesperaloe parviflora	Red Yucca	1 gal
Lavandula dentata	French Lavender	5 gal
Leucophyllum f. 'Green Cloud'	Green Cloud Texas Sage	5 gal
Lomandra longifolia	Spiny-headed Mat Rush	5 gal
Prunus caroliniana 'Bright n Tight'	Cherry Laurel	15 gal
Rhaphiolepis i. 'Clara'	Clara Indian Hawthorn	5 gal
Rhaphiolepis i. 'Majestic Beauty'	Majestic Beauty Hawthorn	5 gal
Rosa x 'Radrazz'	Knock Out Shrub Rose	5 gal

GROUNDCOVER SCHEDULE:

BOTANICAL NAME	COMMON NAME	SIZE
Lantana montevidensis 'Alba'	White Trailing Lantana	1 gal
Lonicera japonica 'Halliana'	Hall's Honeysuckle	1 gal
Rosmarinus 0. 'Huntington Carpet'	Rosemary Huntington Carpet	1 gal
Senecio mandraliscae	Blue Chalk Sticks	1 gal

Note: 1. Plant selection and landscape/irrigation design should comply with the Water Efficient Landscape requirements and ordinances.

Exhibit 4.2b: Conceptual Planting Palette Legend

Not to Scale

4.3.3 North Nora Avenue

The North Nora Avenue streetscape will consist of public sidewalk and parkway with layering of trees, shrubs, plants, and ground cover.

4.4 ENTRIES

The proposed community is required to provide two entires: a Primary Entry on West Del Norte Street and a Secondary Entry on North Nora Avenue, as described in the following sections.

4.4.1 Primary Entry

Primary access to the site is provided from West Del Notre Street. As illustrated in **Exhibit 4.3: Conceptual Primary Entry,** the primary entry will be defined enhanced landscaping, paving, and potential community monumentation. The entry will have parkways and sidewalks on both sides. Parking will not be permitted. Behind the sidewalk, landscaping will soften the appearance of community walls on either side of the entry.

4.4.2 Secondary Entry

The N Nora Avenue entry functions as the secondary entry to the community. This entrance will be less formal and will include pilasters, enhanced paving, and landscaping that complements the main entry design.

4.5 PRIVATE CIRCULATION

Within the community, landscaping of private lanes and alleys will enhance the livability of the community by creating a pleasant walking and driving experience for residents and visitors.

4.5.1 Lanes

Lanes provide the primary vehicular and pedestrian circulation through the specific plan area. Lanes include sidewalks that will be enhanced with trees to provide shade and pedestrian comfort along sidewalks and to shade parked cars. The planting pattern is modified based upon the design condition of the lane, which varies throughout the site. Where sidewalks are separated from the curb by parkway, trees are planted generally 30 feet on center. Where sidewalks are immediately adjacent to the curb, tree are planted where appropriate behind the sidewalk. When adjacent to parking stalls, trees are planted to shade park cars and complement the design of adjacent common recreation areas. Pedestrian portal of arbors are provided at the city park connection point to further enhance the design of the community.

4.5.2 Alleys

Alleys provide access to townhome garages. For residents, alleys are the primary vehicular entry to their home and should therefore be designed to enhance their daily experience. Where feasible alleys should be enhanced with small shrubs and vines between garages to soften the feel of the alley.

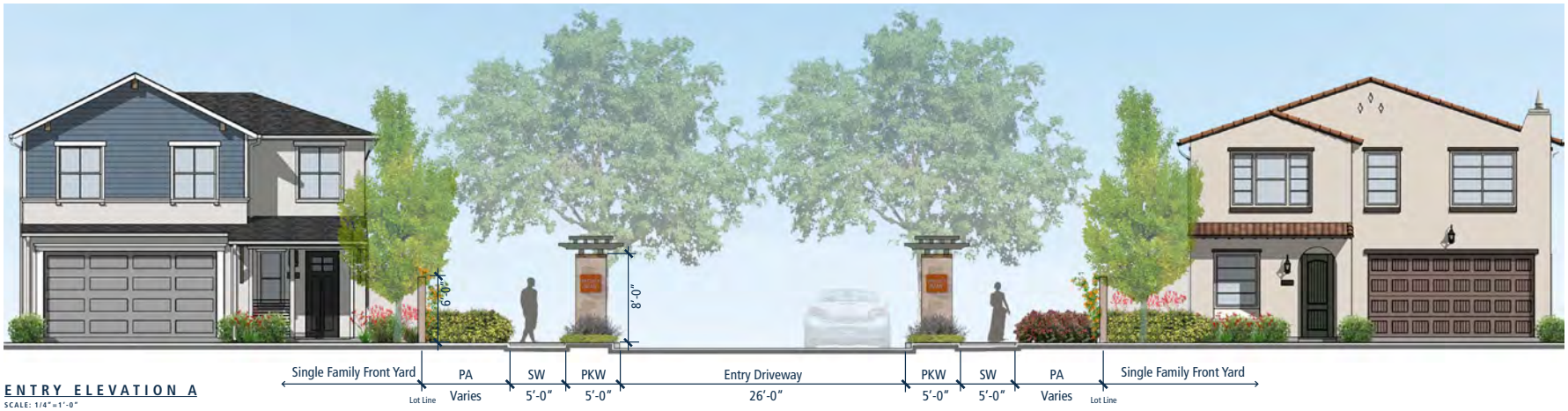
4.6 COMMON AREAS

Common areas provide an outdoor living space where people can relax, recreate, or gather as a community. Landscaping of these areas should reflect the anticipated activities for each space.

LEGEND

1. Project Entry with Enhanced Paving
2. Entry Signage Pilaster
3. Entry Specimen Tree
4. Concrete Sidewalk
5. Single Family Side Yard Wall
6. Single Family Front Yard
7. Townhome Private Patio
8. Screening Vine
9. Open Lawn Area

KEYMAP



ENTRY ELEVATION A
SCALE: 1/4"=1'-0"

For conceptual purposes only. Site Plan may vary at Final provided it is in substantial conformance with the specific plan. Please refer to Chapter 6.

Exhibit 4.3: Conceptual Primary Entry

Not to Scale

4.6.1 Central Recreation

The central recreation area consists of open space and amenities at the center of the community.

Exhibit 4.4: Conceptual Central Community Space illustrates the proposed concept for this space. Alternative designs are permitted as long as the proposed amenities are equivalent or better than those illustrated in this specific plan.

Landscaping in the common recreation area should enhance the proposed amenities. Turf should be limited to areas intended for passive and active play. Shade should be provided for table and benches.

4.6.2 Secondary Spaces

Secondary spaces, as illustrated in **Exhibit 4.5: Conceptual Secondary Spaces**, provide smaller and more intimate areas that can be enhanced to provide additional community amenities or smaller gathering space.

4.6.3 Paseos

Pasoes are areas between buildings that provide front door access to units. These linear spaces are not intended for active recreation but can include benches, patios, and landscaping that create an attractive and high quality living space.

4.7 WALLS & FENCES

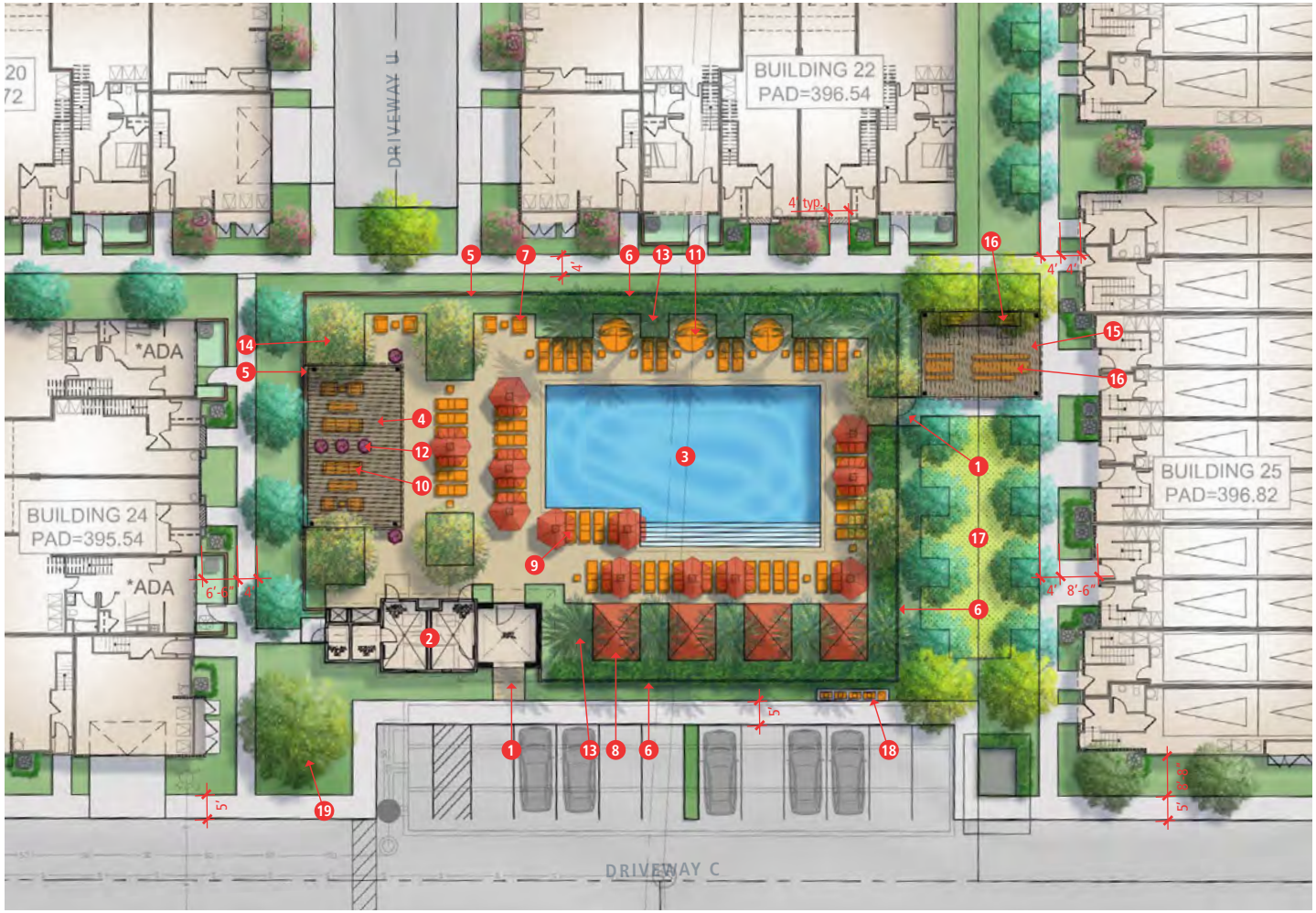
Walls and fences within the specific plan area will be used to define private and semi-private space in accordance with the wall and fence regulations provided in Chapter 2. Community walls will also serve as a unifying design element. **Exhibit 4.6a: Conceptual Wall and Fence Plan** illustrates the anticipated location and design of walls and fences within the specific plan area.

4.8 LIGHTING & OUTDOOR FURNITURE

Lighting along public rights-of-way will consist of City of West Covina Street lighting. Within the community, lighting should be designed at a pedestrian scale. Lighting should be provided at the lowest level to accommodate pedestrian safety and should be designed to minimize disturbances to residential homes and shield lighting from adjacent properties.

Lighting, benches, tables, waste receptacles, mailboxes and similar street furniture should all be coordinated to provide a consistent and complementary palette of elements. These details work together to convey a high quality design character.

Graffiti-resistant coatings should be used on all street furniture to assist in deterring graffiti.



LEGEND

1. Pool Entry
2. Pool Building
3. Pool (34'x 58')
4. Shade Structure at Pool Area
5. Pool Enclosure Wall
6. Pool Enclosure Fence
7. Semi-Private Casual Seating
8. Cabana
9. Lounge Chair with Umbrella
10. Group Seating
11. Daybed
12. Planter Pot
13. Palm Tree
14. Accent Tree
15. Shade Structure at Social Area
16. BBQ Grill with Picnic Table and Chairs
17. Event Lawn
18. Mailbox
19. Specimen Tree

KEYMAP

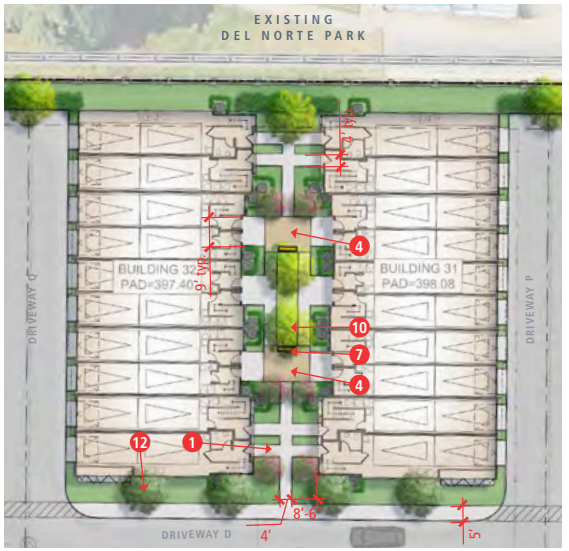
For conceptual purposes only. Site Plan may vary at Final provided it is in substantial conformance with the specific plan. Please refer to Chapter 6.

Exhibit 4.4: Conceptual Central Community Space

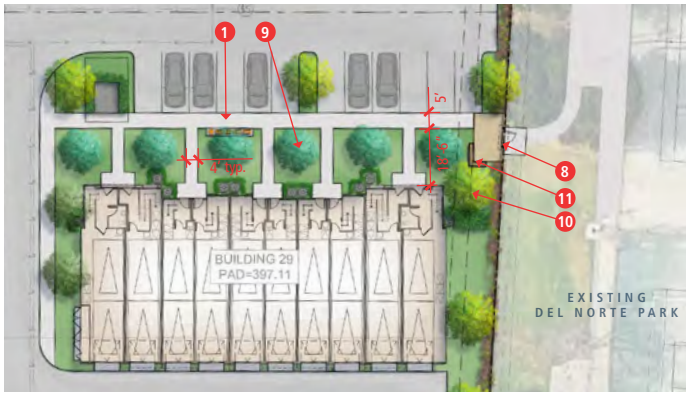
Not to Scale

GREEN PASEO A

GREEN PASEO B



GREEN PASEO C



GREEN PASEO D

LEGEND

1. Sidewalk
2. Private Patio Fence
3. Paseo Tree
4. Enhanced Paving
5. DG Paving
6. Casual Seating
7. Benches
8. Park Connection with Overhead Portal
9. Evergreen Park Connection Tree
10. Accent Tree
11. Low Seat Wall
12. Street Tree

KEYMAP

Exhibit 4.5: Conceptual Secondary Spaces

Not to Scale

For conceptual purposes only. Site Plan may vary at Final provided it is in substantial conformance with the specific plan. Please refer to Chapter 6.

Exhibit 4.6a: Conceptual Wall & Fence Plan

Not to Scale

Entry Signage Pilaster

Shot Blast CMU (or Equal)

Perimeter Low Wall with Tubular Steel Fence

Slump Block - Gray (or Equal)

Perimeter Wall

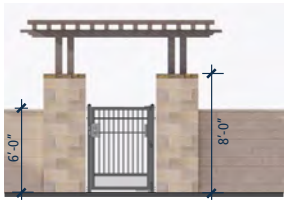
Slump Block - Gray (or Equal)

Single Family/ Townhome Side Yard Fence

Vinyl Fence with Paint Color: SW7048 Urban Bronze (or Equal)

Park Connection With Portal

Shot Blast CMU (or Equal)



Townhome Private Patio Fence
Townhome Private Patio Gate

Wood Fence
Color to Match Architecture

Single Family/ Townhome Side Yard Gate

Vinyl Fence with Paint Color: SW7048 Urban Bronze (or Equal)

Pool Enclousre Wall

CMU Wall with Stucco finish.
Color to match pool building.

Pool Enclousre Fence

Tubular Steel

Pool Enclousre Gate

Tubular Steel

Exhibit 4.6b: Conceptual Wall & Fence Imagery

Not to Scale

5 - UTILITIES & SERVICES

5.1 INTRODUCTION

This chapter provides an overview of the grading plan, utility plans, and services necessary to support development proposed by the Del Norte Specific Plan. The intent is to provide the basic utilities and services needed to ensure the community functions properly. It also seeks to conserve resources and protect natural ecosystems by implementing best management practices, low impact development practices, water and energy conservation measures, and adequate public services such as schools, fire protection, and public safety.

5.2 GRADING & DRAINAGE

Both the City of West Covina and the County of Los Angeles manage and maintain storm drain systems within the City to collect storm runoff and help prevent flooding of developed areas. The stormwater systems consist of channels, gutters, drains, catch basins, and pipes which convey the runoff to receiving water bodies. Receiving water bodies include Walnut Creek Wash and San Jose Creek, which flow to the San Gabriel River. The San Gabriel River flows to the San Pedro Bay on the Pacific Ocean coast.

5.2.1 Grading

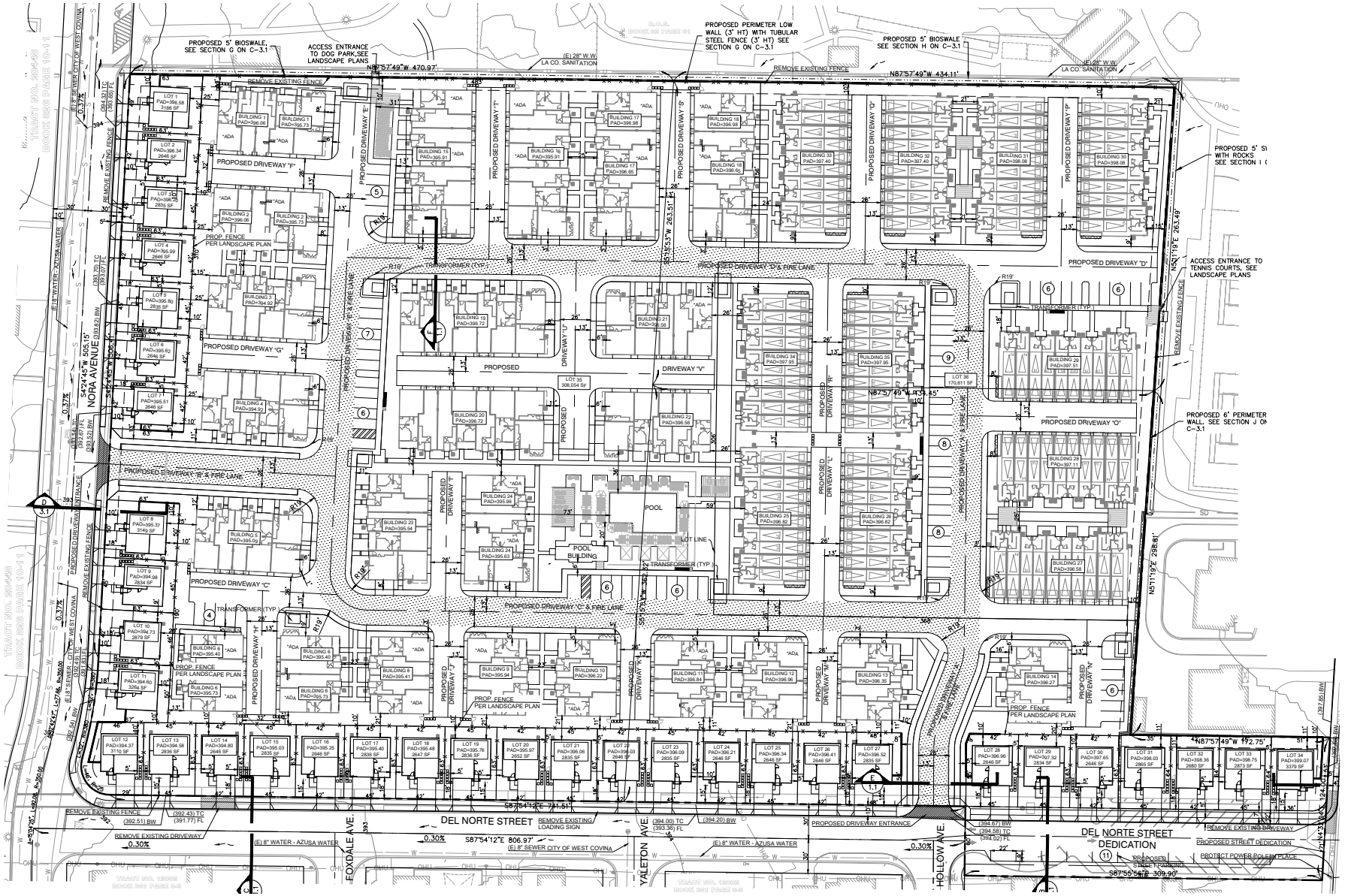
Exhibit 5.1: Conceptual Drainage & Grading Plan illustrates the proposed grading and drainage concept for the specific plan area.

To prevent flooding in the northeast corner, the conceptual grading plan proposes to slope towards the southwestern corner of the site. Surface drainage is directed to the underground stormdrain system. A bioswale will be provided along the northern and easterly property line to collect runoff from the adjacent park and any incidental runoff from the adjacent property owners. The runoff will be collected in inlets and directed into an existing County of Los Angeles Storm drain line in W Del Norte Street and N Nora Ave.

Grading adheres to the City of West Covina's grading standards unless otherwise shown and as recommended by the geotechnical engineer.

5.2.2 Stormwater Drainage & Treatment

Stormwater runoff collected from the specific plan area may contain high sediment loads and many types of pollutants, including oil and grease, chemicals, pesticides, heavy metals, bacteria, viruses, and oxygen-demanding compounds. The City's strategy and policy direction is to reduce discharges of these pollutants into the stormwater conveyance system through implementation of low impact development (LID) structural and non-structural best management practices (BMPs), source control BMPs; and



LEGEND:

- EXISTING LOT LINE
- EXISTING ROW
- LOT LINE
- BACK OF CURB
- CENTERLINE
- FACE OF CURB (FC)
- PROPOSED FLOW LINE
- PROPERTY LINE
- S — EXISTING SEWER
- W — EXISTING WATER
- 30 — PROPOSED CONTOUR MAJOR

Exhibit 5.1: Conceptual Drainage & Grading Plan

structural and non-structural BMPs for all new development. LID requires that all stormwater be collected and treated on-site prior to entering the storm drain system.

The grading plan is designed to drain all stormwater into an infiltration system onsite as illustrated in **Exhibit 5.2: Conceptual Storm Drain Plan**. The typical path of travel for the onsite runoff are as follows: flows overland and gets intercepted by either catch basin, trench drain, or area drains. Flows through a storm drainpipe to a hydrodynamic separator for pretreatment, then to the infiltration chambers located underneath the guest parking spaces. Storm drain manholes will provide access to the infiltration chambers for maintenance. The infiltration chambers have been designed to capture flows from the 85th percentile storm event, high flows will bypass the catch basins, trench drain, area drains and will flow out to the N Nora Avenue and W Del Norte Street. No direct connections to the public storm drains are proposed. The Q25 on-site and off-site flows will surface flow via street and ultimately discharge to Pacific Ocean.

5.3 DOMESTIC WATER

The specific plan area is situated within the service boundaries of Azusa Light & Water (ALW). ALW is the incumbent water purveyor for this area. The water produced by Azusa Light & Water currently meets all State and Federal Standards relating to domestic water quality. The proposed water system shall comply with all current and future rules and regulations of ALW applicable water conservation requirements contained in the City of West Covina Municipal Code.

The water system proposed for the specific plan area consists of a series of public 6-inch pipes, as illustrated in **Exhibit 5.3: Conceptual Domestic Water Plan**, to create a looped system that serves all homes within the site. The proposed water system connects to an existing 8-inch pipe in W Del Norte Street and N Nora Avenue. The project will connect all proposed services and laterals to the new public water main. All new services shall be connected to the new public water main. The proposed 8-inch water main in W Del Norte will connect to the 8-inch line in N Nora Avenue and both will connect into the existing 12-inch line in N Sunset Avenue.

A proposed fire water line will be added adjacent to the water line in the proposed driveway D in the fire lane throughout the project.

Water conservation measures required within the specific plan area include the following:

- Low flow toilets and fixtures per CalGreen standards
- Drought tolerant landscaping
- Smart irrigation controllers
- Mulching
- Hydrozoning
- All other water conservation requirements per CalGreen, the City's Landscape Efficiency Ordinance, and other applicable State, regional, and local regulations.

5.4 SEWER

Domestic sewage includes wastewater from household and commercial plumbing, such as toilets, showers, and sinks. The City of West Covina operates and maintains the City's sanitary sewer system, which collects and conveys sewage to Los Angeles County Sanitations District (LACSD) trunk line located on Willow Avenue and Gravey Avenue

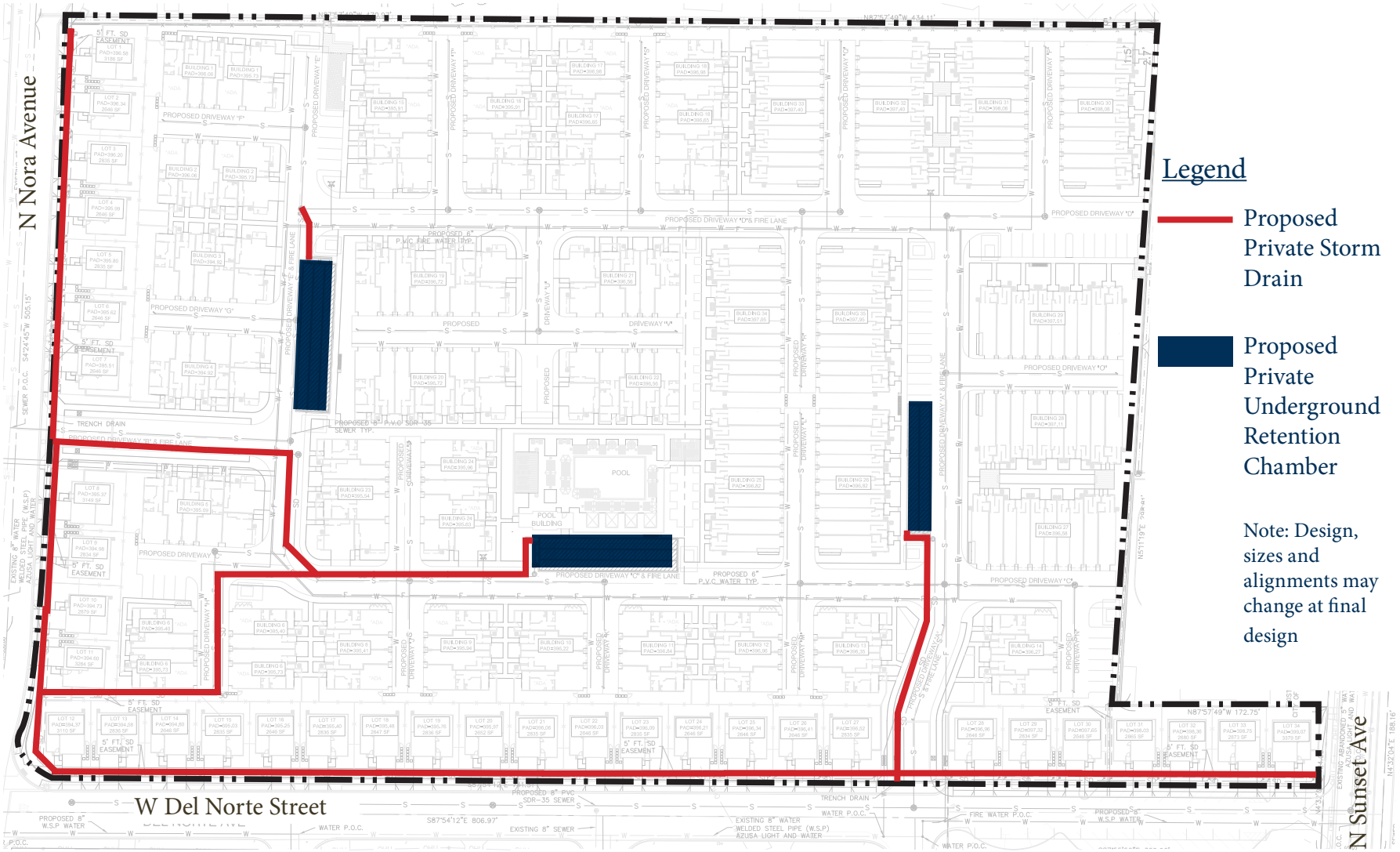


Exhibit 5.2: Conceptual Storm Drain Plan

Not to Scale

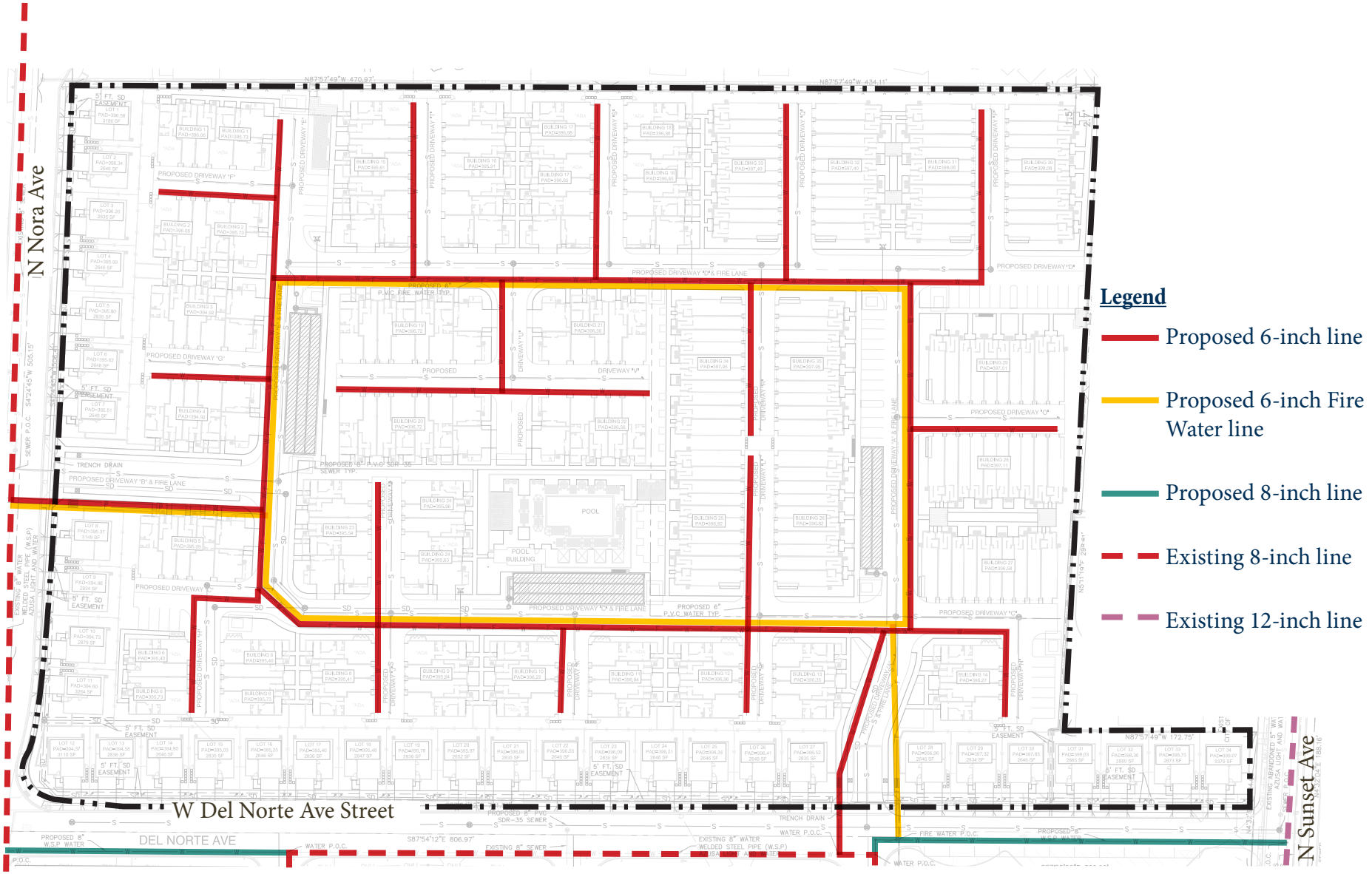


Exhibit 5.4: Conceptual Domestic Water Plan

before connecting to the San Jose Creek East Water Reclamation Plant (WRP) . There, contaminants are removed from the sewage through a multi-stage process, which includes settling, filtering, and biological and chemical treatment. The treated water is then discharged into local waterways or used as reclaimed water.

The proposed public sewer system for the specific plan area is illustrated in **Exhibit 5.4: Conceptual Sewer Plan**. The proposed gravity sewer system consist of a series of 8-inch polyvinyl chloride pipe (P.V.C) that convey flows to an existing 8-inch pipe in North Nora Avenue or a new 8-inch pipe in N Del Norte Street that will connect to an existing 8-inch pipe in N Sunset Ave. Pursuant to a sewer capacity study prepared for this project, no additional off-site mitigation is required.

5.5 SOLID WASTE

The City contracts with a private hauler, Athens Services, for residential and commercial solid waste and recycling pickup and disposal. Each home will be provided with three individual carts: a black cart for trash, recycling, and a green can for organic waste. Carts will be stored in garages or in private fenced yards on non-collection days. On collection day, residents will be required to place their carts along the designed collection route for collection by Athens Services. Waste collected from the specific plan area is taken to a materials recovery facility.

Non-hazardous construction and demolition waste shall be recycled or salvaged pursuant to CalGreen. Prior to issuance of building permits, a Waste Management Plan (WMP) for Construction and Demolition shall be provided. Additionally, documentation and approval from the WMP Compliance Official shall be required prior to final inspection and approvals to demonstrate that the waste diversion requirement have been met.

5.6 ELECTRICITY & NATURAL GAS

Electrical power is provided by Southern California Edison. No major improvements to the local distribution networks will be needed to support the growth facilitated by this specific plan. All new lines are required to be installed underground. No natural gas connection is proposed for the project.

New development within the specific plan area will be required to meet the requirements of the California Energy Code (Title 24) and CalGreen. Title 24 and CalGreen include the most stringent requirements for energy conservation in the country. To meet these requirements, all new development within the specific plan area will include rooftop photovoltaic (PV) solar panels, energy efficient lighting and appliances, cool roofs, energy efficient windows, and other design features that significantly conserve energy.

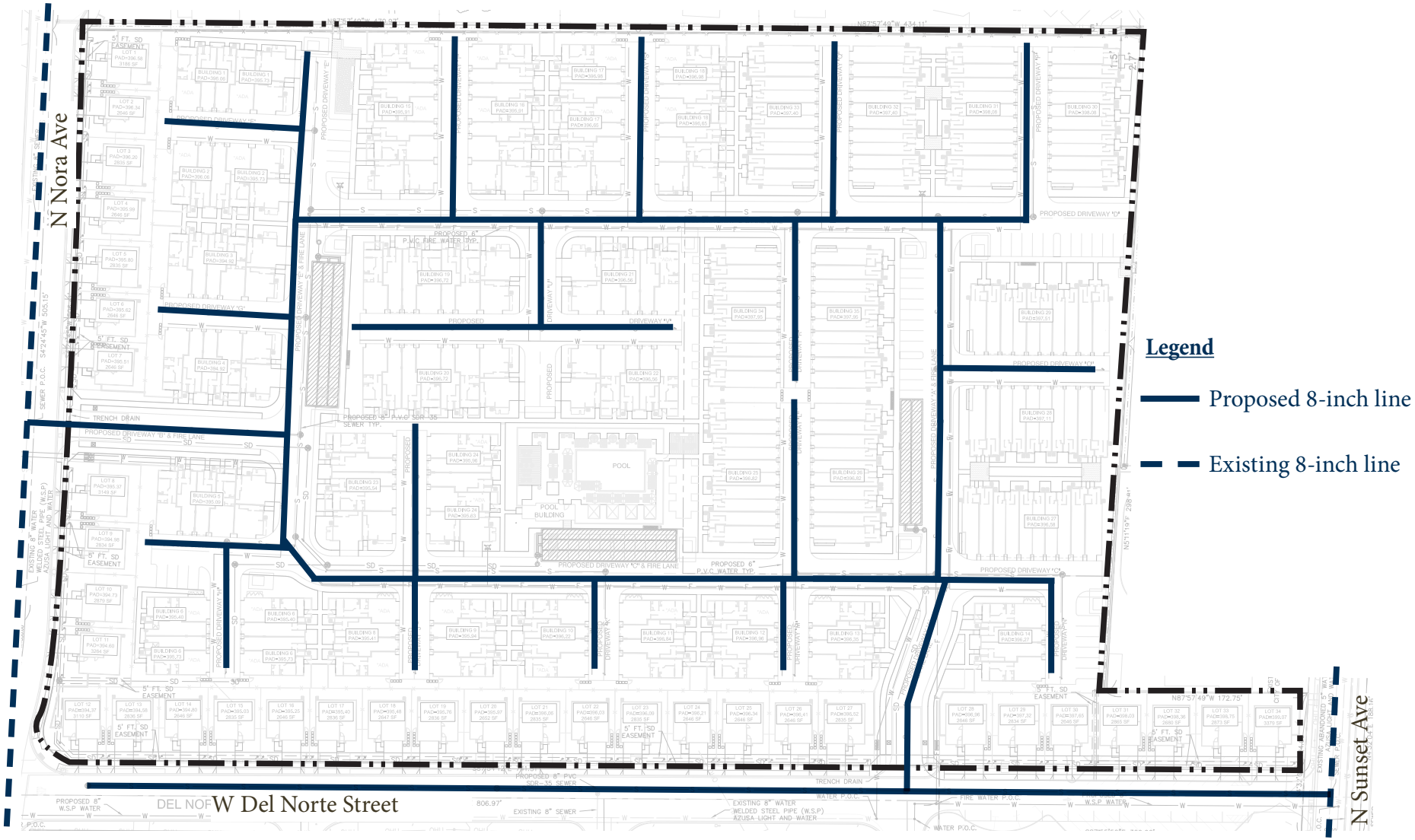


Exhibit 5.4: Conceptual Sewer Plan

5.7 BROADBAND & TELECOM.

Broadband and telecommunications services are provided by Spectrum, Frontier, Direct TV and AllConnect (Direct TV). All new dry utilities are required to placed underground to the extent feasible.

5.8 SCHOOLS

The specific plan area falls within the boundaries of the West Covina Unified School District. The assigned elementary school (Grades K-5) for the specific plan area is Monte Vista Elementary School. The assigned Middle School (Grades 6-8) for the specific plan area is Edgewood Middle School. The assigned High School (Grades 9-12) for the specific plan area is Edgewood High School.

5.9 PUBLIC SAFETY & EMERGENCY SERVICES

Public Safety services are provided by the City of West Covina Police Department. The community has been designed with Crime Prevention Through Environmental Design (CPTED) principles in mind. Buildings are oriented with front doors and windows facing public sidewalks and common areas to allow for natural surveillance. The landscape plan utilizes the use of walkways, fences, lighting, signage and landscape to clearly guide people and vehicles to and from the proper entrances. These way-finding features include entry monumentation at both vehicular entrances and pedestrian portals in key locations. Walls, fences, bollards, and shrubs are also used to reinforce public areas from private spaces. Finally, the requirement for an HOA will ensure that properties are properly maintained to prevent the specific plan area from becoming an attractive nuisance.

The West Covina Fire Department provides fire emergency services throughout the City. The specific plan area is located within the Fire Station 3 District. Fire Station No. 3 is located at 1433 West Puente Avenue, approximately 1.2 miles from the site to the east. Response time to the specific plan area is less than three (3) minutes.

The proposed community is designed to accommodate emergency access to the site as illustrated in **Exhibit 5.6: Conceptual Fire Access Plan**. Fire access routes have been designed to meet the minimum width and turning dimensions as required by the fire department. Furthermore, all buildings will be constructed to meet the current building code requirements for fire safety.

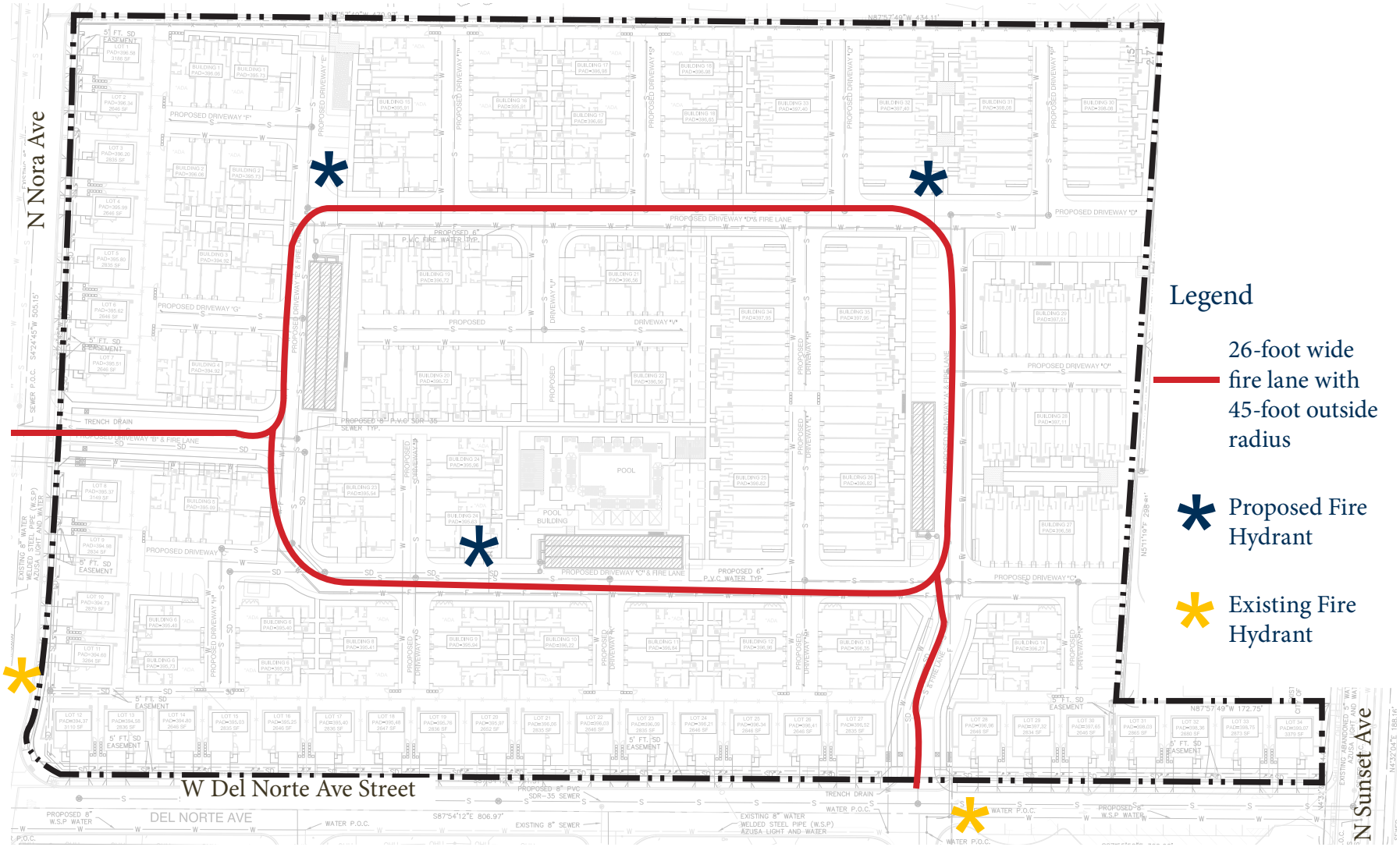


Exhibit 5.5: Conceptual Fire Access Plan

6 - ADMINISTRATION & IMPLEMENTATION

6.1 Administration

The Del Norte Specific Plan shall be adopted by ordinance. At the time of adoption of the Del Norte Specific Plan, concurrent applications shall be approved for overall site development through General Plan Amendment, Zone Change, Precise Plan, and Tentative Tract Map.

The Administration section is intended to provide the regulatory framework for any subsequent entitlements that shall be required and is consistent with the WCMC.

All other ordinances and sections of the WCMC shall also apply, unless such standards are inconsistent with the provisions and objectives of the Del Norte Specific Plan in which case, the Specific Plan shall apply.

6.1.1 Interpretations

The Planning Director of the City of West Covina, or their designee, shall have the responsibility to interpret the provisions of the Del Norte Specific Plan.

6.1.2 Substantial Conformance

"Substantial conformance" means that any proposed activity, construction, and development complies with the Del Norte Specific Plan, adopted mitigation measures, and project conditions of approval; where no additional units, property, or parcels beyond that provided by the specific plan or approved map are involved; approved minimum lot sizes and setbacks are maintained; proposed construction is consistent with the architectural guidelines provided in the specific plan; no grading beyond substantial conformance limits is proposed; and no significant environmental impact is created. The Planning Director or their designees shall make a determination of substantial conformance prior to the issuance of any permits or approval of plans. No written determination is required provided that plans submitted to the city for approval exhibit substantial conformance with the Del Norte Specific Plan.

6.1.3 Modifications & Minor Adjustments

In order to provide flexibility to the review process, the Planning Director, without a public hearing, may approve through a Minor Site Plan Review any minor adjustments to the project of a development standard for yards, setbacks, and architecture.

6.2 Implementation

The following section describes how the Del Norte Specific Plan will be built and financed.

6.2.1 Phasing

The community shall be developed in two (2) phases:

- Phase 1 shall include demolition of all structures and clearing of the site, grading, and installation of all utilities and roadways. Phase one is anticipated to last approximately six (6) months.
- Phase 2 shall include the construction of all buildings. Phase 2 may be further divided into sub-phases and is expected to last approximately twenty-four (24) months depending upon market conditions.

All new development shall provide the appropriate level of public improvements, services, and utilities to adequately serve the proposed uses for each phase of development. Confirmation by the Public Works Department of adequate facilities shall be provided prior to the issuance of building permits.

If needed, temporary on-site private streets and drive aisles shall be provided subject to the approval of the Public Works and Fire Departments.

Each undeveloped phase shall be maintained in a weed free condition.

6.2.2 Financing

All private infrastructure improvements shall be funded entirely by the developer of the community. Public improvements shall be conditioned to be completed by the developer as determined appropriate by the City of West Covina. The developer shall pay any applicable fees to the City of West Covina or other applicable agencies if required for connection and/or capacity expansion fees (or other similar fees). The City of West Covina shall ensure and developer shall install adequate facilities available to serve the project prior to issuance of an occupancy permit for any portion of the project consistent with the phasing policies describes in section 6.2.1.

Consistent with the City of West Covina's requirements or mitigation measures identified in the Mitigated Negative Declaration, the project developer shall be required to pay fees or contribute to public service facilities on a prorated share based on the project impacts to public services. Confirmation that the project has met it's fair share contribution to public services shall be required prior to the issuance of a building permit or occupancy permit, as determined by the Public Works Director.

6.2.3 Maintenance

The Del Norte Community shall have a private Homeowners Association (HOA). The association shall provide maintenance of all private common area improvements, including landscape, fence, and wall repairs. The HOA shall also be responsible for all private streets, alleys, and motor courts. Lastly, the HOA shall be responsible for all front yard landscape improvements.

All improvements within the specific plan area shall comply with maintenance of standards, buildings, and structures for Multi-Family Zones as specified in the WCMC.

APPENDIX A - GENERAL PLAN CONSISTENCY ANALYSIS

GENERAL PLAN CONSISTENCY ANALYSIS

The General Plan Consistency Analysis provides a summary of applicable goals, policies, and actions to demonstrate the specific plan's compliance with the General Plan as required by State law. Related policies and actions have been grouped together, where appropriate, to provide a more concise discussion. Policies and actions, indicated with a "P" and "A" prefix respectively, are highlighted in orange and are followed by a brief analysis of the how the specific plan implements them.

General Plan Part 2 – 1. Natural Community

"Our goal is to live in balance with our natural environment by preserving the existing open spaces; improving the quality of natural resources; and greater access to open space."

P1.1 Promote alternative transportation modes like walking, biking, and transit that reduce emissions related to vehicular travel.

The Del Norte Specific Plan promotes alternative modes in a variety of ways. Biking is supported by providing bicycle parking in compliance with CalGreen. Transit is located at the intersection of W Rowland Avenue and N Sunset Ave and at the intersection of N Sunset and W Workman Ave, less than a quarter mile south of the site.

P1.2 Promote the use of energy-efficient vehicles.

The project supports the use of energy efficient vehicles by providing EV charging in compliance with CalGreen.

P1.3 Minimize the adverse impacts of growth and development on air quality and climate.

The project minimizes the adverse impacts of growth and development on air quality and climate by providing high density housing within walking distance of transit stops and local parks. Proximity to these uses may reduce the number of vehicle miles traveled and promotes the use of alternative modes of travel. Furthermore, the project with comply with CalGreen and the current energy code, which requires the provision of EV charging, bicycle parking, energy efficient appliances, increased insulation, high performance windows, solar roof panels, water efficient landscaping, and more. These design features all contribute to a reduction in energy use and vehicle emissions, which help minimize impacts on air quality and climate.

P1.5 Where appropriate, new development shall minimize impervious area, minimize runoff and pollution, and incorporate best management practices.

In accordance with regional and local regulations, Best Management Practices have been implemented as part of the stormwater treatment plan for the site to prevent pollutants from entering the storm drain system. The typical path of travel for the onsite runoff are as follows: flows overland and gets intercepted by either catch basin, trench drain, or area drains. Flows through a storm drainpipe to a hydrodynamic separator for pretreatment, then to a storm drain manhole and then to the infiltration chambers located underneath the guest parking spaces.

P1.6 Preserve, conserve, and add to public open space.

A1.6b Continue to add public open spaces through developer dedication, in-lieu fees, or conservation easements.

The developer is required to pay in-lieu fees for parkland. In addition, the project provides on-site recreational amenities, which will reduce the demand on public parks and open space areas.

P1.9 During the review of public and private development projects, analyze potential impacts to views of natural areas from public streets, parks, trails, and community facilities.

There are no views from or through the site and the proposed project will not impact any views.

P1.10 To preserve nighttime views within and immediately adjacent to single family residential zones, require property owners within and directly adjacent to these zones to utilize shielding and directional lighting methods to direct lighting away from adjoining properties.

A1.10 Adopt development standards that prevent glare and light trespass and assess the impact of outdoor lighting during the development review process

Section 2.3.10 of the specific plan requires that site lighting be evaluated as part of the design review process and includes lighting standards designed to minimize skyglow and reduce light trespass onto adjacent properties.

P1.11 Plant to maximize the social, economic, and environmental benefits of trees.

A1.11a Develop a street tree master plan for the downtown area as part of the Downtown Plan and Code. Develop urban design strategies with unique palettes of trees that add character to the street space. Consistency and variation in tree form, color, and seasonal display can be used to create dynamic and harmonious streetscapes.

A1.11c Pursue an expanded and equitable distribution of trees and greening throughout the City. Fill in the gaps in canopy cover, address aging tree population, and identify vacant and new planting spots. Target planting where pedestrian and

public realm improvements are prioritized such as safe streets to schools and parks. Set a citywide tree canopy coverage goal.

The projects landscape concept has been designed to plant and replace street trees along both the N Nora Avenue and W Del Norte Street frontages. This new landscape plan will greatly increase the number of street trees. Within the site, a tree survey was conducted.

General Plan Part 2 - 2. Our Prosperous Community

"Our goal is to maintain and monitor West Covina's fiscal health, reinforce the West Covina's image as a great place to Live, Work and Play in the San Gabriel Valley, and nurture local businesses and attract non-retail jobs."

P2.1 Maintain and enhance the City's current tax base

A2.1 While the City of West Covina has a significant inventory and variety of retail space, there should be continuing efforts to improve the performance of retail establishments in terms their generation of taxable sales for the City. The City is fortunate enough to capitalize on its location along the I-10 corridor with a regional mall, several big box stores, and a cluster of auto-dealers, and numerous neighborhood and community serving retail centers. Strategies and actions to enhance retail performance may include:

- Attract unique eating and drinking, and ethnic dining establishments to the downtown area that can capture a greater share of local food and beverage dollars. Local and regional eating and drinking establishments (as well as some national fast-casual chains) drive visitation and can add to the 'authenticity' of a vibrant downtown district around Plaza West Covina. Carefully curate the retail and dining offer of downtown West Covina with targeted retail recruitment in a manner that complements new developments, public realm investments, and existing and on-coming retail in established retail centers.
- Improve connections to the Mall from Surrounding Areas. In order for the mall visitors to support other complementary retail and dining in the downtown area and vice versa, creating strong connections to both the Glendora Avenue Corridor and the Civic Center from the Mall location can help create a more integrated downtown district.
- Explore Opportunities to Reposition Underperforming Strip Centers along Corridors. While as of 2015, some of the neighborhood and community serving retail centers are doing well, the City has a significant inventory of undifferentiated retail centers and stand-alone retail, many of which compete with each other, driving down sales performance. The City should explore opportunities to encourage the repositioning of some of these underperforming retail real estate, which either achieve rents below that in comparable retail markets, or have not been renovated within the past 15 to 20 years. In addition to renovation and

reinvestment in the capital facilities some of the existing under-performing retail real estate can be repositioned with a mix of other employment of residential uses and possibly smaller but higher performing retail footprints.

The proposed project supports nearby retail uses by diverse housing opportunities within a area that is predominately single-family residential.

A2.1c Ensure that new development is not a fiscal burden to the City. The City should adopt a clear set of policies to ensure that new development does not impose any fiscal burdens to the City and does not take away resources from providing the current level of services. This is typically achieved by requiring proponents of new developments to provide a fiscal impact analysis of proposed projects, and have it peer reviewed by an independent consultant (compensated by the project proponents), prior to approving final entitlements. While it is not suggested that all projects be fiscally positive as a requirement for approval, as there may be projects considered by the City for their strategic importance or catalytic potential, it is important that the fiscal impacts of new projects are publicly circulated and reviewed as part of the City's decision making process.

The proposed project will have a positive fiscal impact for the City. Impact fees will be paid by the applicant. These fees help will help to ensure that the new infrastructure ans services are available through the City. In addition, residents of the project will be paying property taxes that will generate a net fiscal benefit for the City.

P2.3 Focus new growth in the Downtown Area to create vibrancy and invest in key public improvements. West Covina should capitalize on developer interest in Downtown, with targeted improvements that will encourage further investment.

A2.3a Invest in infrastructure and improve the public realm. A cohesive "sense of place" and aesthetic appeal is increasingly important to a broad range of demographics and implementing public realm improvements will be essential to capturing new development. West Covina should prioritize realizing the improvements identified in the General Plan update during regular streetscape upgrades, as well as investing in targeted improvements. In addition to streetscape, signage, and lighting improvements, the City should consider aesthetic improvements to the Walnut Creek Wash in partnership with County and other regional partners. The improved Wash can become a recreational and leisure hub for residents and visitors. The City should create a targeted downtown infrastructure implementation plan as part of the City's capital development and public works plan, and prioritize investments based available resources.

P2.5a Encourage transformative development in the triangle bounded by Glendora Avenue, Vincent Avenue, and Interstate 10.

Although the project is not located in the downtown, the specific plan area serves as a gateway to the residential area off of Interstate 10. As such, improvements to the N Sunset Avenue corridor will benefit the downtown and will encourage additional future investment in the downtown area.

P2.6 Create a diversity of housing options. Younger demographics are increasingly drawn toward urban-style, walkable living, as are baby boomers who value their independence, but anticipating limited mobility, are moving to multifamily homes in close proximity to transit, retail, food and dining, and entertainment choices.

A2.6a Support higher-intensity and high-quality multifamily development in the downtown. Encourage multifamily projects that are urban in design and facilitate a pedestrian oriented environment by utilizing ground-floor retail, and active and vibrant streetscapes. West Covina should promote opportunities, engage developers, and support higher-intensity, mixed-use multifamily residential development. The City can work to familiarize the development community with the City's General Plan and Vision for Downtown, and emphasize the City's commitment with a priority list of infrastructure investments, and expectations in terms of development/design quality.

P2.7 Target employment based uses to downtown. West Covina's employment base as of 2015 is dominated by retail trade, which as an industry, is projected by the Southern California Association of Governments (SCAG) to have relatively slow growth over through 2025. Education, healthcare and professional services, however are expected to have above-average growth, and capturing one or more major employers in these sectors could not only improve the City's economic strength and provide high-quality jobs for residents, but could also anchor one of many key currently underutilized sites in West Covina's downtown, and support the City's fiscal health.

The Del Norte Specific Plan provides new medium- to high-density housing options in walking distance of retail, food and dining, and entertainment choices, which are appealing to a young professional demographic. Offering new, attractive, and economical housing options for these buyers within walking distance of downtown can create an employment base for the type of businesses the City seeks to attract.

General Plan Part 2-3. Our Well Planned Community

"Our goal is to direct new growth to the downtown area where development pressures are the greatest and change is desired, while protecting the stable residential areas; target housing and job growth in strategic areas along the corridor; and encourage pedestrian-oriented mixed-use development, while providing vibrant public gathering places."

P3.1 Preserve existing housing stock.

A3.1 Incorporate standards in the development code to preserve the existing form and character of stable residential areas and prevent encroachment of incompatible land uses and intensity.

P3.2 Support vibrant, economically strong neighborhoods through education and enforcement of property maintenance regulations.

A3.2 Establish incentives to upgrade the appearance of poorly maintained or otherwise unattractive sites, and enforce existing land maintenance regulations.

P3.3. New growth will complete, enhance, and reinforce the form and character of the unique West Covina neighborhoods, districts, and corridors.

A3.3. Adjust regulations for the neighborhoods, districts and corridors to reflect the nature of intended change.

The Specific Plan is designed to redevelop an aging school site with new, high quality residential uses that are designed to complement the adjacent established residential neighborhood. By adopting a specific plan, the accompanying development regulations are designed specifically to complete, enhance, and reinforce the character of the neighborhood The Specific Plan also requires the implementation of a HOA who will be responsible for enforcing CC&Rs and maintaining commonly owned parcels, including the front yards along N Nora Avenue and W Del Norte Street. This maintenance entity will ensure that the proposed improvements to this property will remain attractive and in good repair for the long-term, thereby supporting the stability of the neighborhood.

P3.4 Direct new growth to downtown area and the corridors. Adapt economically underused and blighted buildings, consistent with the character of surrounding districts and neighborhoods, to support new uses that can be more successful. Provide opportunities for healthy living, commerce, employment, recreation, education, culture, entertainment, and civic.

The specific plan area is currently owned and operated by the West Covina Valley Unified School District. The District's decision to sell the property indicates that this location is no longer needed to serve the educational needs of the community; therefore, a new use must be assigned to allow the property to be developed to its highest and best use. As an infill site, residential uses offer the most compatible use. New homes will replace aging school buildings and new landscaping and street trees will revitalize both corridors, improving walkability and the character of the area. The proximity to transit, shopping, entertainment, and services as well as convenient freeway access make this an ideal opportunity for high density housing; however, adjacencies to existing single family neighborhoods require a more moderate density to preserve the character of these established neighborhoods. The Specific Plan proposes a blend of residential densities that appropriately address the single-family adjacencies with limited height and density while allowing for the increased densities that are appropriate for the northeast portions of the site. This proposal offers the City an opportunity to implement general plan goals for more efficient and sustainable development that capitalizes on transit and walkability while also supporting the goal of preserving established neighborhoods.

A3.2 Adopt form-based codes for the Downtown area and Corridors that:

- Utilize clear development requirements tailored to the community's vision;
- Increase land use choices and encourage community vitality;
- Foster a rich public realm, with engaging private frontages, complete streets, and access to a range of open spaces;
- Insist on the highest standards of quality in architecture, landscaping, and urban design; and
- Offer predictable streamlined development review process and produce predictable outcomes.

Although the Specific Plan is not form-based, it fulfills the intent by providing a clear vision for the property with accompanying development standards designed to foster improved corridors along N Nora Avenue and W Del Norte Street with private frontages that engage the sidewalk and street. Design Guidelines provide high standards of quality for architecture and landscaping with clear direction and a defined development review process for implementing the Specific plan.

P3.6 Reduce West Covina's production of green-house gas emissions and contribution to climate change and adapt to the effects of climate change.

A3.6 Key land use adaptation strategies to reduce greenhouse gas emissions are:

- Promoting transit-oriented infill development, and
- Providing incentives for high-performance buildings and infrastructure.

The Specific Plan proposes infill residential development within walking distance to transit, retail, entrainment, and services. These adjacencies promote a reduction in vehicle trips, thereby reducing emissions that contribute to climate change. Buildings will also be constructed to current building code standards that require high-performance net-zero buildings, water efficient landscaping, parking for bicycles, charging for electric vehicles, and more that significantly reduce greenhouse gas emissions when compared to existing housing and the uses that currently exist on site.

Part 2 – 4. Our Accessible Community

Our goal is to provides safe access for all users—pedestrians, cyclists, public transit users, and motorists—of all ages and abilities. Design streets that consider both the existing and future context of transportation and land use and seek to be in harmony with the adjacent area's history, environ-mental resources, and overall aesthetic.

P4.1 Coordinate and integrate land use, economic and transportation planning policies.

A 4.1 Adopt a new land-use oriented system of street classifications as described in the City¬wide Thoroughfare Plan.

The proposed land uses support the vision of integrated landscape and transportation by providing higher densities of housing within walking distance of transit, shopping, entertainment, and services.

P4.8 Implement "green" streetscape elements for purposes of beautification, carbon reduction and stormwater runoff management.

A4.8 As part of the green infrastructure plan, develop a strategy to increase the tree canopy along existing arterial streets by 25 percent.

The W Del Norte Street and N Nora Avenue frontages currently have minimal street trees. Both frontages will be planted with new street trees spaced approximately 30 feet on center, thereby increasing the tree canopy by more than 90%, beautifying these two corridors, increasing carbon sequestration, and shading sidewalks to reduce heat island effect and provide pedestrian comfort.

P5.4 Buildings, lots, and blocks primarily scaled around the pedestrian and transit, creating a human-scaled spatial enclosure. Buildings should be informed by surrounding physical context, the adjacent landscapes, structures, local conditions, building traditions, and the microclimate.

A5.4 Adjust development regulations and review processes to require assessment and appropriate response to local context.

The project was designed with the local context in mind and development standards including density, height, setbacks, and more were specifically designed to reflect these adjacencies. Homes are required to provide front doors along W Del Norte Street and N Nora Avenue and will be enhanced with porches, patios, and other design features that provide pedestrian scale and engage the sidewalk. Street trees are also required to shade sidewalks and provide pedestrian comfort.

P5.6 Continue existing beneficial energy conservation programs, including adhering to the California Energy Code in new construction & major renovations.

Homes will be designed to current Building Code standards, which require the highest level of energy consideration including the installation of photovoltaic panels (solar roofs), increased insulation and low-E windows, energy efficient appliances, and more that result in high performance net-zero energy homes.

P5.7 Manage & develop safe, reliable, economical water supply for existing & planned new customers.

A5.7 Reduce demand through water conservation techniques.

Homes and landscaping will be designed to current Building Code standards, which require energy conservation through the use of smart irrigation controller, low flow toilets, water efficient appliances, and more.

P5.8 Ensure provision of adequate sewer system capacities to serve existing & planned development.

A5.8c Pursue construction of new or replacement sewer lines consistent with the City's Sewer System Management Plan.

As part of the preparation of the Specific Plan a sewer capacity study was completed. No off site improvements are required.

P5.9 Provide adequate facilities & services for the collection, transfer, recycling, & disposal of refuse.

As part of the preparation of the Specific Plan, Athens Services was consulted and a waste collection plan was developed to ensure that adequate waste management services are available and accommodated to serve the waste collection needs of the proposed residential uses.

General Plan Part 2 – 6. Our Healthy and Safe Community

" Our goal is to create environments that encourage safe and healthy lifestyles and maximize the opportunities for physical activity. Well-designed public and semi-public realm foster social interaction, and good programming can draw people out of their homes and into their community."

P6.1 Promote and support transportation decisions that reduce driving and increase rates of transit use, walking, and biking.

A6.1b The development review bodies should con¬sider active living as a development criteria and encourage: Where practical, locating the building near transit and a diverse mix of uses; Siting the building to encourage walking; and Securing bicycle parking, and where feasible, other cycling friendly facilities such as showers and lockers.

The Del Norte Specific Plan promotes alternative modes in a variety if ways. Biking is supported by providing bicycle parking in compliance with CalGreen.

P6.2 New and renovated buildings should be designed and constructed to improve the health of the residents, workers, and visitors.

Homes and landscaping will be designed to current Building Code standards, which include measures for healthy and comfortable buildings including standards for thermal comfort, ventilation, and more.

P6.7 Preserve and strengthen social capital by supporting formal and informal social networks in the community.

A6.7 Increase access to safe, comfortable, and interesting public spaces.

The specific plan requires a minimum amount of common open space areas that must be improved with amenities and landscaping. These areas provide opportunities for people to gather and form formal and informal social networks with their neighbors in safe and comfortable spaces.

P6.12 Address safety during development review process.

A6.12a Incorporate Crime Prevention Through Environmental Design (CPTED) principles and best practices into zoning ordinances and development review processes for new development and major rehabilitation.

Public Safety services are provided by the City of West Covina Police Department. The project has been designed with Crime Prevention Through Environmental Design (CPTED) principles in mind. Buildings are oriented with front doors and windows facing public sidewalks and common areas to allow for natural surveillance. The landscape plan utilizes the use of walkways, fences, lighting, signage, and landscape to clearly guide people and vehicles to and from the proper entrances. These way-finding features include entry monumentation at both vehicular entrances and pedestrian portals in key locations. Walls, fences, bollards, and shrubs are also used to reinforce and define public areas from private spaces. Finally, the requirement for an HOA will ensure that properties are properly maintained to prevent the specific plan area from becoming an attractive nuisance.

P6.14 Address fire-prevention during development review process.

Section 5.9 of the Specific Plan addresses fire prevention.

P6.15 Limit the exposure to potential natural hazards through adoption and enforcement of appropriate building standards, land use controls, and environmental review.

A 6.15a Require all development to comply with the provisions of the latest California Building Code, including provisions related to design and engineering to mitigate potential impacts from seismic events, fires, and other hazards.

All buildings are required to be constructed to current Building Code requirements.

A6.15c Require CEQA environmental reviews to analyze and as necessary mitigate potential natural hazards on a site-specific basis.

The CEQA review analyzed potential hazards and determined that the potential impact of natural hazards is less than significant. Please refer to the Initial Study - Mitigated Negative Declaration for details.

A6.15d Require Specific Plans to recognize the findings of this Safety Element as critical land use guidelines are developed for specific areas.

The CEQA review analyzed potential hazards and determined that the potential impact of natural hazards is less than significant; therefore, no additional safety guidelines related to natural hazards are required.

P6.23 Ensure that new development is not exposed to excessive noise.

A 6.23a Require new developments to reduce exterior noise levels for any usable outdoor area to the "normally acceptable" range in the City's land use/noise compatibility matrix, shown in Table 6.4 of this Noise Element.

A6.23c Require any residential component of all new buildings to comply with the requirements of the residential noise insulations standards of the most recent edition of California's building code.

P6.24 Ensure that new development does not expose surrounding land uses to excessive noise.

A6.24 Through the environmental review process, require applicants for new development proposals to analyze potential noise impacts on nearby noise-sensitive receivers before project approval. As feasible, require appropriate noise mitigation to address any identified significant noise impacts.

P6.27 Minimize the noise impacts of transportation facilities and improvements.

A6.27C Consider, where appropriate, tools for mitigating noise impacts of transportation facilities on new and existing development. Such tools may include noise insulation for interior spaces, site design solutions, and noise barriers such as sound walls and berms. Site design solutions such as setbacks are frequently preferable to barriers, and berms are frequently preferable to sound walls, for reasons of aesthetics and potential noise reflection effects.

The CEQA review analyzed potential noise impacts. The CEQA document includes mitigation measures that reduce all potential noise impacts to less than significant levels. Please refer to the Initial Study - Mitigated Negative Declaration for details.

General Plan Part 2 – 7. Our Creative Community

"Our goal is to become a vibrant cultural center by weaving the arts and local heritage into everyday life."

P7.3 Increase public art and cultural expression throughout the community.

The project is required to pay an in-lieu fee for public art.

P7.7 Assess, avoid, and mitigate potential impacts to archaeological, paleontological, and tribal resources through the CEQA review process for development projects carried out within the City. Comply with existing regulations relating to Native American resources, including California Environmental Quality Act Section 15064.5(d) and (e) and Public Resources Code §5097.98 concerning burial grounds, and Assembly Bill 52 and Senate Bill 18 for consultation with Native American tribes for development projects carried out within the City.

A7.7 Require development to avoid archaeological and paleontological resources, whenever possible. If complete avoidance is not possible, require development to minimize and fully mitigate the impacts to the resources. Notify California Native American tribes and organizations of proposed projects that have the potential to adversely impact cultural resources.

The CEQA review analyzed potential impacts to historic, archaeological, and paleontological resources and includes mitigation measures to reduce all potential impacts to less than significant levels. Please refer to the Initial Study - Mitigated Negative Declaration for details.

General Plan Part 2 - 8. Our Active Community

"Our goal is to enhance the value of fitness and celebrate healthy living; improve the existing condition of public open spaces and facilities to encourage use; and acquire, develop, and maintain quality of public open spaces and trails."

P8.1 Encourage the distribution of a variety of park types and sizes throughout the City.

A8.1 Develop variety of new park types of different sizes and require them in new development.

P8.2 Encourage the development of non-traditional park types, including green belts, linear parks, urban trails, and pocket parks.

P8.4 Small and frequent open spaces should be dispersed throughout the neighborhood.

A8.4 Develop new neighborhood parks, pocket parks, and community gardens as feasible and appropriate to meet citizen needs and require them in new development.

Although these policies and actions are intended for public parks it should be noted that the proposed project will pay its fair share of park fees and will also provide recreational amenities that serve as neighborhood and pocket parks for the specific plan community. These spaces and amenities support healthy living and reduce the need for residents to travel to public parks to enjoy recreational activities, thereby reducing the demand for similar public park facilities.

Appendix B

Applicant Submittal Package

D E L N O R T E

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Architectural Sheet List Table

Sheet Number	Sheet Title
A0.00	TITLE SHEET

PLANNING SHEETS

P-1	CONCEPTUAL SITE PLAN
P-2	SITE PHOTOS
P-3	DIMENSIONED SITE PLAN
P-4	PROPOSED LAND USE

Architectural Sheet List Table

Sheet Number	Sheet Title
A1.10	ARCHITECTURAL SITE PLAN

Civil Sheet List

Sheet Number	Sheet Title
C-1.0	TITLE SHEET
C-1.1	SECTIONS
C-1.2	SITE PLAN
C-2.0	TITLE SHEET
C-2.1	SECTIONS
C-2.2	TENTATIVE MAP
C-3.0	TITLE SHEET
C-3.1	SECTIONS & DETAILS
C-3.2	GRADING PLAN
C-4.0	UTILITY PLAN

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A2.11	PLAN 3222 MIRRORED FLOOR PLANS
A2.12	PLAN 3222 EXTERIOR ELEVATIONS
A2.13	PLAN 3222 EXTERIOR ELEVATIONS
A2.14	PLAN 3222 MIRRORED EXTERIOR ELEVATIONS
A2.15	PLAN 3222 MIRRORED EXTERIOR ELEVATIONS
A2.20	PLAN 3522 FLOOR PLANS
A2.21	PLAN 3522 MIRRORED FLOOR PLANS
A2.22	PLAN 3522 EXTERIOR ELEVATIONS
A2.23	PLAN 3522 EXTERIOR ELEVATIONS
A2.24	PLAN 3522 MIRRORED EXTERIOR ELEVATIONS
A2.25	PLAN 3522 MIRRORED EXTERIOR ELEVATIONS
A5.10	PLAN 1 & PLAN 3 FLOOR PLANS
A5.11	PLAN 3 4TH FLOOR
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A5.13	PLAN 3 MIRRORED 4TH FLOOR
A5.20	PLAN 2 & 4 FLOOR PLANS
A5.21	PLAN 4 4TH FLOOR
A5.22	PLAN 2 & 4 MIRRORED FLOOR PLANS
A5.23	PLAN 4 MIRRORED 4TH FLOOR
A5.30	PLAN 5 FLOOR PLANS
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A5.60	COMPOSITE 'A' ELEVATIONS
A5.61	COMPOSITE 'A' ELEVATIONS
A5.62	MIRRORED COMPOSITE 'A' ELEVATIONS
A5.63	MIRRORED COMPOSITE 'A' ELEVATIONS
A5.64	COMPOSITE 'A' FLOOR PLANS
A5.65	MIRRORED COMPOSITE 'A' FLOOR PLANS
A5.70	COMPOSITE 'B' ELEVATIONS
A5.71	COMPOSITE 'B' ELEVATIONS
A5.72	MIRRORED COMPOSITE 'B' ELEVATIONS
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A5.74	COMPOSITE 'B' FLOOR PLANS
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A5.80	COMPOSITE 'C' ELEVATIONS
A5.81	COMPOSITE 'C' ELEVATIONS
A5.82	MIRRORED COMPOSITE 'C' ELEVATIONS
A5.83	MIRRORED COMPOSITE 'C' ELEVATIONS
A5.84	COMPOSITE 'C' FLOOR PLANS
A5.85	COMPOSITE 'C' FLOOR PLANS
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A5.92	MIRRORED COMPOSITE 'D' ELEVATIONS
A5.93	MIRRORED COMPOSITE 'D' ELEVATIONS
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L-4	TYPICAL PASEO ENLARGEMENT
L-5	CONCEPTUAL WALL & FENCE PLAN
L-6	CONCEPTUAL WALL & FENCE DETAILS
L-7	CONCEPTUAL SITE AMENITIES
L-8	CONCEPTUAL LIGHTING PLAN
L-9	CONCEPTUAL LIGHTING FIXTURES
L-10	PRELIMINARY IRRIGATION CALCULATION
L-11	CONCEPTUAL PLANTING PALETTE
L-12	CONCEPTUAL TREE PLAN
L-13	TREE INVENTORY

Submittal Log

Date	Description
10/10/2024	1st Planning Submittal
4/3/2024	2nd Planning Submittal

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MLC Holdings Inc.
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MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 4, 2025

TITLE SHEET

A0.00

Project Summary

Project Area: 13.56 acres
Net Site Area[1]: 13.19 acres

Total Homes[2]: 282 Homes
- (34) Single-Family Detached Homes
  - (16) Plan 3222 - 1,678 SF, 3 Bed, 2.5 Bath
  - (18) Plan 3522 - 1,957 SF, 4 Bed, 3 Bath
- (138) 3-Story Townhomes
  - (30) Plan 5 - 1,226 SF, 2 Bed, 2.5 Bath
  - (54) Plan 6 - 1,470 SF, 3 Bed, 3 Bath
  - (54) Plan 7 - 1,755 SF, 4 Bed, 4 Bath
- (110) 4-Story Stacked Flats
  - (33) Plan 1 Flats - 1,126 SF, 2 Bed, 2 Bath
  - (22) Plan 2 Flats - 1,464 SF, 3 Bed, 2 Bath
  - (33) Plan 3 Flats - 1,959 SF, 3 Bed, 3 Bath
  - (22) Plan 4 Flats - 2,485 SF, 4 Bed, 3 Bath

Density: 20.8 du/ac
Net Density: 21.4 du/ac

Parking Spaces Provided: 641 Spaces
- 2 garage per unit: 564 Spaces
- Guest: 77 Spaces
- Total Parking: 641 Spaces

Open Space Provided: ± 136,478 SF (± 3.13 acres)
- Paseos and Common: ± 120,891 SF
- Private Patios: ± 15,587 SF

Notes:
1. 1501 W Del Norte St, West Covina, CA 91790
2. Net site area assumes dedication of Del Norte Street to Sunset Avenue.
3. Assessor's Parcel Numbers: 8458-020-901
4. Type VB construction with NFPA 13D automatic sprinkler system.
5. Guest spaces are 9' x 20'.
6. On street spaces are not accounted in guest spaces
7. Private open space minimum dimension of 6'.
8. Existing General Plan: Civic: Schools (S)
9. Existing Zoning: R-1: Residential Single Family
10. Proposed General Plan: Neighborhood High
11. Proposed Zoning: Specific Plan
12. SB330 Vesting: Pending
13. CEQA: IS/MND (Assumed)

Conceptual Site Plan

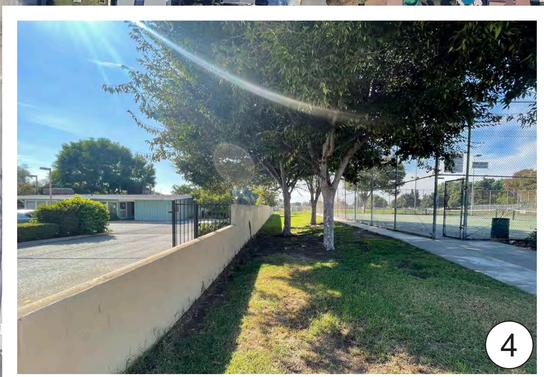
0 30 60
1" = 30'

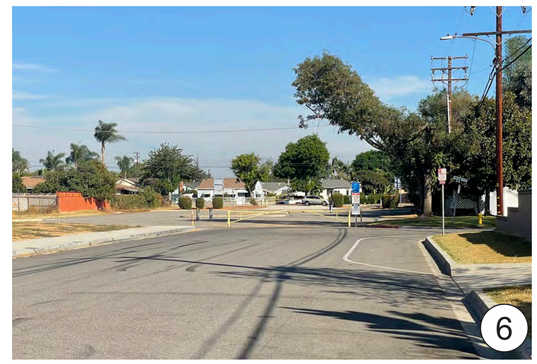
1501Del Norte Street

West Covina, California

April 2025

North





0 30 60

1" = 30'

Site Photos

1501Del Norte Street

West Covina, California

April 2025

North

Project Summary

Project Area: 13.56 acres
Net Site Area[1]: 13.19 acres

Total Homes[2]: 282 Homes
- (34) Single-Family Detached Homes
  - (16) Plan 3222 - 1,678 SF, 3 Bed, 2.5 Bath
  - (18) Plan 3522 - 1,957 SF, 4 Bed, 3 Bath
- (138) 3-Story Townhomes
  - (30) Plan 5 - 1,226 SF, 2 Bed, 2.5 Bath
  - (54) Plan 6 - 1,470 SF, 3 Bed, 3 Bath
  - (54) Plan 7 - 1,755 SF, 4 Bed, 4 Bath
- (110) 4-Story Stacked Flats
  - (33) Plan 1 Flats - 1,126 SF, 2 Bed, 2 Bath
  - (22) Plan 2 Flats - 1,464 SF, 3 Bed, 2 Bath
  - (33) Plan 3 Flats - 1,959 SF, 3 Bed, 3 Bath
  - (22) Plan 4 Flats - 2,485 SF, 4 Bed, 3 Bath

Density: 20.8 du/ac
Net Density: 21.4 du/ac

Parking Spaces Provided: 641 Spaces
- 2 garage per unit: 564 Spaces
- Guest: 77 Spaces
- Total Parking: 641 Spaces

Open Space Provided: ± 136,478 SF (± 3.13 acres)
- Paseos and Common: ± 120,891 SF
- Private Patios: ± 15,587 SF

Notes:
1. 1501 W Del Norte St, West Covina, CA 91790
2. Net site area assumes dedication of Del Norte Street to Sunset Avenue.
3. Assessor's Parcel Numbers: 8458-020-901
4. Type VB construction with NFPA 13D automatic sprinkler system.
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8. Existing General Plan: Civic: Schools (S)
9. Existing Zoning: R-1: Residential Single Family
10. Proposed General Plan: Neighborhood High
11. Proposed Zoning: Specific Plan
12. SB330 Vesting: Pending
13. CEQA: IS/MND (Assumed)

Dimensioned Site Plan

0 30 60
1" = 30'

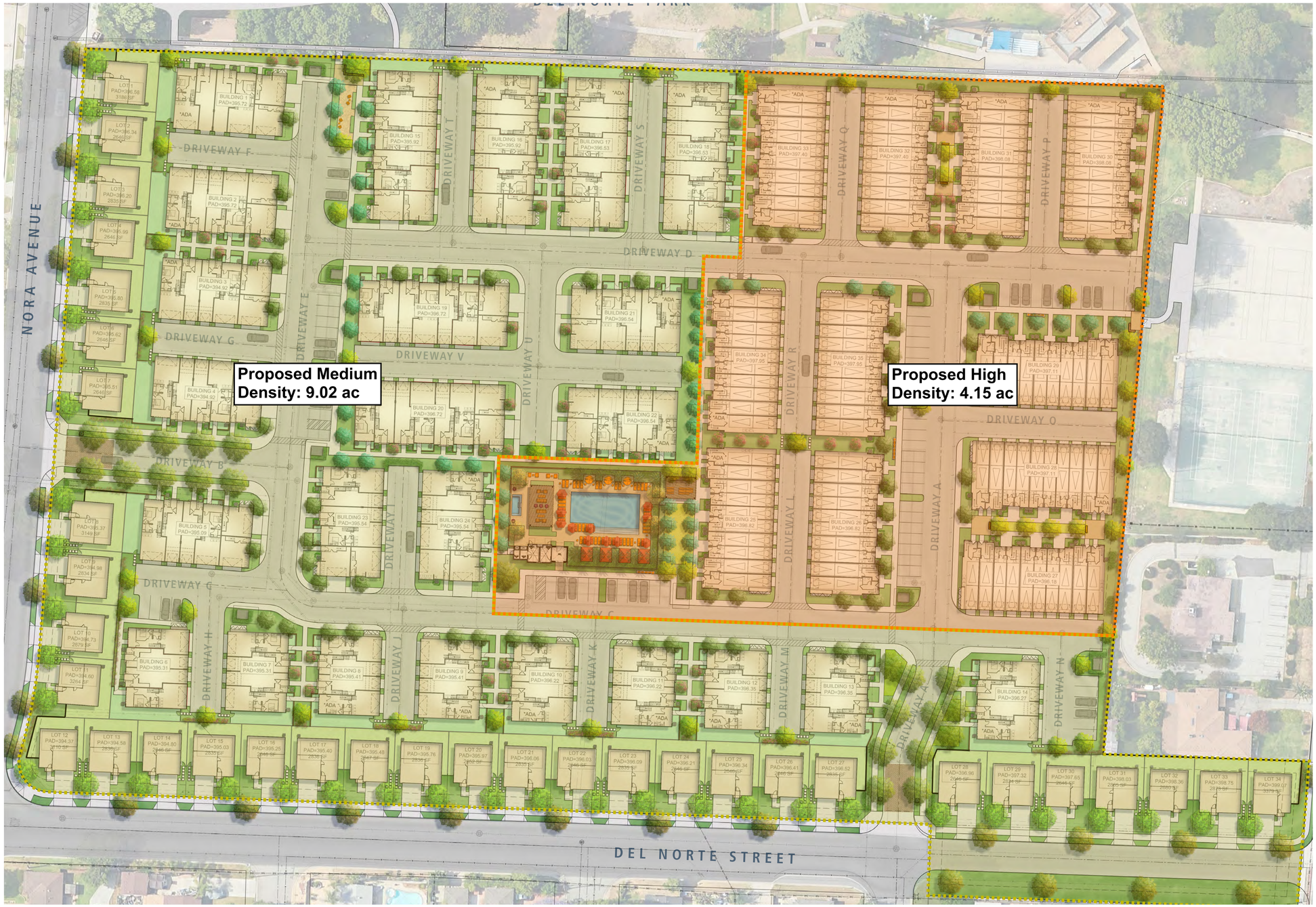
1501Del Norte Street

West Covina, California

April 2025

Meritage Homes | MLC Holdings, Inc.

North



LEGEND

Project Area: 13.56 acres
Net Site Area[1]: 13.19 acres

Total Homes[2]: 282 Homes
- (34) Single-Family Detached Homes
  - (16) Plan 3222 - 1,678 SF, 3 Bed, 2.5 Bath
  - (18) Plan 3522 - 1,957 SF, 4 Bed, 3 Bath
- (138) 3-Story Townhomes
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  - (54) Plan 7 - 1,755 SF, 4 Bed, 4 Bath
- (110) 4-Story Stacked Flats
  - (33) Plan 1 Flats - 1,126 SF, 2 Bed, 2 Bath
  - (22) Plan 2 Flats - 1,464 SF, 3 Bed, 2 Bath
  - (33) Plan 3 Flats - 1,959 SF, 3 Bed, 3 Bath
  - (22) Plan 4 Flats - 2,485 SF, 4 Bed, 3 Bath

Notes:
1. 1501 W Del Norte St, West Covina, CA 91790
2. Net site area assumes dedication of Del Norte Street to Sunset Avenue.

	Required Density	Proposed Density
Neighborhood Medium Density	9 to 20 units/ac	19.1 units/ac
Neighborhood High Density	21 to 54 units/ac	26.5 units/ac

0 30 60
1” = 30’

Proposed Land Use

1501Del Norte Street

West Covina, California

April 2025

North

SITE SUMMARY

Development Area: ±13.62 Acres (Gross), ±13.19 Acres (Net)

Proposed Units: 282 Dwelling Units

Unit Summary:

Single Family Dwelling Units:

Plan 3222	(16) 1,678 gsf - 3bed/2.5ba - 2 story, SxS	(6%)
Plan 3522	(18) 1,957 gsf - 4bed/3ba - 2 story, SxS	(6%)

4-Story Stacked Flats:

Plan 1	(33) 1,126 gsf - 2bed/2ba - 4 story, Tandem	(12%)
Plan 3	(33) 1,959 gsf - 3bed/3ba - 4 story, Tandem	(12%)
Plan 2	(22) 1,464 gsf - 3bed/2ba - 4 story, Tandem	(8%)
Plan 4	(22) 2,485 gsf - 4bed/3ba - 4 story, Tandem	(8%)

CRC Towns:

Plan 5	(30) 1,226 gsf - 2bed/2.5ba - 3 story, SxS	(10%)
Plan 6	(54) 1,470 gsf - 3bed/3ba - 3 story, Tandem	(19%)
Plan 7	(54) 1,755 gsf - 4bed/4ba - 3 story, SxS	(19%)

Density: ±21.38 du/ac

Private Outdoor Open Space per Building:

SFD (Plan 3222 & 3522):	1400 sf/unit
Building A	704 sf
Building B	792 sf
Building C	1144 sf
Building D	1181 sf

Common Open Space Including Pool Building: 81,404 sf

Rec Center:	2361 sf
Pool Building:	633 sf
Common HOA Area:	78,410 sf

Total Landscaped Area (including Pool Building): 145,636 s.f.

Percentage: 25%

Parking Provided:

Garages	564	spaces (2 per Unit)
Open	77	spaces
Total Provided	641	spaces (± 2.27 per Unit)

Building & Fire Dept. Information:

Occupancies:

Plan 3222 & 3522	R3 (Dwelling units) / U (Private Garages)
Composite 'A', 'B', & 'C'	R3 (Dwelling units) / U (Private Garages)
Composite 'D'	R2 (Dwelling units) / U (Private Garages)

Construction Type:

Composite 'D'	Type VA Rated Constriction, NFPA 13
All other Structures	Type VB - non-rated, NFPA 13D

LEGEND

- CX / X — Composite Type / Building Number
- XX — Unit Number
- CH11A — CH11A-Compliant Unit

ktgy
17911 Von Karman Ave.
Suite 200
Irvine, CA 92614
ktgy.com
949.851.2133

MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606

MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 20 40 80

ARCHITECTURAL SITE PLAN

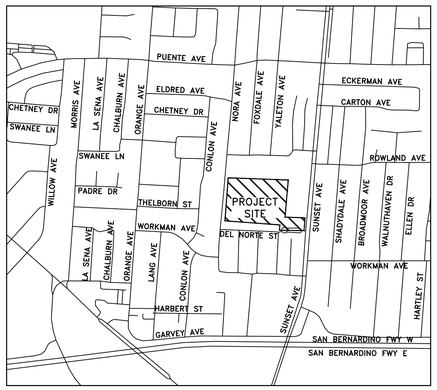
A1.10

SITE PLAN

TENTATIVE TRACT NO. 044618

(FOR CONDOMINIUM PURPOSES)
LOCATED IN THE UNINCORPORATED TERRITORY OF
THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

BEING A SUBDIVISION OF THOSE PORTIONS OF THE SECTION 31, TOWNSHIP 1 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN, AS RECORDED IN BOOK 37951 PAGE 277 OF MAPS, RECORDS IN THE CITY OF COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA.

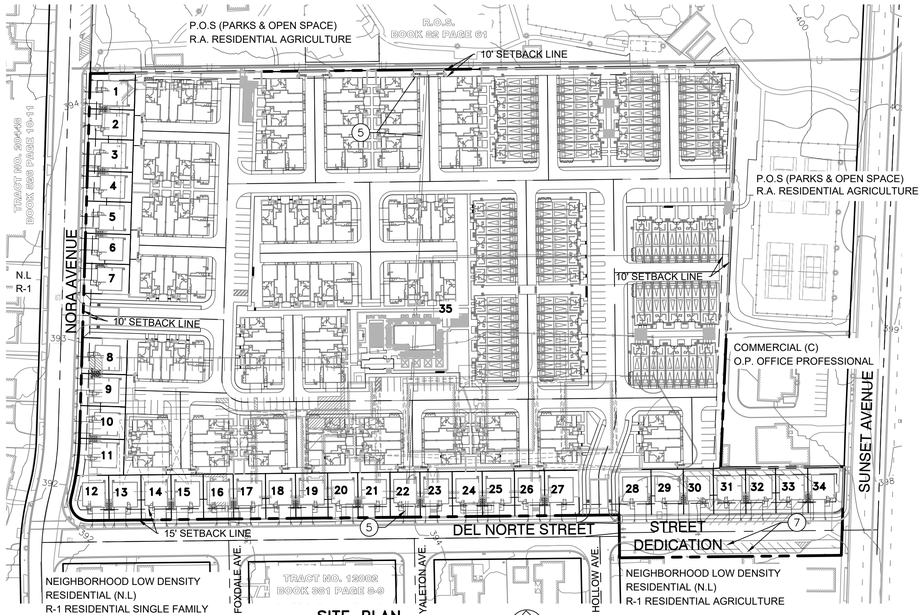


VICINITY MAP
(NOT TO SCALE)

LOT NO.	LOT AREA (SF)	UNIT TYPE
1	3,186	SFD
2	2,646	SFD
3	2,635	SFD
4	2,646	SFD
5	2,635	SFD
6	2,646	SFD
7	2,646	SFD
8	3,149	SFD
9	2,834	SFD
10	2,679	SFD
11	3,264	SFD
12	3,110	SFD
13	2,838	SFD
14	2,646	SFD
15	2,835	SFD
16	2,646	SFD
17	2,636	SFD
18	2,647	SFD

LOT NO.	LOT AREA (SF)	UNIT TYPE
19	2,635	SFD
20	2,646	SFD
21	2,635	SFD
22	2,646	SFD
23	2,635	SFD
24	2,646	SFD
25	2,646	SFD
26	2,646	SFD
27	3,013	SFD
28	2,830	SFD
29	2,833	SFD
30	2,646	SFD
31	2,867	SFD
32	2,680	SFD
33	2,973	SFD
34	3,379	SFD
35	476,668	TOWNHOMES
PUBLIC	18,702	DEDICATION

LOT AREAS



SITE PLAN
NOT TO SCALE

REVISED 03/31/2025
12/04/2024

NOTES:

SITE DATA TABLE:

NUMBER OF RESIDENTIAL UNITS:	282 TOTAL HOMES
GROSS AREA:	±13.62 ACRES / ±593,294 SQUARE FEET
EASEMENT AREA:	±0.22 ACRES / ±9,957 SQUARE FEET
NET AREA:	±13.40 ACRES / ±583,337 SQUARE FEET
DENSITY:	20.70 UNITS PER ACRE
PARKING:	
	72 GUEST PARKING
	4 ADA GUEST PARKING
	76 TOTAL PARKING SPACES

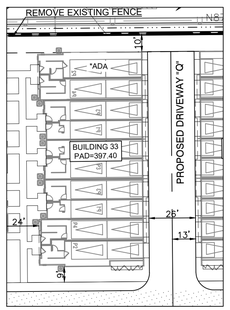
OPEN SPACE AREAS:

- FOR OPEN SPACES & LANDSCAPE AREAS SEE LANDSCAPE PLAN
- FOR UTILITY DESIGN AND INFORMATION SEE UTILITY PLAN

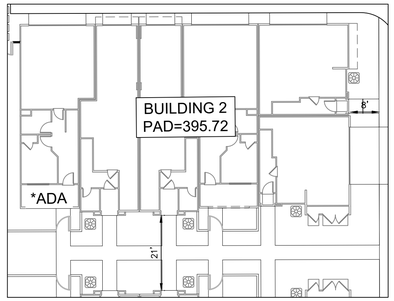
EARTHWORK QUANTITIES:
CUT: 1,871 CYDS
FILL: 6,172 CYDS
IMPORT FILL: 4,301 CYDS
OVEREXCAVATION (7' FEET DEEP): 153,816 CYDS
APPROXIMATE SHRINKAGE OF OVEREXCAVATION (12%): 18,458 CYDS
NET IMPORT: 4,301 CYDS (IMPORT FILL) + 18,458 (12%) = 22,759 CYDS

PROJECT SCOPE:

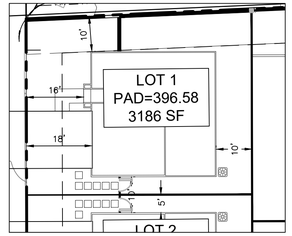
LOTS:
34 DETACHED SINGLE FAMILY RESIDENCES
1 COMMON LOT OF TOWNHOMES AND FLATS



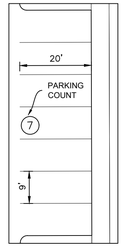
4-STORY STACKED FLATS
NOT TO SCALE



3-STORY TOWNHOME
NOT TO SCALE



2-STORY SINGLE FAMILY HOMES
NOT TO SCALE



TYPICAL PARKING
NOT TO SCALE

LEGAL DESCRIPTION:

REAL PROPERTY IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
PARCEL 1:

THAT PORTION OF THE RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
COMMENCING AT A TWO INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE, 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID TWO INCH IRON PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG SAID LAST MENTIONED WESTERLY LINE, 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'22" WEST, 626.11 FEET TO A TWO INCH PIPE, MARKING THE NORTHEASTERLY CORNER OF THE PARCEL OF LAND FIRST DESCRIBED IN THE DEED TO HENRY SHINICHI OSHIRO, RECORDED APRIL 23, 1941 IN BOOK 18336 PAGE 324 OF OFFICIAL RECORDS OF SAID COUNTY, BEING THE TRUE POINT OF BEGINNING; THENCE ALONG THE EASTERLY LINE OF THE LAND DESCRIBED IN THE LAST MENTIONED DEED, SOUTH 4°49'31" WEST, 263.51 FEET; THENCE SOUTH 88°24'11" EAST, PARALLEL WITH THE LINE HEREIN DESCRIBED AS HAVING A BEARING "NORTH 88°24'11" WEST," A DISTANCE OF 434.46 FEET; THENCE NORTH 4°44'57" EAST, 263.49 FEET TO A POINT DISTANT SOUTH 88°24'11" EAST, 434.11 FEET FROM THE TRUE POINT OF BEGINNING; THENCE NORTH 88°24'11" WEST, 434.11 FEET TO THE TRUE POINT OF BEGINNING

EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.

PARCEL 2:

THAT PORTION OF RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
COMMENCING AT A 2 INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE, 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID 2 INCH PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG SAID LAST MENTIONED WESTERLY LINE 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'11" WEST, 626.11 FEET TO A 2 INCH IRON PIPE, MARKING THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 4°49'31" WEST, 686.41 FEET, TO A 2 INCH IRON PIPE; THENCE NORTH 88°24'11" WEST, 634.66 FEET TO A 2 INCH IRON PIPE IN THE EASTERLY LINE OF THE PARCEL OF LAND MARKED "JOHN LANG" ON A LICENSED SURVEYOR'S MAP FILED IN BOOK 31 PAGE 48 OF RECORD OF SURVEYS OF SAID COUNTY; THENCE ALONG SAID EASTERLY LINE AND ITS NORTHERLY PROLONGATION, NORTH 3°57'27" EAST, 685.91 FEET TO A 2 INCH IRON PIPE WHICH BEARS NORTH 88°24'11" WEST, FROM THE TRUE POINT OF BEGINNING; THENCE SOUTH 88°24'11" EAST, 645.03 FEET TO THE TRUE POINT OF BEGINNING. SAID LAND IS SHOWN AS PARCEL "B" ON MAP FILED IN BOOK 50 PAGE 38 OF RECORD OF SURVEYS OF SAID COUNTY.

EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JUNE 2, 1958 AS INSTRUMENT NO. 2918, OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.

PARCEL 3:

THAT PORTION OF RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
COMMENCING AT A 2 INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID 2 INCH IRON PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG LAST MENTIONED WESTERLY LINE 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'11" WEST, 626.11 FEET TO A 2 INCH IRON PIPE MARKING THE NORTHEASTERLY CORNER OF THE PARCEL OF LAND FIRST DESCRIBED IN THE DEED TO HENRY SHINICHI OSHIRO, RECORDED ON APRIL 23, 1941, IN BOOK 18336 PAGE 324 OF OFFICIAL RECORDS OF SAID COUNTY; THENCE ALONG THE EASTERLY LINE OF THE PARCEL OF LAND DESCRIBED IN THE LAST MENTIONED DEED SOUTH 4°49'31" WEST, 263.51 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING SOUTH 4°49'31" WEST, ALONG SAID EASTERLY LINE, 422.90 FEET TO A 2 INCH IRON PIPE; THENCE SOUTH 88°24'11" EAST, 629.20 FEET TO A 2 INCH IRON PIPE, IN SAID WESTERLY LINE OF IRWINDALE AVENUE, MARKING THE SOUTHEAST CORNER OF PARCEL "A" AS SHOWN ON MAP FILED IN BOOK 50 PAGE 38 OF RECORD OF SURVEYS OF SAID COUNTY; THENCE ALONG SAID WESTERLY LINE OF IRWINDALE AVENUE, NORTH 4°05'42" EAST, 124.00 FEET; THENCE PARALLEL WITH THAT CERTAIN COURSE DESCRIBED ABOVE AS HAVING A BEARING AND LENGTH OF "NORTH 88°24'11" WEST, 626.11 FEET", NORTH 88°24'11" WEST, 192.77 FEET; THENCE NORTH 4°44'57" EAST, 298.81 FEET TO A POINT IN A LINE THAT PASSES THROUGH THE TRUE POINT OF BEGINNING, AND THAT IS PARALLEL WITH SAID CERTAIN COURSE DESCRIBED AS "NORTH 88°24'11" WEST, 626.11 FEET", SAID POINT IN SAID PARALLEL LINE BEING DISTANT SOUTH 88°24'11" EAST, 434.46 FEET FROM THE TRUE POINT OF BEGINNING; THENCE ALONG SAID PARALLEL LINE NORTH 88°24'11" WEST, 434.46 FEET TO THE TRUE POINT OF BEGINNING.

SAID LAND IS A PORTION OF PARCEL "A", AS SHOWN ON MAP FILED IN BOOK 50 PAGE 38 OF RECORDS OF SURVEYS OF SAID COUNTY.

EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JUNE 2, 1958 AS INSTRUMENT NO. 2918, OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JULY 11, 1966 AS INSTRUMENT NO. 2049, OFFICIAL RECORDS.

EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.

EASEMENTS:

③ AN EASEMENT FOR WAGON ROAD AND A WATER DITCH AND INCIDENTAL PURPOSES, RECORDED MARCH 4, 1875 IN BOOK 36 OF DEEDS, PAGE 169. IN FAVOR OF: D. C. MENSING
AFFECTS: AS DESCRIBED THEREIN
THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION. (NON-PLOTTABLE)

④ AN EASEMENT FOR WATER PIPE LINE, WITH THE RIGHT OF INGRESS AND EGRESS AND INCIDENTAL PURPOSES, RECORDED APRIL 22, 1896 IN BOOK 1043 OF DEEDS, PAGE 309.
IN FAVOR OF: AZUSA IRRIGATING COMPANY, A CORPORATION
AFFECTS: AS DESCRIBED THEREIN
THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION. (NON- PLOTTABLE)

⑤ THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED AGREEMENT RECORDED JANUARY 14, 1946 AS BOOK 22719, PAGE 40 OF OFFICIAL RECORDS. (NON-PLOTTABLE)

⑥ AN EASEMENT FOR POLE LINES AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 26, 1946 AS BOOK 22872, PAGE 213 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, LTD., A CORPORATION
AFFECTS: PARCEL 1 (NON-PLOTTABLE CANNOT BE DETERMINED FROM RECORD INFORMATION)

⑦ AN EASEMENT FOR POLE LINES AND INCIDENTAL PURPOSES, RECORDED JANUARY 24, 1951 AS INSTRUMENT NO. 2281, IN BOOK 35398, PAGE 55 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION
AFFECTS: AS DESCRIBED THEREIN (PLOTTED)

⑧ INTENTIONALLY DELETED

⑨ INTENTIONALLY DELETED

⑩ A NOTICE THAT SAID LAND IS INCLUDED WITHIN A PROJECT AREA OF THE REDEVELOPMENT AGENCY SHOWN BELOW, AND THAT PROCEEDINGS FOR THE REDEVELOPMENT OF SAID PROJECT HAVE BEEN INSTITUTED UNDER THE REDEVELOPMENT LAW (SUCH REDEVELOPMENT TO PROCEED ONLY AFTER THE ADOPTION OF THE REDEVELOPMENT PLAN) AS DISCLOSED BY A DOCUMENT
RECORDING DATE: JULY 11, 1990
RECORDING NO: 90-1219638, OFFICIAL RECORDS
REDEVELOPMENT PROJECT: AMENDED EASTLAND REDEVELOPMENT PROJECT

RECORDING DATE: DECEMBER 22, 1993
RECORDING NO: 93-2492845, OFFICIAL RECORDS

DIGALERT
DIAL TOLL FREE! 811
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BASIS OF BEARING:
THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCHMARK NO:	DESCRIPTION	DATUM:	ELEV:	YEAR:
BM 4G4954	DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE	NAVD88	401.938	2013

CITY: WEST COVINA
COUNTY: LOS ANGELES
STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER · CESAR MORAN · C72247 · CIVIL · STATE OF CALIFORNIA

PREPARED BY:

MORAN CONSULTING CORPORATION
• CIVIL ENGINEERING • SURVEYING • LAND PLANNING
4500 E. Pacific Coast Highway, Suite 210
Long Beach, California 90804
Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com
CESAR MORAN P.E. C72247

DATE: 03/03/25 | JOB № 224181 | DRAWN BY: CR

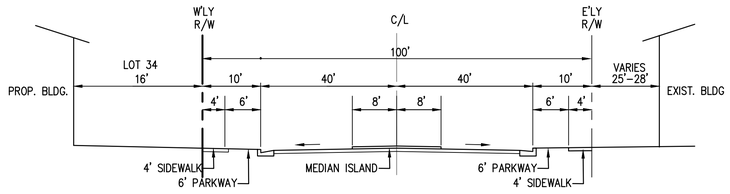
REVISIONS

N°	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			
6			

PLANS PREPARED FOR:
MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606
PHONE (949) 372-3315
FAX
E-Mail

PROJECT TITLE: DEL NORTE
TRACT NO. 044618
PROJECT ADDRESS: 1501 DEL NORTE STREET, WEST COVINA, CA 91790
SCALE: PER PLAN
LEGAL DESCRIPTION: SEE SHEET 1
SHEET TITLE: TITLE SHEET
C-1.0

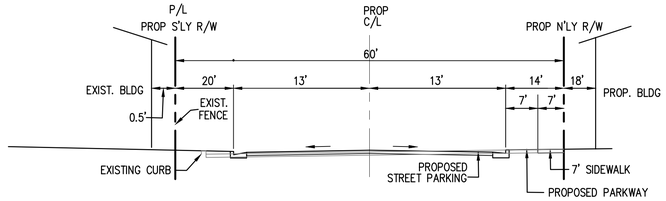
DWG: C:\Users\Mybooks\OneDrive - Moran Consulting Corp\224181 - 1501 Del Norte West Covina (Martinez)\Engineering\CAD_Sheets\Exhibit A\Site Plan.dwg BY: Rpinkos Apr 01, 2025 - 2:46:07pm
PROJ: 211041



SUNSET AVENUE

NOT TO SCALE

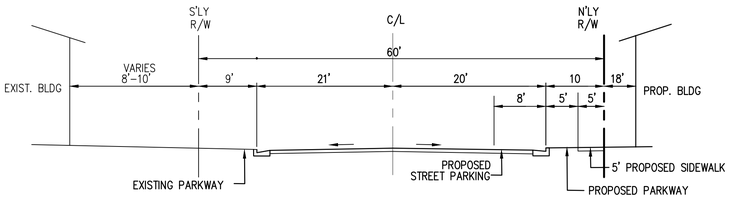
A/3



DEL NORTE STREET DEDICATION

NOT TO SCALE

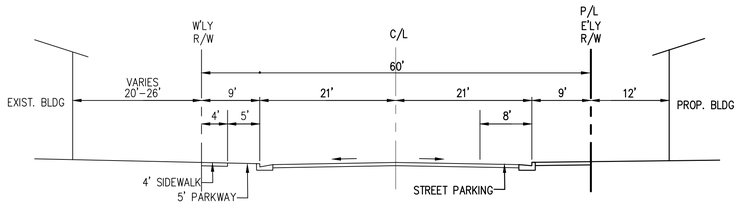
B/3



DEL NORTE STREET-EXISTING

NOT TO SCALE

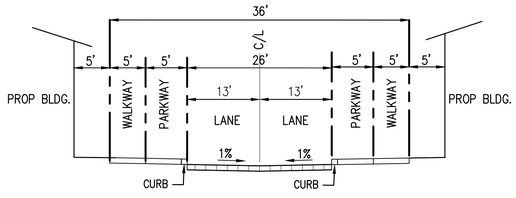
C/3



NORA AVENUE

NOT TO SCALE

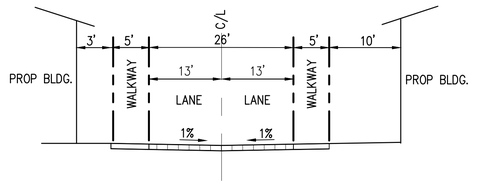
D/3



PROPOSED ENTRANCE - DWY. "A"

NOT TO SCALE

E/3



PROPOSED DRIVEWAY

NOT TO SCALE

F/3

DIGALERT — DIAL TOLL FREE 811 — AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BASIS OF BEARING:

THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCHMARK NO:	DESCRIPTION	DATUM:	ELEV:	YEAR:
BM 4G4954	DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE	NAVD88	401.938	2013

CITY: WEST COVINA

COUNTY: LOS ANGELES

STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — CESAR MORAN — C72247 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:

MORAN CONSULTING CORPORATION
• CIVIL ENGINEERING • SURVEYING • LAND PLANNING
4500 E. Pacific Coast Highway, Suite 210
Long Beach, California 90804
Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com

CESAR MORAN P.E. C72247

DATE: 03/31/25 | JOB N° 224181 | DRAWN BY: CR

REVISIONS

N°	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			
6			

PLANS PREPARED FOR:

MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606

PHONE (949) 372-3315
FAX
E-Mail

PROJECT TITLE
DEL NORTE

PROJECT ADDRESS
1501 DEL NORTE STREET
WEST COVINA, CA 91790

LEGAL DESCRIPTION
SEE SHEET 1

TRACT NO.

SCALE: PER PLAN

C-1.1

SHEET TITLE
SECTIONS

PROJ#: 211041
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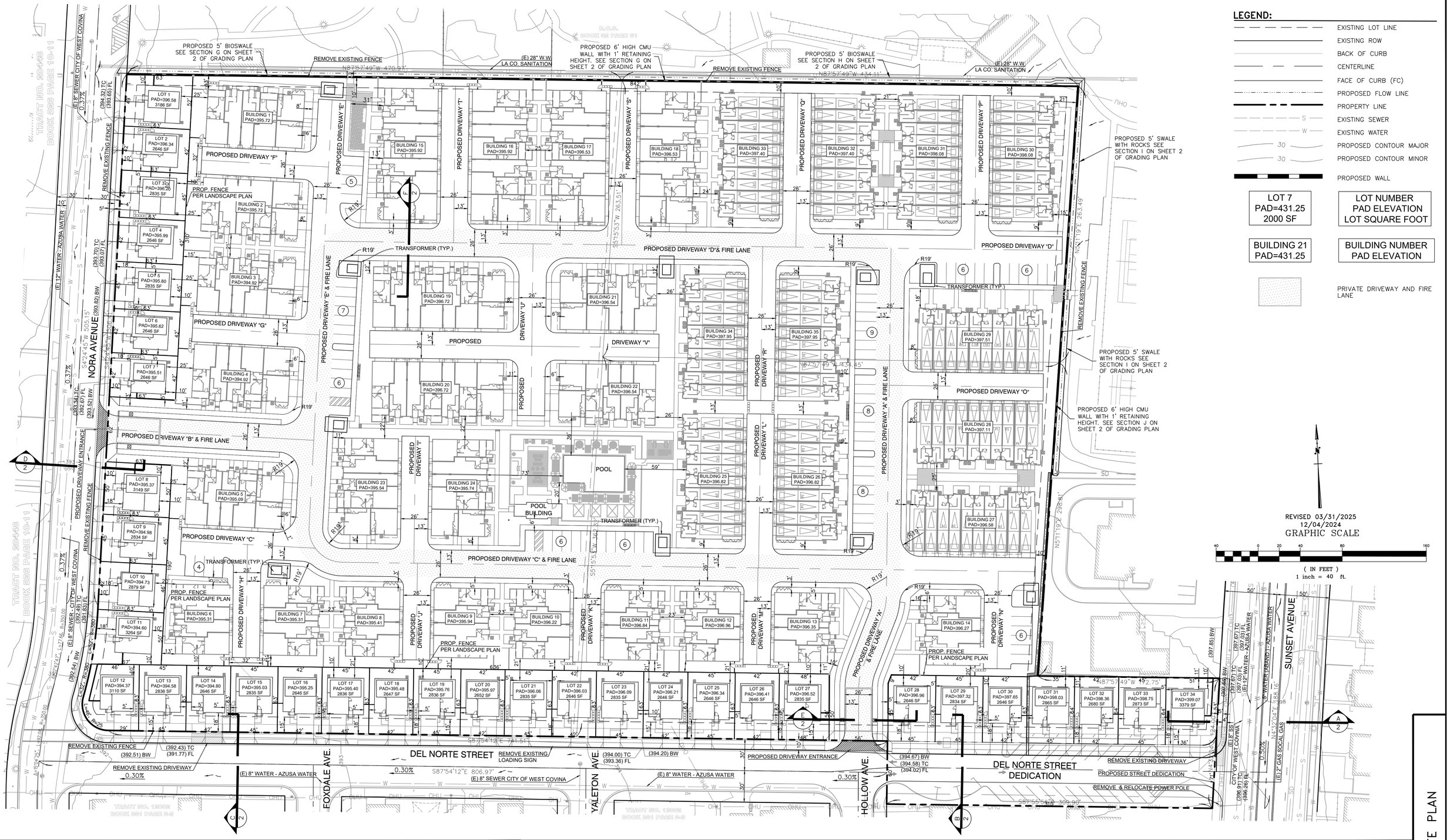


LEGEND:

- EXISTING LOT LINE
- EXISTING ROW
- BACK OF CURB
- CENTERLINE
- FACE OF CURB (FC)
- PROPOSED FLOW LINE
- PROPERTY LINE
- EXISTING SEWER
- EXISTING WATER
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- PROPOSED WALL

LOT 7
PAD=431.25
2000 SF

LOT NUMBER
PAD ELEVATION
LOT SQUARE FOOT

BUILDING 21
PAD=431.25

BUILDING NUMBER
PAD ELEVATION

PRIVATE DRIVEWAY AND FIRE LANE

REVISED 03/31/2025
12/04/2024
GRAPHIC SCALE

40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

SITE PLAN

SHEET TITLE

BASIS OF BEARING:
THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCHMARK NO: BM 4G4954
DESCRIPTION DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE
DATUM: NAVD88
ELEV: 401.938
YEAR: 2013

CITY: WEST COVINA
COUNTY: LOS ANGELES
STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER · CESAR MORAN · C72247 · CIVIL · STATE OF CALIFORNIA

PREPARED BY:
MORAN CONSULTING CORPORATION
• CIVIL ENGINEERING • SURVEYING • LAND PLANNING
4500 E. Pacific Coast Highway, Suite 210
Long Beach, California 90804
Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com
CESAR MORAN P.E. C72247

DATE: 03/31/25 | JOB N° 224181 | DRAWN BY: CR

REVISIONS

N°	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			
6			

PLANS PREPARED FOR:
MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606
PHONE (949) 372-3315
FAX
E-Mail

PROJECT TITLE DEL NORTE
PROJECT ADDRESS 1501 DEL NORTE STREET WEST COVINA, CA 91790
LEGAL DESCRIPTION SEE SHEET 1

TRACT NO.
SCALE: PER PLAN
C-1.2

DIAL TOLL FREE 811 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

PROJ: 211041
DWG: C:\Users\Mycheck\OneDrive - Moran Consulting Corp\224181 - 1501 Del Norte West Covina (demo\sp7)\Engineering\CAD_Sheets\Cad\Set A\Site Plan.dwg BY: Mycheck Apr 01, 2025 - 2:46:21pm

MAJOR LAND DIVISION
TENTATIVE TRACT NO. 004618

(FOR CONDOMINIUM PURPOSES)
LOCATED IN THE UNINCORPORATED TERRITORY OF
THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

BEING A SUBDIVISION OF THOSE PORTIONS OF THE SECTION 31, TOWNSHIP 1 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN, AS RECORDED IN BOOK 37951 PAGE 277 OF MAPS, RECORDS IN THE CITY OF COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA.

NOTES:

SITE ADDRESS: 1501 DEL NORTE WEST COVINA, CA 91790

1. ASSESSORS PARCEL: 8458-020-901
2. GENERAL PLAN:
   EXISTING: CIVIC SCHOOL (S)
3. ZONING:
   EXISTING: R-1: RESIDENTIAL SINGLE FAMILY
   PROPOSED: SPECIFIC PLAN
4. LAND USE:
   EXISTING: CIVIC-SCHOOL (S)
   PROPOSED: SPECIFIC PLAN- RESIDENTIAL
5. ADJACENT LAND USES:

NORTH: PARKS AND OPEN SPACE

SOUTH: NEIGHBORHOOD LOW DENSITY COMM / RA

EAST: COMM / RA NEIGHBORHOOD LOW RESIDENTIAL

WEST: RESIDENTIAL

6. FLOOD ZONE: "X" PER FEMA MAP 06037C 1700F DATED 09/26/2008 (PER FEMA WEB SITE)
7. THE UTILITIES SHOWN ON THIS MAP ARE BASED UPON INFORMATION PROVIDED BY: CITY OF ASUZA, PUBLIC WORKS COUNTY OF LOS ANGELES AND CITY OF AZUSA LIGHT AND WATER.
8. SEWER SERVICES PROVIDED BY: LOS ANGELES COUNTY SANITATION DISTRICT
9. WATER SERVICES PROVIDED BY: CITY OF AZUSA LIGHT AND WATER
10. SOLID WASTE SERVICES PROVIDED BY: ATHENS SERVICES
11. GAS SERVICES PROVIDED BY: SOUTHERN CALIFORNIA GAS COMPANY
12. ELECTRICAL SERVICES PROVIDED BY: SOUTHERN CALIFORNIA EDISON
13. TELEPHONE SERVICES PROVIDED BY: FRONTIER COMMUNICATIONS
14. CABLE TELEVISION SERVICES PROVIDED BY: SPECTRUM
15. FIRE PROTECTION SERVICES PROVIDED BY: LOS ANGELES COUNTY FIRE DEPARTMENT
16. SCHOOL DISTRICT:
    ELEMENTARY: WEST COVINA UNIFIED SCHOOL DISTRICT
    HIGH SCHOOL: WEST COVINA UNIFIED SCHOOL DISTRICT
17. PAD ELEVATIONS SHOWN HEREON MAY BE CHANGED TO THE SATISFACTION TO THE CITY OF WEST COVINA
18. ALL LOTS WILL DRAIN TO STREET.
19. THIS IS AN APPLICATION FOR A SUBDIVISION.
20. ANY SLOPES SHOWN WILL BE A MAXIMUM OF 2:1, UNLESS OTHERWISE SHOWN AND APPROVED, INCLUDING PRIVATE SIDEYARD SLOPES.
21. ESTIMATED EARTHWORK QUANTITIES:
    CUT: 1,871 CYDS
    FILL : 6,172 CYDS
    IMPORT FILL : 4,301 CYDS

OVEREXCAVATION (7' FEET DEEP):	153,816 CYDS
APPROXIMATE SHRINKAGE OF OVEREXCAVATION (12%):	18,458 CYDS
NET IMPORT: 4,301 CYDS (IMPORT FILL) + 18,458 CYDS (12%) =	22,759 CYDS

22. THE PRELIMINARY GEOTECHNICAL/SOILS REPORT WAS PREPARED BY SA GEO DATED: 06/14/2024.
23. THERE ARE SEVERAL EXISTING STRUCTURES AND RELATED IMPROVEMENTS WITHIN THE BOUNDARIES OF THIS TENTATIVE TRACT MAP, ALL ARE TO BE REMOVED.
24. ALL INTERIOR STREETS WITHIN THE TENTATIVE TRACT MAP ARE PRIVATE DRIVEWAY AND FIRE LANES TO BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
25. THERE WERE NO OBSERVED WELLS WITHIN THE PROPERTY.
26. ANY PROPOSED STORM DRAIN IMPROVEMENTS WILL BE IN ACCORDANCE WITH THE CITY OF WEST COVINA REQUIREMENTS.
27. ANY IMPROVEMENTS REQUIRED BY THE CITY OF WEST COVINA SHALL BE INSTALLED TO THE SATISFACTION OF THE CITY ENGINEER.
28. THE AERIAL TOPOGRAPHY WAS FLOWN AND COMPILED BY CESAR MORAN & ASSOCIATES, DATED MAY 16 , 2024 AND COMPLIES WITH NATIONAL MAPPING ACCURACY STANDARDS.
30. THE PROPOSED INFILTRATION BASIN WILL BE MAINTAINED BY THE HOA.
31. FOR OPEN SPACES & LANDSCAPE AREAS SEE LANDSCAPE PLAN
32. FOR UTILITY DESIGN AND INFORMATION SEE UTILITY PLAN.

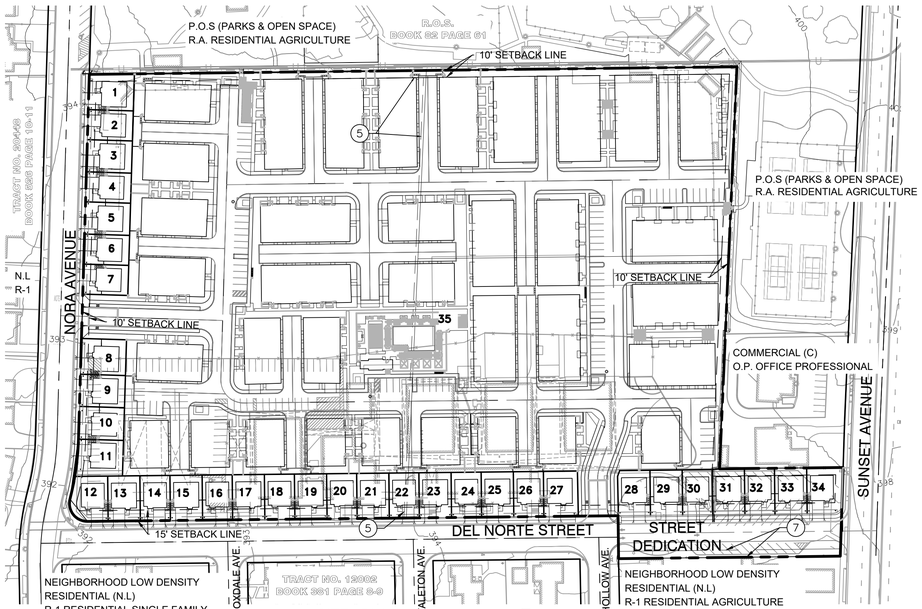
LOT SUMMARY:

DETACHED SINGLE FAMILY RESIDENCES (LOTS 1-34)

TOWNHOMES/ FLATS (LOT 35)

SITE DATA TABLE:

NUMBER OF RESIDENTIAL UNITS:	282 TOTAL HOMES
GROSS AREA:	±13.62 ACRES / ±593,294 SQUARE FEET
EASEMENT AREA:	±0.22 ACRES / ±9,957 SQUARE FEET
NET AREA:	±13.40 ACRES / ±583,337 SQUARE FEET
DENSITY:	20.70 UNITS PER ACRE
PARKING:	
	72 GUEST PARKING
	4 ADA GUEST PARKING
	76 TOTAL PARKING SPACES



SITE PLAN
NOT TO SCALE

REVISED 03/31/2025
12/04/2024

EASEMENTS:

③ AN EASEMENT FOR WAGON ROAD AND A WATER DITCH AND INCIDENTAL PURPOSES, RECORDED MARCH 4, 1875 IN BOOK 36 OF DEEDS, PAGE 169. IN FAVOR OF: D. C. MENSING
AFFECTS: AS DESCRIBED THEREIN
THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION. (NON-PLOTTABLE)

④ AN EASEMENT FOR WATER PIPE LINE, WITH THE RIGHT OF INGRESS AND EGRESS AND INCIDENTAL PURPOSES, RECORDED APRIL 22, 1896 IN BOOK 1043 OF DEEDS, PAGE 309.
IN FAVOR OF: AZUSA IRRIGATING COMPANY, A CORPORATION
AFFECTS: AS DESCRIBED THEREIN
THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION. (NON- PLOTTABLE)

⑤ THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED AGREEMENT RECORDED JANUARY 14, 1946
AS BOOK 22719, PAGE 40 OF OFFICIAL RECORDS. (NON-PLOTTABLE)

⑥ AN EASEMENT FOR POLE LINES AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 26, 1946 AS BOOK 22872, PAGE 213 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, LTD., A CORPORATION
AFFECTS: PARCEL 1 (NON-PLOTTABLE CANNOT BE DETERMINED FROM RECORD INFORMATION)

⑦ AN EASEMENT FOR POLE LINES AND INCIDENTAL PURPOSES, RECORDED JANUARY 24, 1951 AS INSTRUMENT NO. 2281, IN BOOK 35398, PAGE 55 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION
AFFECTS: AS DESCRIBED THEREIN (PLOTTED)

⑧ INTENTIONALLY DELETED

⑨ INTENTIONALLY DELETED

⑩ A NOTICE THAT SAID LAND IS INCLUDED WITHIN A PROJECT AREA OF THE REDEVELOPMENT AGENCY SHOWN BELOW, AND THAT PROCEEDINGS FOR THE REDEVELOPMENT OF SAID PROJECT HAVE BEEN INSTITUTED UNDER THE REDEVELOPMENT LAW (SUCH REDEVELOPMENT TO PROCEED ONLY AFTER THE ADOPTION OF THE REDEVELOPMENT PLAN) AS DISCLOSED BY A DOCUMENT
RECORDING DATE: JULY 11, 1990
RECORDING NO: 90-1219638, OFFICIAL RECORDS
REDEVELOPMENT PROJECT: AMENDED EASTLAND REDEVELOPMENT PROJECT

RECORDING DATE: DECEMBER 22, 1993
RECORDING NO: 93-2492845, OFFICIAL RECORDS

LOT NO.	LOT AREA (SF)	UNIT TYPE
1	3,186	SFD
2	2,646	SFD
3	2,835	SFD
4	2,646	SFD
5	2,835	SFD
6	2,646	SFD
7	2,646	SFD
8	3,149	SFD
9	2,834	SFD
10	2,679	SFD
11	3,264	SFD
12	3,110	SFD
13	2,838	SFD
14	2,646	SFD
15	2,835	SFD
16	2,646	SFD
17	2,836	SFD
18	2,647	SFD

LOT NO.	LOT AREA (SF)	UNIT TYPE
19	2,835	SFD
20	2,646	SFD
21	2,835	SFD
22	2,646	SFD
23	2,835	SFD
24	2,646	SFD
25	2,646	SFD
26	2,646	SFD
27	3,013	SFD
28	2,830	SFD
29	2,833	SFD
30	2,646	SFD
31	2,967	SFD
32	2,680	SFD
33	2,873	SFD
34	3,379	SFD
35	478,658	TOWNFLATS
PUBLIC	18,762	DEDICATION

LOT AREAS

LEGAL DESCRIPTION:

REAL PROPERTY IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
PARCEL 1:

THAT PORTION OF THE RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
COMMENCING AT A TWO INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE, 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID TWO INCH IRON PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG SAID LAST MENTIONED WESTERLY LINE, 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'22" WEST, 626.11 FEET TO A TWO INCH PIPE, MARKING THE NORTHEASTERLY CORNER OF THE PARCEL OF LAND FIRST DESCRIBED IN THE DEED TO HENRY SHINICHI OSHIRO, RECORDED APRIL 23, 1941 IN BOOK 18336 PAGE 324 OF OFFICIAL RECORDS OF SAID COUNTY, BEING THE TRUE POINT OF BEGINNING; THENCE ALONG THE EASTERLY LINE OF THE LAND DESCRIBED IN THE LAST MENTIONED DEED, SOUTH 4°49'31" WEST, 263.51 FEET; THENCE SOUTH 88°24'11" EAST, PARALLEL WITH THE LINE HEREIN DESCRIBED AS HAVING A BEARING "NORTH 88°24'11" WEST," A DISTANCE OF 434.46 FEET; THENCE NORTH 4°44'57" EAST, 263.49 FEET TO A POINT DISTANT SOUTH 88°24'11" EAST, 434.11 FEET FROM THE TRUE POINT OF BEGINNING; THENCE NORTH 88°24'11" WEST, 434.11 FEET TO THE TRUE POINT OF BEGINNING

EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.

PARCEL 2:

THAT PORTION OF RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
COMMENCING AT A 2 INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE, 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID 2 INCH PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG SAID LAST MENTIONED WESTERLY LINE 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'11" WEST, 626.11 FEET TO A 2 INCH IRON PIPE, MARKING THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 4°49'31" WEST, 686.41 FEET, TO A 2 INCH IRON PIPE; THENCE NORTH 88°24'11" WEST, 634.66 FEET TO A 2 INCH IRON PIPE IN THE EASTERLY LINE OF THE PARCEL OF LAND MARKED "JOHN LANG" ON A LICENSED SURVEYOR'S MAP FILED IN BOOK 31 PAGE 48 OF RECORD OF SURVEYS OF SAID COUNTY; THENCE ALONG SAID EASTERLY LINE AND ITS NORTHERLY PROLONGATION, NORTH 3°57'27" EAST, 685.91 FEET TO A 2 INCH IRON PIPE WHICH BEARS NORTH 88°24'11" WEST, FROM THE TRUE POINT OF BEGINNING; THENCE SOUTH 88°24'11" EAST, 645.03 FEET TO THE TRUE POINT OF BEGINNING. SAID LAND IS SHOWN AS PARCEL "B" ON MAP FILED IN BOOK 50 PAGE 38 OF RECORD OF SURVEYS OF SAID COUNTY.

EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JUNE 2, 1958 AS INSTRUMENT NO. 2918, OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.

PARCEL 3:

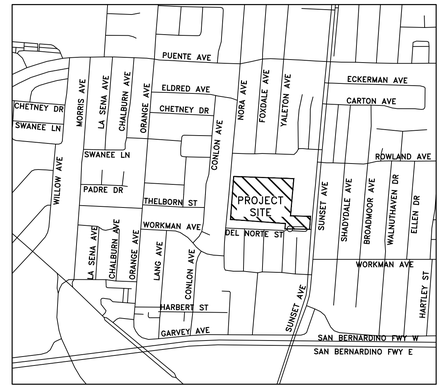
THAT PORTION OF RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
COMMENCING AT A 2 INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID 2 INCH IRON PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG LAST MENTIONED WESTERLY LINE 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'11" WEST, 626.11 FEET TO A 2 INCH IRON PIPE MARKING THE NORTHEASTERLY CORNER OF THE PARCEL OF LAND FIRST DESCRIBED IN THE DEED TO HENRY SHINICHI OSHIRO, RECORDED ON APRIL 23, 1941, IN BOOK 18336 PAGE 324 OF OFFICIAL RECORDS OF SAID COUNTY; THENCE ALONG THE EASTERLY LINE OF THE PARCEL OF LAND DESCRIBED IN THE LAST MENTIONED DEED SOUTH 4°49'31" WEST, 263.51 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING SOUTH 4°49'31" WEST, ALONG SAID EASTERLY LINE, 422.90 FEET TO A 2 INCH IRON PIPE; THENCE SOUTH 88°24'11" EAST, 629.20 FEET TO A 2 INCH IRON PIPE, IN SAID WESTERLY LINE OF IRWINDALE AVENUE, MARKING THE SOUTHEAST CORNER OF PARCEL "A" AS SHOWN ON MAP FILED IN BOOK 50 PAGE 38 OF RECORD OF SURVEYS OF SAID COUNTY; THENCE ALONG SAID WESTERLY LINE OF IRWINDALE AVENUE, NORTH 4°05'42" EAST, 124.00 FEET; THENCE PARALLEL WITH THAT CERTAIN COURSE DESCRIBED ABOVE AS HAVING A BEARING AND LENGTH OF "NORTH 88°24'11" WEST, 626.11 FEET", NORTH 88°24'11" WEST, 192.77 FEET; THENCE NORTH 4°44'57" EAST, 298.81 FEET TO A POINT IN A LINE THAT PASSES THROUGH THE TRUE POINT OF BEGINNING, AND THAT IS PARALLEL WITH SAID CERTAIN COURSE DESCRIBED AS "NORTH 88°24'11" WEST, 626.11 FEET", SAID POINT IN SAID PARALLEL LINE BEING DISTANT SOUTH 88°24'11" EAST, 434.46 FEET FROM THE TRUE POINT OF BEGINNING; THENCE ALONG SAID PARALLEL LINE NORTH 88°24'11" WEST, 434.46 FEET TO THE TRUE POINT OF BEGINNING.

SAID LAND IS A PORTION OF PARCEL "A", AS SHOWN ON MAP FILED IN BOOK 50 PAGE 38 OF RECORDS OF SURVEYS OF SAID COUNTY.

EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JUNE 2, 1958 AS INSTRUMENT NO. 2918, OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JULY 11, 1966 AS INSTRUMENT NO. 2049, OFFICIAL RECORDS.

EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.



VICINITY MAP
(NOT TO SCALE)

DIGALERT
DIAL TOLL FREE 811
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BASIS OF BEARING:

THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCHMARK NO:	DESCRIPTION	DATUM:	ELEV:	YEAR:
BM 4G4954	DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE	NAVD88	401.938	2013

CITY: WEST COVINA

COUNTY: LOS ANGELES

STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
CESAR MORAN
C72247
CIVIL
STATE OF CALIFORNIA

PREPARED BY:

MORAN CONSULTING CORPORATION
• CIVIL ENGINEERING • SURVEYING • LAND PLANNING
4500 E. Pacific Coast Highway, Suite 210
Long Beach, California 90804
Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com

CESAR MORAN P.E. C72247

DATE: 03/31/25 | JOB Nº 224181 | DRAWN BY: CR

REVISIONS

Nº	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			
6			

PLANS PREPARED FOR:

MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606

PHONE (949) 372-3315
FAX
E-Mail

PROJECT TITLE: DEL NORTE

TRACT NO.: 044618

PROJECT ADDRESS: 1501 DEL NORTE STREET WEST COVINA, CA 91790

SCALE: PER PLAN

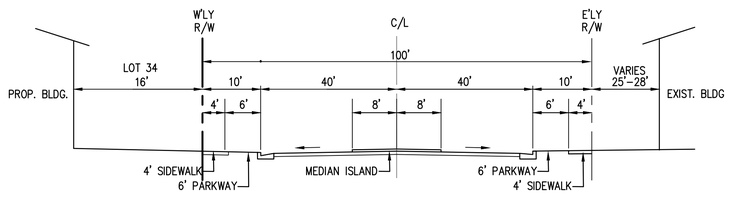
LEGAL DESCRIPTION: SEE SHEET 1

SHEET TITLE: TITLE SHEET

C-2.0

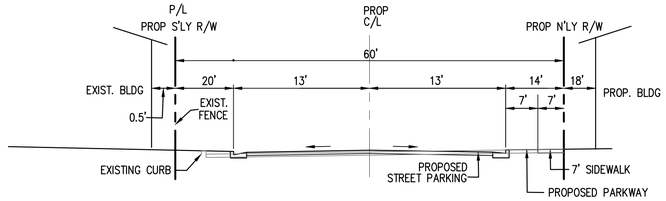
PROJ. 21041

DWG: C:\Users\Planning\OneDrive - Moran Consulting Corp\224181 - 1501 Del Norte West Covina (Bentegal)\Engineering\CAD_Sheets\Tentative Map\C-TENT.dwg BY: Wednesday Apr 01, 2025 - 2:48:44pm



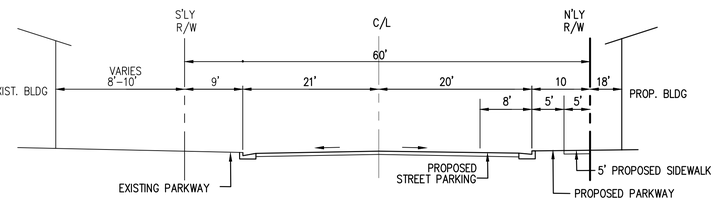
SUNSET AVENUE

NOT TO SCALE — A/3



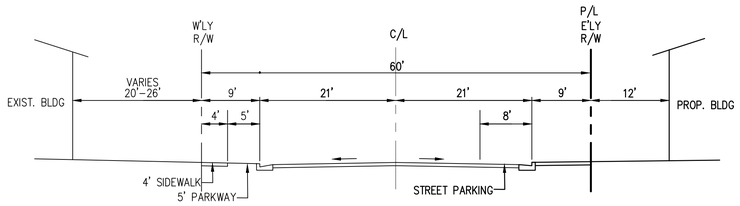
DEL NORTE STREET DEDICATION

NOT TO SCALE — B/3



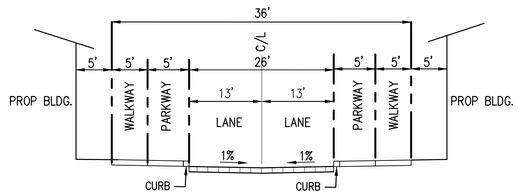
DEL NORTE STREET-EXISTING

NOT TO SCALE — C/3



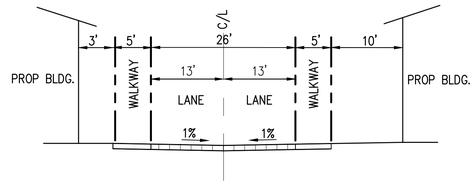
NORA AVENUE

NOT TO SCALE — D/3



PROPOSED ENTRANCE - DWY. "A"

NOT TO SCALE — E/3



PROPOSED DRIVEWAY

NOT TO SCALE — F/3

DIAL TOLL FREE 811 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BASIS OF BEARING:
THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

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CITY: WEST COVINA

COUNTY: LOS ANGELES

STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — CESAR MORAN — C72247 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:
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CESAR MORAN P.E. C72247

DATE: 03/31/25 | JOB No 224181 | DRAWN BY: CR

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PLANS PREPARED FOR:
MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606

PHONE (949) 372-3315
FAX
E-Mail

PROJECT TITLE: DEL NORTE

PROJECT ADDRESS: 1501 DEL NORTE STREET, WEST COVINA, CA 91790

LEGAL DESCRIPTION: SEE SHEET 1

TRACT NO. 044618

SCALE: PER PLAN

SHEET TITLE: SECTIONS

C-2.1

PROJ: 211041 DWG: C:\Users\Mpineda\OneDrive - Moran Consulting Corp\224181 - 1501 Del Norte West Covina (Meritage)\Engineering\CAD_Sheets\Tentative Map\C-TENT.dwg BY: Mpineda Apr 01, 2025 - 2:48:49pm

LEGEND:

- EXISTING LOT LINE
- EXISTING ROW
- BACK OF CURB
- CENTERLINE
- FACE OF CURB (FC)
- PROPOSED FLOW LINE
- PROPERTY LINE
- EXISTING SEWER
- EXISTING WATER
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- PROPOSED FENCE
- PROPOSED WALL

LOT 7 PAD=431.25 2000 SF — LOT NUMBER PAD ELEVATION LOT SQUARE FOOT

BUILDING 21 PAD=431.25 — BUILDING NUMBER PAD ELEVATION

- PRIVATE DRIVEWAY AND FIRE LANE
- EXISTING ON-SITE TREES TO BE REMOVED
- (8) PARKING COUNT

REVISED 03/31/2025
12/04/2024
GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

DIGALERT DIAL TOLL FREE 811 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BASIS OF BEARING:
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DESCRIPTION DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE
DATUM: NAVD88 **ELEV:** 401.938 **YEAR:** 2013

CITY: WEST COVINA
COUNTY: LOS ANGELES
STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER · CESAR MORAN · C72247 · CIVIL · STATE OF CALIFORNIA

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PROJECT TITLE DEL NORTE
TRACT NO. 044618
PROJECT ADDRESS 1501 DEL NORTE STREET WEST COVINA, CA 91790
SCALE: PER PLAN
LEGAL DESCRIPTION SEE SHEET 1
C-2.2

SHEET TITLE: TENTATIVE MAP

DWG: C:\Users\Vtechnet\OneDrive - Moran Consulting Corp\224181 - 1501 Del Norte West Covina (demo.sgp)\Engineering\CAD_Sheets\Tentative Map\C-TENT.dwg BY: Vtechnet Apr 01, 2025 - 2:48:57pm
PROJ: 211041

GRADING PLAN

TENTATIVE TRACT NO. 044618

(FOR CONDOMINIUM PURPOSES)
LOCATED IN THE UNINCORPORATED TERRITORY OF
THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

BEING A SUBDIVISION OF THOSE PORTIONS OF THE SECTION 31, TOWNSHIP 1 SOUTH, RANGE 10 WEST, SAN BERNARDINO BASE AND MERIDIAN, AS RECORDED IN BOOK 37951 PAGE 277 OF MAPS, RECORDS IN THE CITY OF COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA.

NOTES:

SITE ADDRESS: 1501 DEL NORTE WEST COVINA, CA 91790

1. ASSESSORS PARCEL: 8458-020-901
2. FLOOD ZONE: "X" PER FEMA MAP 06037C 1700F DATED 09/26/2008 (PER FEMA WEB SITE)
3. PAD ELEVATIONS SHOWN HEREON MAY CHANGED TO THE SATISFACTION TO THE CITY OF WEST COVINA
4. ALL LOTS WILL DRAIN TO STREET.
5. ANY SLOPES SHOWN WILL BE A MAXIMUM OF 2:1, UNLESS OTHERWISE SHOWN AND APPROVED, INCLUDING PRIVATE SIDEYARD SLOPES.
6. ESTIMATED EARTHWORK QUANTITIES:

CUT: 1,871 CYDS

FILL: 6,172 CYDS

IMPORT FILL: 4,301 CYDS

OVEREXCAVATION (7' FEET DEEP): 153,816 CYDS
APPROXIMATE SHRINKAGE OF OVEREXCAVATION (12%): 18,458 CYDS
NET IMPORT: 4,301 CYDS (IMPORT FILL) + 18,458 CYDS (12%)= 22,759 CYDS

7. THE PRELIMINARY GEOTECHNICAL/SOILS REPORT WAS PREPARED BY SA GEO DATED: 06/14/2024.
8. THERE ARE SEVERAL EXISTING STRUCTURES AND RELATED IMPROVEMENTS WITHIN THE BOUNDARIES OF THIS TENTATIVE TRACT MAP, ALL ARE TO BE REMOVED.
9. ANY IMPROVEMENTS REQUIRED BY THE CITY OF WEST COVINA SHALL BE INSTALLED TO THE SATISFACTION OF THE CITY ENGINEER.
10. THE AERIAL TOPOGRAPHY WAS FLOWN AND COMPILED BY CESAR MORAN & ASSOCIATES, DATED MAY 16 , 2024 AND COMPLIES WITH NATIONAL MAPPING ACCURACY STANDARDS.
11. THE PROPOSED INFILTRATION BASIN WILL BE MAINTAINED BY THE HOA.
12. FOR UTILITY DESIGN AND INFORMATION SEE UTILITY PLAN.

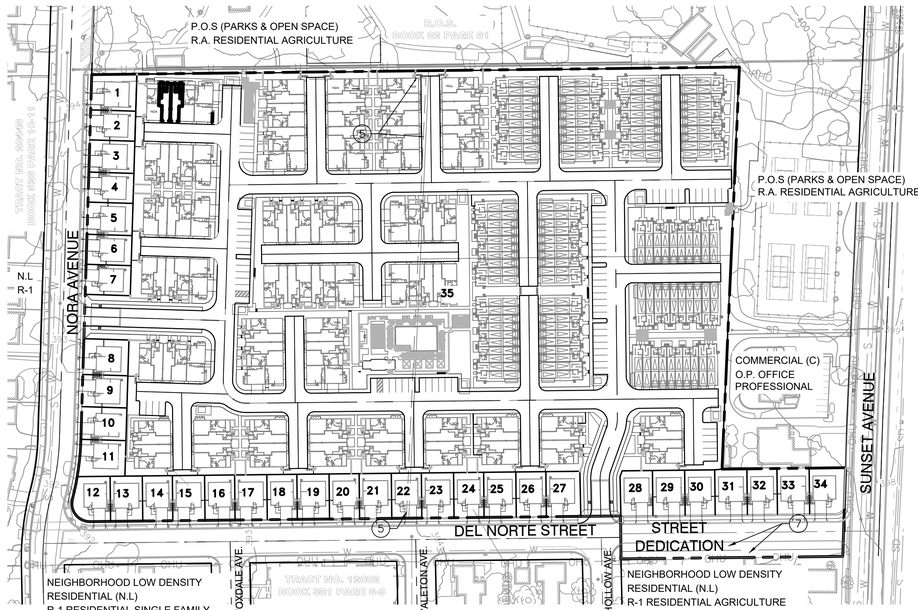
LOT SUMMARY:

DETACHED SINGLE FAMILY RESIDENCES (LOTS 1-34)
TOWNHOMES/ FLATS (LOT 35)

SITE DATA TABLE:

NUMBER OF RESIDENTIAL UNITS:	282 TOTAL HOMES
GROSS AREA:	±13.62 ACRES / ±593,294 SQUARE FEET
EASEMENT AREA:	±0.22 ACRES / ±9,957 SQUARE FEET
NET AREA:	±13.40 ACRES / ±583,337 SQUARE FEET
DENSITY:	20.70 UNITS PER ACRE
PARKING:	72 GUEST PARKING
	4 ADA GUEST PARKING
	76 TOTAL PARKING SPACES

VICINITY MAP
(NOT TO SCALE)



SITE PLAN
NOT TO SCALE

REVISED 03/31/2025
12/04/2024

LEGAL DESCRIPTION:

REAL PROPERTY IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
PARCEL 1:

THAT PORTION OF THE RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
COMMENCING AT A TWO INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE, 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID TWO INCH IRON PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG SAID LAST MENTIONED WESTERLY LINE, 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'22" WEST, 626.11 FEET TO A TWO INCH PIPE, MARKING THE NORTHEASTERLY CORNER OF THE PARCEL OF LAND FIRST DESCRIBED IN THE DEED TO HENRY SHINICHI OSHIRO, RECORDED APRIL 23, 1941 IN BOOK 18336 PAGE 324 OF OFFICIAL RECORDS OF SAID COUNTY, BEING THE TRUE POINT OF BEGINNING; THENCE ALONG THE EASTERLY LINE OF THE LAND DESCRIBED IN THE LAST MENTIONED DEED, SOUTH 4°49'31" WEST, 263.51 FEET; THENCE SOUTH 88°24'11" EAST, PARALLEL WITH THE LINE HEREIN DESCRIBED AS HAVING A BEARING "NORTH 88°24'11" WEST," A DISTANCE OF 434.46 FEET; THENCE NORTH 4°44'57" EAST, 263.49 FEET TO A POINT DISTANT SOUTH 88°24'11" EAST, 434.11 FEET FROM THE TRUE POINT OF BEGINNING; THENCE NORTH 88°24'11" WEST, 434.11 FEET TO THE TRUE POINT OF BEGINNING

EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.

PARCEL 2:

THAT PORTION OF RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
COMMENCING AT A 2 INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE, 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID 2 INCH PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG SAID LAST MENTIONED WESTERLY LINE 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'11" WEST, 626.11 FEET TO A 2 INCH IRON PIPE, MARKING THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 4°49'31" WEST, 686.41 FEET, TO A 2 INCH IRON PIPE; THENCE NORTH 88°24'11" WEST, 634.66 FEET TO A 2 INCH IRON PIPE IN THE EASTERLY LINE OF THE PARCEL OF LAND MARKED "JOHN LANG" ON A LICENSED SURVEYOR'S MAP FILED IN BOOK 31 PAGE 48 OF RECORD OF SURVEYS OF SAID COUNTY; THENCE ALONG SAID EASTERLY LINE AND ITS NORTHERLY PROLONGATION, NORTH 3°57'27" EAST, 685.91 FEET TO A 2 INCH IRON PIPE WHICH BEARS NORTH 88°24'11" WEST, FROM THE TRUE POINT OF BEGINNING; THENCE SOUTH 88°24'11" EAST, 645.03 FEET TO THE TRUE POINT OF BEGINNING. SAID LAND IS SHOWN AS PARCEL "B" ON MAP FILED IN BOOK 50 PAGE 38 OF RECORD OF SURVEYS OF SAID COUNTY.

EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JUNE 2, 1958 AS INSTRUMENT NO. 2918, OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.

PARCEL 3:

THAT PORTION OF RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:
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SAID LAND IS A PORTION OF PARCEL "A", AS SHOWN ON MAP FILED IN BOOK 50 PAGE 38 OF RECORDS OF SURVEYS OF SAID COUNTY.

EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JUNE 2, 1958 AS INSTRUMENT NO. 2918, OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JULY 11, 1966 AS INSTRUMENT NO. 2049, OFFICIAL RECORDS.

EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.

EASEMENTS:

③ AN EASEMENT FOR WAGON ROAD AND A WATER DITCH AND INCIDENTAL PURPOSES, RECORDED MARCH 4, 1875 IN BOOK 36 OF DEEDS, PAGE 169. IN FAVOR OF: D. C. MENSING
AFFECTS: AS DESCRIBED THEREIN
THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION. (NON-PLOTTABLE)

④ AN EASEMENT FOR WATER PIPE LINE, WITH THE RIGHT OF INGRESS AND EGRESS AND INCIDENTAL PURPOSES, RECORDED APRIL 22, 1896 IN BOOK 1043 OF DEEDS, PAGE 309.
IN FAVOR OF: AZUSA IRRIGATING COMPANY, A CORPORATION
AFFECTS: AS DESCRIBED THEREIN
THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION. (NON- PLOTTABLE)

⑤ THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED AGREEMENT RECORDED JANUARY 14, 1946 AS BOOK 22719, PAGE 40 OF OFFICIAL RECORDS. (NON-PLOTTABLE)

⑥ AN EASEMENT FOR POLE LINES AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 26, 1946 AS BOOK 22872, PAGE 213 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, LTD., A CORPORATION
AFFECTS: PARCEL 1 (NON-PLOTTABLE CANNOT BE DETERMINED FROM RECORD INFORMATION)

⑦ AN EASEMENT FOR POLE LINES AND INCIDENTAL PURPOSES, RECORDED JANUARY 24, 1951 AS INSTRUMENT NO. 2281, IN BOOK 35398, PAGE 55 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION
AFFECTS: AS DESCRIBED THEREIN (PLOTTED)

⑧ INTENTIONALLY DELETED

⑨ INTENTIONALLY DELETED

⑩ A NOTICE THAT SAID LAND IS INCLUDED WITHIN A PROJECT AREA OF THE REDEVELOPMENT AGENCY SHOWN BELOW, AND THAT PROCEEDINGS FOR THE REDEVELOPMENT OF SAID PROJECT HAVE BEEN INSTITUTED UNDER THE REDEVELOPMENT LAW (SUCH REDEVELOPMENT TO PROCEED ONLY AFTER THE ADOPTION OF THE REDEVELOPMENT PLAN) AS DISCLOSED BY A DOCUMENT
RECORDING DATE: JULY 11, 1990
RECORDING NO: 90-1219638, OFFICIAL RECORDS
REDEVELOPMENT PROJECT: AMENDED EASTLAND REDEVELOPMENT PROJECT

RECORDING DATE: DECEMBER 22, 1993
RECORDING NO: 93-2492845, OFFICIAL RECORDS

DIGALERT
DIAL TOLL FREE 811
AT LEAST TWO DAYS BEFORE YOU DIG
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SCALE: PER PLAN

LEGAL DESCRIPTION: SEE SHEET 1

SHEET TITLE: TITLE SHEET

SHEET NO.: C-3.0

DWG: C:\Users\Planning\OneDrive - Moran Consulting Corp\224181 - 1501 Del Norte West Covina (Remington)\Engineering\CAD_Sheets\Grading\C-GRAD.dwg BY: Planning Apr 01, 2025 - 2:42:18pm
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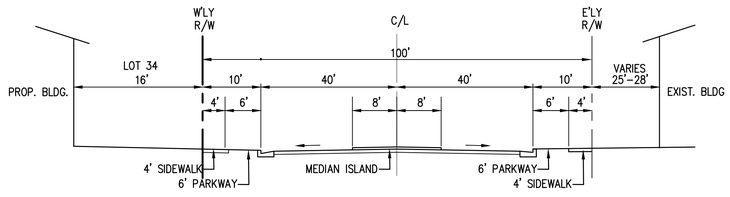
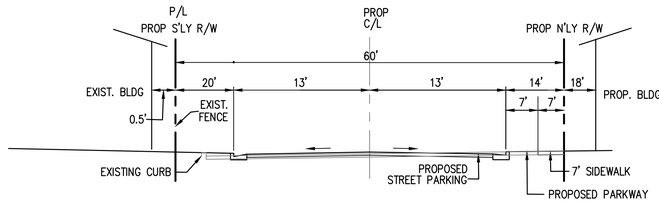


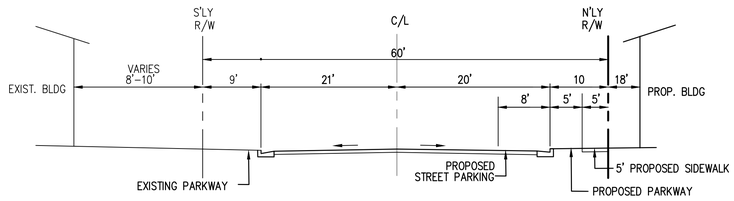
SUNSET AVENUE

NOT TO SCALE — A/3



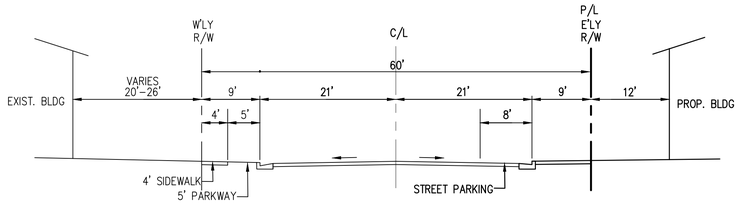
DEL NORTE STREET DEDICATION

NOT TO SCALE — B/3



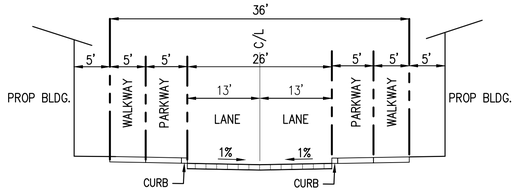
DEL NORTE STREET-EXISTING

NOT TO SCALE — C/3



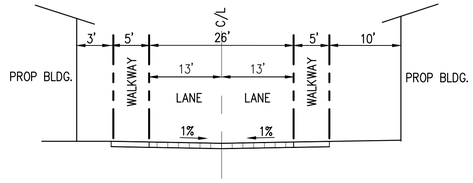
NORA AVENUE

NOT TO SCALE — D/3



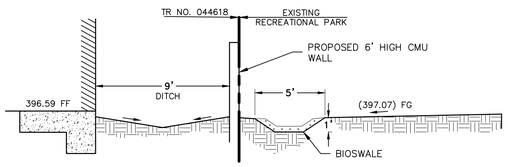
PROPOSED ENTRANCE - DWY. "A"

NOT TO SCALE — E/3



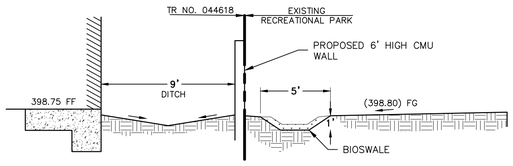
PROPOSED DRIVEWAY

NOT TO SCALE — F/3



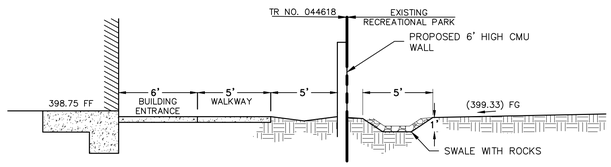
CROSS SECTION @ BUILDING 16 - G

SCALE: 1" = 5'



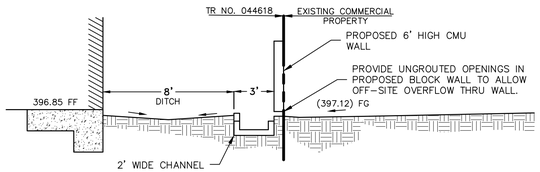
CROSS SECTION @ BUILDING 31 - H

SCALE: 1" = 5'



CROSS SECTION @ BUILDING 28 - I

SCALE: 1" = 5'



CROSS SECTION @ BUILDING 27 - J

SCALE: 1" = 5'

DIGALERT — DIAL TOLL FREE 811 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BASIS OF BEARING:

THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCHMARK NO:	DESCRIPTION	DATUM:	ELEV:	YEAR:
BM 4G4954	DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE	NAVD88	401.938	2013

CITY: WEST COVINA

COUNTY: LOS ANGELES

STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — CESAR MORAN — C72247 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:

MORAN CONSULTING CORPORATION
• CIVIL ENGINEERING • SURVEYING • LAND PLANNING
4500 E. Pacific Coast Highway, Suite 210
Long Beach, California 90804
Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com

CESAR MORAN P.E. C72247

DATE: 03/31/25 | JOB N° 224181 | DRAWN BY: CR

1			
2			
3			
4			
5			
6			
7			

PLANS PREPARED FOR:

MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606

PHONE (949) 372-3315
E-Mail

PROJECT TITLE: DEL NORTE

TRACT NO.: 044618

PROJECT ADDRESS: 1501 DEL NORTE STREET, WEST COVINA, CA 91790

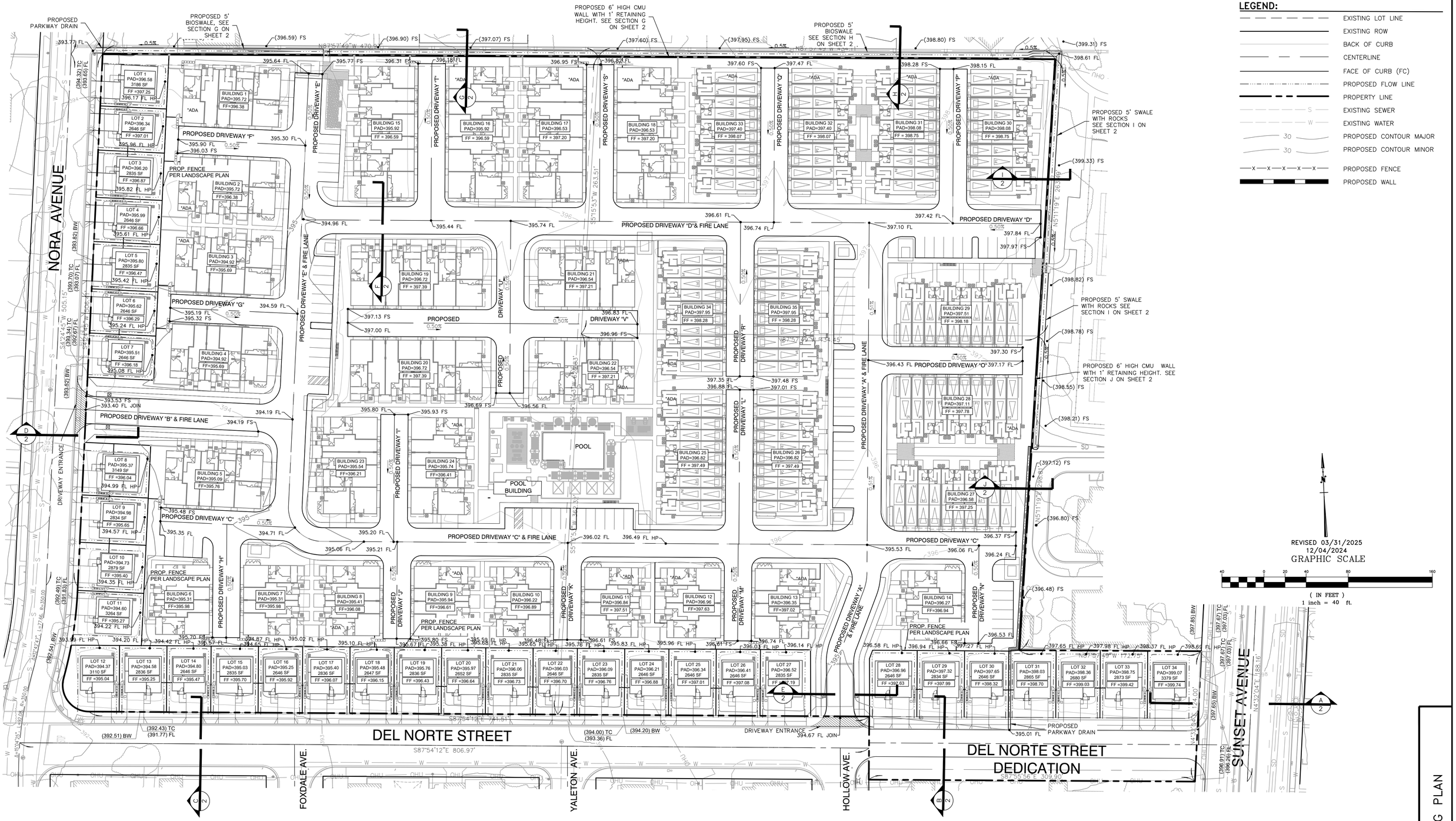
SCALE: PER PLAN

LEGAL DESCRIPTION: SEE SHEET 1

SHEET TITLE: SECTIONS & DETAILS

C-3.1

PROJ#: 211041 DWG: C:\Users\Planning\OneDrive - Moran Consulting Corp\224181 - 1501 Del Norte West Covina (Meritage)\Engineering\CAD_Sheets\Grading\C-GRAD.dwg BY: Romeo Apr 01, 2025 - 2:42:30pm



LEGEND:

- EXISTING LOT LINE
- EXISTING ROW
- BACK OF CURB
- CENTERLINE
- FACE OF CURB (FC)
- PROPOSED FLOW LINE
- PROPERTY LINE
- EXISTING SEWER
- EXISTING WATER
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- PROPOSED FENCE
- PROPOSED WALL

BASIS OF BEARING:

THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCHMARK NO: BM 4G4954

DESCRIPTION: DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE

DATUM: NAVD88 **ELEV:** 401.938 **YEAR:** 2013

CITY: WEST COVINA

COUNTY: LOS ANGELES

STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — CESAR MORAN — C72247 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:

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Long Beach, California 90804
Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com
CESAR MORAN P.E. C72247

DATE: 03/31/25 | JOB № 224181 | DRAWN BY: CR

PLANS PREPARED FOR:

MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606

PHONE (949) 372-3315
E-Mail

PROJECT TITLE: DEL NORTE

TRACT NO.: 044618

PROJECT ADDRESS: 1501 DEL NORTE STREET WEST COVINA, CA 91790

SCALE: PER PLAN

LEGAL DESCRIPTION: SEE SHEET 1

SHEET TITLE: GRADING PLAN

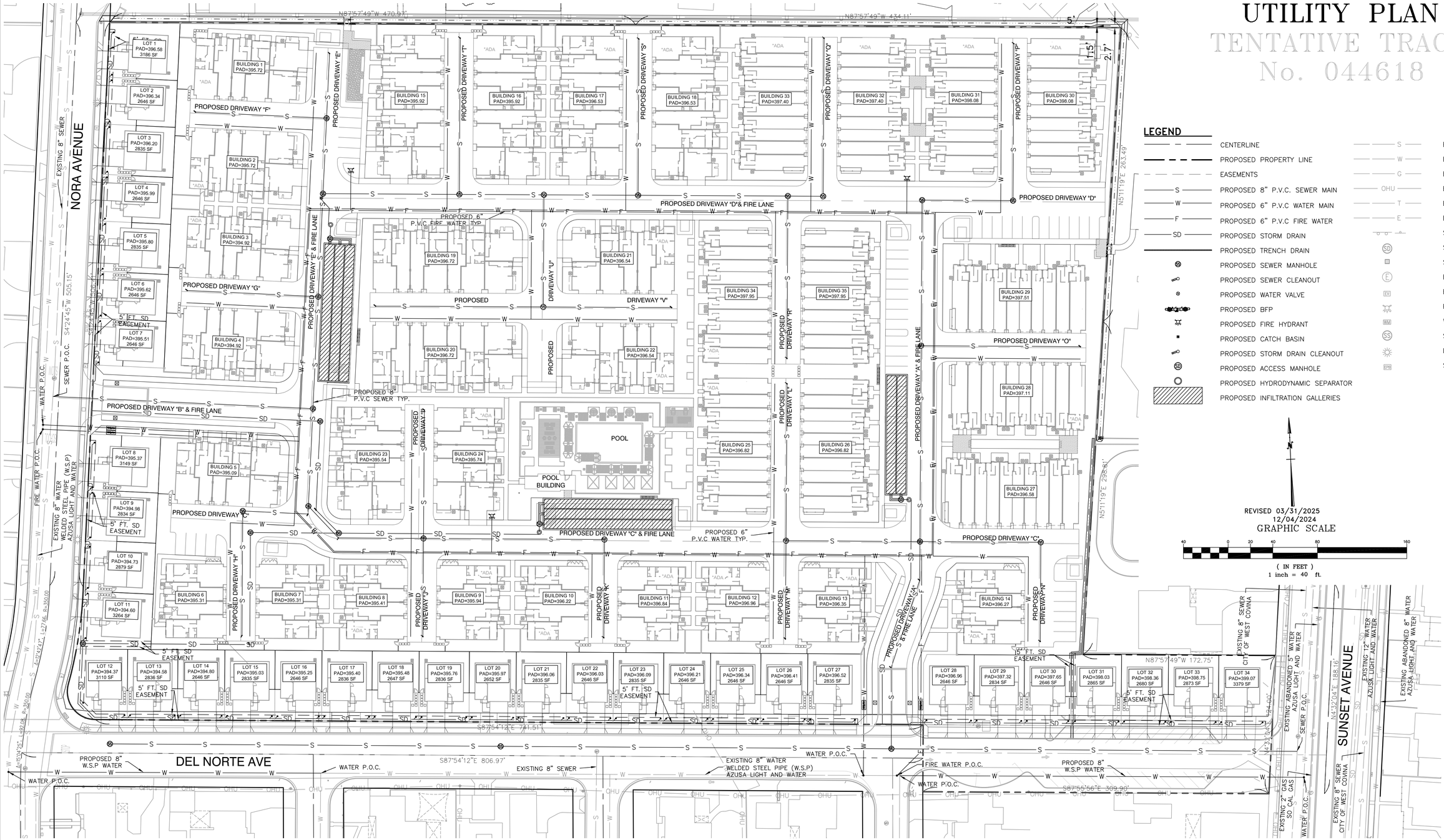
C-3.2

DIGALERT — DIAL TOLL FREE 811 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

PROJ: 211041 DWG: C:\Users\Mp\mods\QmSave — Moran Consulting Corp\224181 – 1501 Del Norte West Covina (Jennings)\Engineering\CAD_Sheets\Grading\C-GR40.dwg BY: Mpmods Apr 01, 2025 - 2:42:38pm

UTILITY PLAN

TENTATIVE TRACT No. 044618



LEGEND

CENTERLINE	EXISTING SEWER
PROPOSED PROPERTY LINE	EXISTING WATER
EASEMENTS	EXISTING GAS
PROPOSED 8" P.V.C. SEWER MAIN	EXIST. OVERHEAD ELECT.
PROPOSED 6" P.V.C WATER MAIN	EXISTING TELEPHONE
PROPOSED 6" P.V.C FIRE WATER	EXISTING ELECTRICAL
PROPOSED STORM DRAIN	SIGN
PROPOSED TRENCH DRAIN	STORM DRAIN MANHOLE
PROPOSED SEWER MANHOLE	STORM DRAIN INLET
PROPOSED SEWER CLEANOUT	ELECTRICAL MANHOLE
PROPOSED WATER VALVE	ELECTRICAL VAULT
PROPOSED BFP	FIRE HYDRANT
PROPOSED FIRE HYDRANT	WATER METER
PROPOSED CATCH BASIN	SEWER MANHOLE
PROPOSED STORM DRAIN CLEANOUT	LIGHT POLE
PROPOSED ACCESS MANHOLE	STREET LIGHT PULL BOX
PROPOSED HYDRODYNAMIC SEPARATOR	
PROPOSED INFILTRATION GALLERIES	

REVISED 03/31/2025
12/04/2024

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

DIAL TOLL FREE 811 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BASIS OF BEARING:
THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCHMARK NO: BM 4G4954
DESCRIPTION DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE
DATUM: NAVD88
ELEV: 401.938
YEAR: 2013

CITY: WEST COVINA
COUNTY: LOS ANGELES
STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER · CESAR MORAN · C72247 · CIVIL · STATE OF CALIFORNIA

PREPARED BY:
MORAN CONSULTING CORPORATION
• CIVIL ENGINEERING • SURVEYING • LAND PLANNING
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Long Beach, California 90804
Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com

CESAR MORAN P.E. C72247
DATE: 03/31/25 | JOB N° 224181 | DRAWN BY: CR

REVISIONS

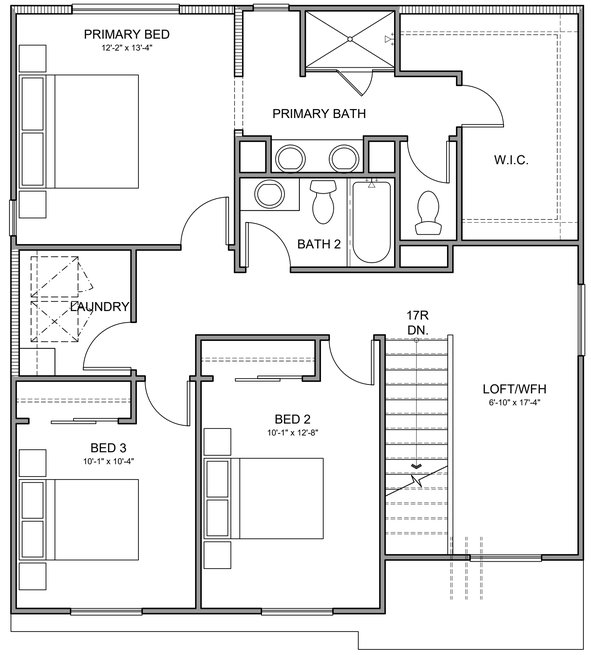
N°	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			
6			

PLANS PREPARED FOR:
MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606
PHONE (949) 372-3315
E-Mail

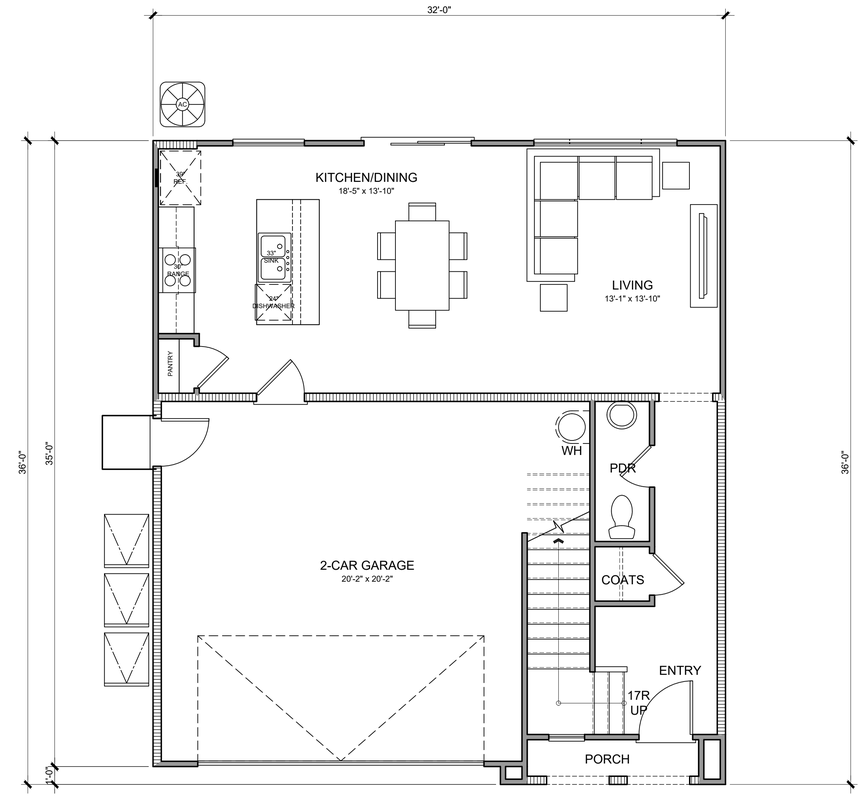
PROJECT TITLE DEL NORTE
TRACT NO. 044618
PROJECT ADDRESS 1501 DEL NORTE STREET WEST COVINA, CA 91790
SCALE: PER PLAN
LEGAL DESCRIPTION SEE SHEET 1
SHEET TITLE UTILITY PLAN
C-4.0

DWG: C:\Users\Mp\Desktop\OneDrive - Moran Consulting Corp\224181 - 1501 Del Norte West Covina (demo)\01Engineering\CAD_Sheets\Utilities Utility Exhibit.dwg BY: Mpineda Apr 01, 2025 - 2:30:29pm
PROJ: 211041

GROSS SF	
1ST FLOOR	667 SQ. FT.
2ND FLOOR	1011 SQ. FT.
-	0
TOTAL LIVING	1678 SQ. FT.
GARAGE	449 SQ. FT.
DECK	-
PORCH	20 SQ. FT.



SECOND FLOOR



FIRST FLOOR

ktgy
17911 Von Karman Ave.
Suite 200
Irvine, CA 92614
ktgy.com
949.851.2133

MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606

DEL NORTE
WEST COVINA, CA # 20240567

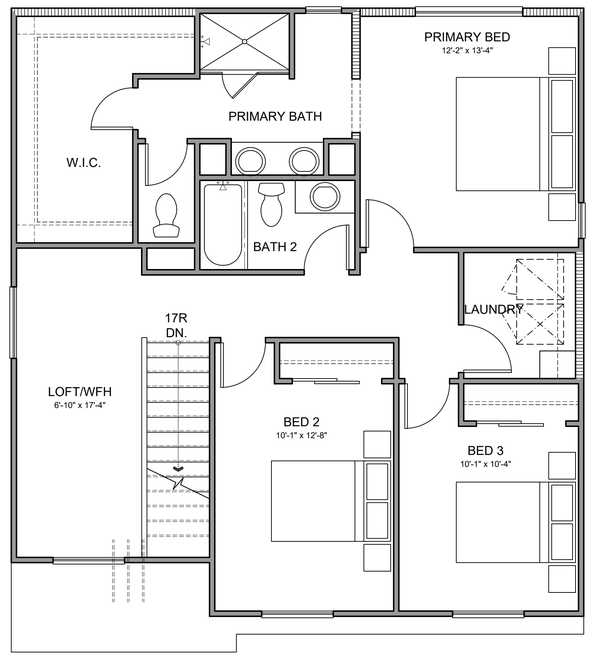
SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

PLAN 3222 FLOOR PLANS

A2.10

GROSS SF	
1ST FLOOR	667 SQ. FT.
2ND FLOOR	1011 SQ. FT.
-	0
TOTAL LIVING	1678 SQ. FT.
GARAGE	449 SQ. FT.
DECK	-
PORCH	20 SQ. FT.



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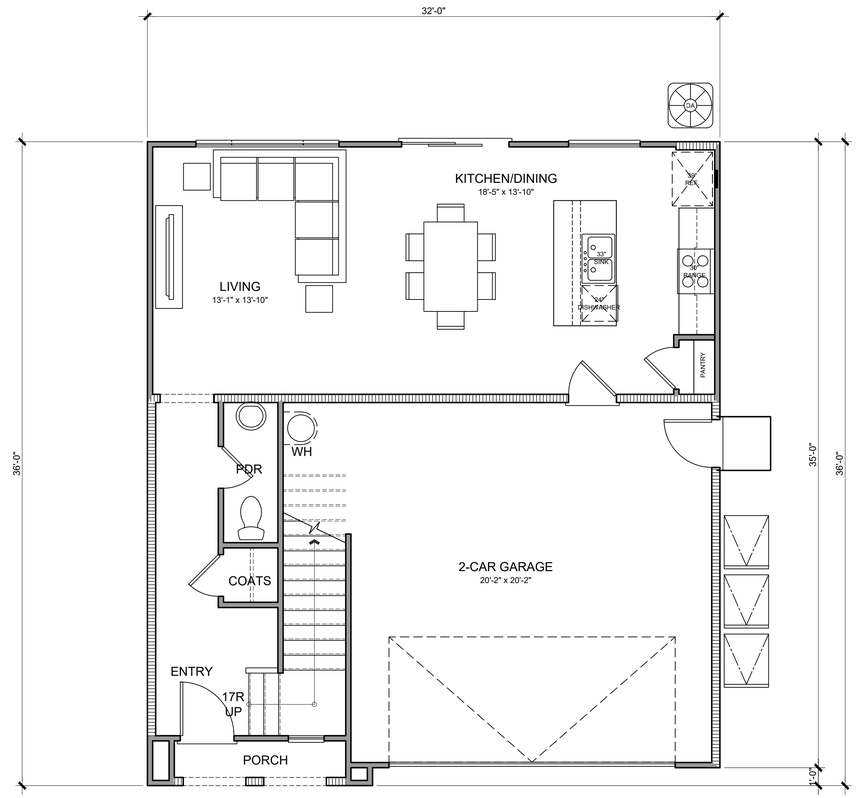

FIRST FLOOR

ktgy
17911 Von Karman Ave.
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949.851.2133

MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606
MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

PLAN 3222 MIRRORED FLOOR PLANS

A2.11

LEGEND

1 Stucco
2 Horizontal Siding
3 Composite Shingle Roof
4 Vinyl Windows
5 Fiberglass Entry Door
6 Metal Sectional Garage Door
7 Decorative Exterior Lights & Address Sign
8 Railing
9 Outrigger
10 Kicker
11 Trellis
12 Window/Opening Trim
13 Window/Opening Header
14 Faux Corbel
15 Sliding Door

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

ktgy
17911 Von Karman Ave.
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949.851.2133

MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606

MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 4 8 12

PLAN 3222 EXTERIOR ELEVATIONS
SEASIDE

A2.12

LEGEND

1. Stucco
2. Low Profile Concrete "S" Roof Tile
3. Round Faux Clay Gable End Vent
4. Fascia
5. Stucco Sill Trim
6. Vinyl Window
7. Stucco o/ Foam Corbel
8. Trellis
9. Stucco Arched Soffit
10. Metal Railing
11. Fiberglass Entry Door
12. Decorative Exterior Lights & Address Sign
13. Metal Sectional Garage Door
14. Shutter
15. Sliding Door
16. Faux Finial

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

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17911 Von Karman Ave.
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949.851.2133

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Irvine, Ca 92606

MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 4 8 12

PLAN 3222 EXTERIOR ELEVATIONS
SPANISH

A2.13

LEGEND

1 Stucco
2 Low Profile Concrete "S" Roof Tile
3 Round Faux Clay Gable End Vent
4 Fascia
5 Stucco Sill Trim
6 Vinyl Window
7 Stucco o/ Foam Corbel
8 Trellis
9 Stucco Arched Soffit
10 Metal Railing
11 Fiberglass Entry Door
12 Decorative Exterior Lights & Address Sign
13 Metal Sectional Garage Door
14 Shutter
15 Sliding Door
16 Faux Finial

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

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MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 4 8 12

PLAN 3222 MIRRORED EXTERIOR ELEVATIONS
SPANISH

A2.14

LEGEND

1	Stucco	8	Railing
2	Horizontal Siding	9	Outrigger
3	Composite Shingle Roof	10	Kicker
4	Vinyl Windows	11	Trellis
5	Fiberglass Entry Door	12	Window/Opening Trim
6	Metal Sectional Garage Door	13	Window/Opening Header
7	Decorative Exterior Lights & Address Sign	14	Faux Corbel
		15	Sliding Door

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

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Irvine, Ca 92606

MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

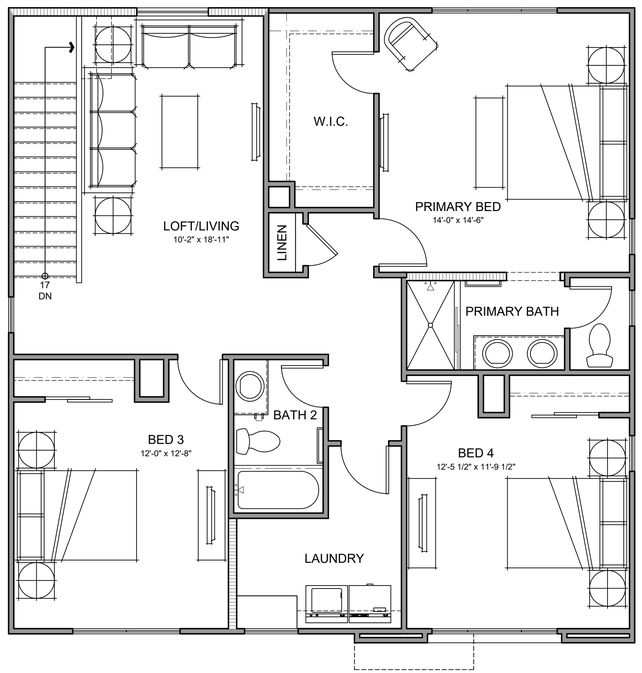
SCHEMATIC DESIGN
April 3, 2025

0 4 8 12

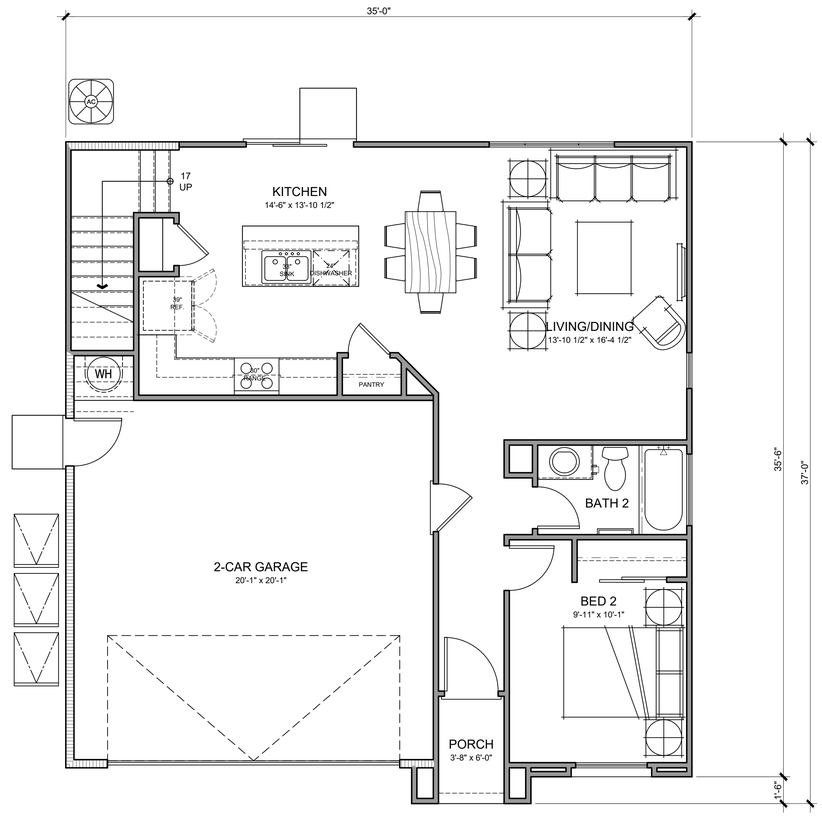
PLAN 3222 MIRRORED EXTERIOR ELEVATIONS
SEASIDE

A2.15

GROSS SF	
1ST FLOOR	790 SQ. FT.
2ND FLOOR	1168 SQ. FT.
-	0
TOTAL LIVING	1957 SQ. FT.
GARAGE	433 SQ. FT.
DECK	-
PORCH	22 SQ. FT.



SECOND FLOOR



FIRST FLOOR

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949.851.2133

MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606
MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

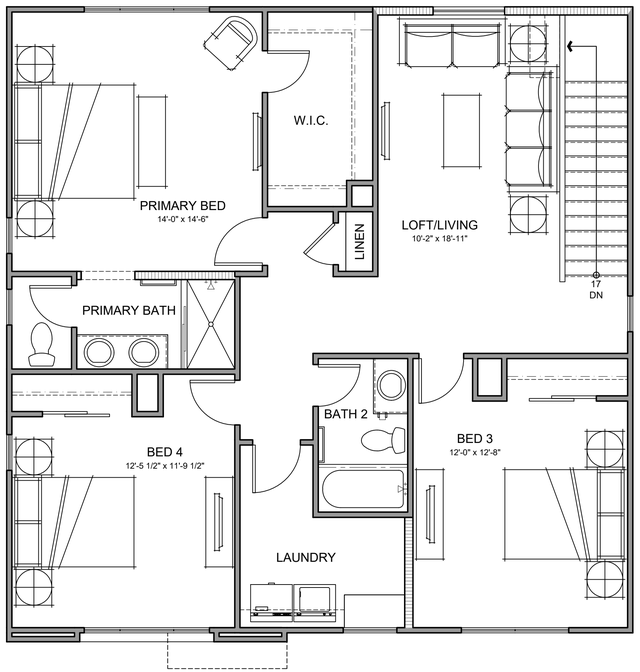
SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

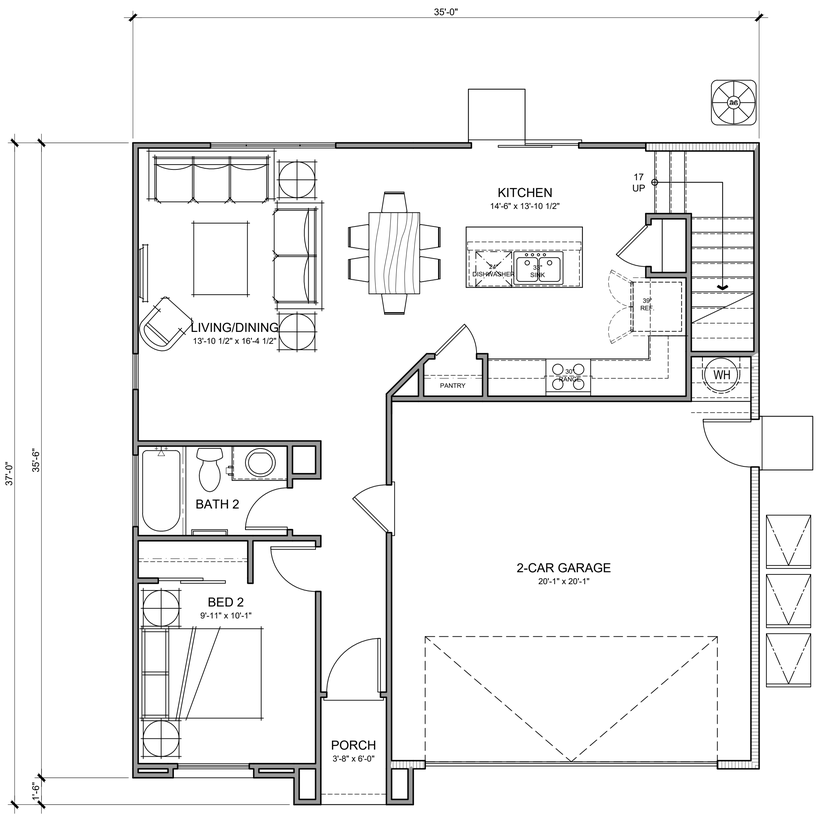
PLAN 3522 FLOOR PLANS

A2.20

GROSS SF	
1ST FLOOR	790 SQ. FT.
2ND FLOOR	1168 SQ. FT.
-	0
TOTAL LIVING	1957 SQ. FT.
GARAGE	433 SQ. FT.
DECK	-
PORCH	22 SQ. FT.



SECOND FLOOR



FIRST FLOOR

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949.851.2133

MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606

MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

PLAN 3522 MIRRORED FLOOR PLANS

A2.21

LEGEND

1 Stucco
2 Horizontal Siding
3 Composite Shingle Roof
4 Vinyl Windows
5 Fiberglass Entry Door
6 Metal Sectional Garage Door
7 Decorative Exterior Lights & Address Sign
8 Railing
9 Outrigger
10 Kicker
11 Trellis
12 Window/Opening Trim
13 Window/Opening Header
14 Faux Corbel
15 Sliding Door

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

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17911 Von Karman Ave.
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949.851.2133

MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606

MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 4 8 12

PLAN 3522 EXTERIOR ELEVATIONS
SEASIDE

A2.22

LEGEND

1 Stucco	9 Stucco Arched Soffit
2 Low Profile Concrete "S" Roof Tile	10 Metal Railing
3 Round Faux Clay Gable End Vent	11 Fiberglass Entry Door
4 Fascia	12 Decorative Exterior Lights & Address Sign
5 Stucco Sill Trim	13 Metal Sectional Garage Door
6 Vinyl Window	14 Shutter
7 Stucco o/ Foam Corbel	15 Sliding Door
8 Trellis	16 Faux Finial

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

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MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606

MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 4 8 12

PLAN 3522 EXTERIOR ELEVATIONS
SPANISH

A2.23

LEGEND

1 Stucco
2 Horizontal Siding
3 Composite Shingle Roof
4 Vinyl Windows
5 Fiberglass Entry Door
6 Metal Sectional Garage Door
7 Decorative Exterior Lights & Address Sign
8 Railing
9 Outrigger
10 Kicker
11 Trellis
12 Window/Opening Trim
13 Window/Opening Header
14 Faux Corbel
15 Sliding Door

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

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Irvine, Ca 92606

MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

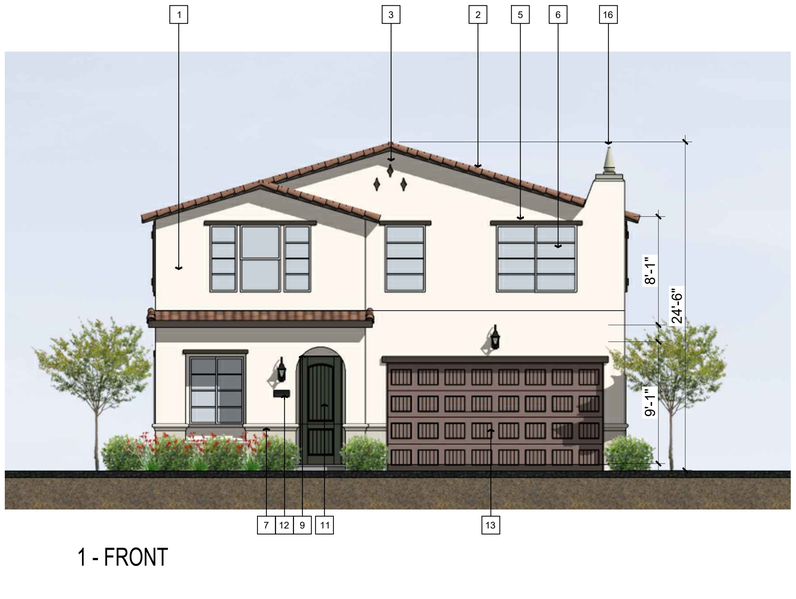
0 4 8 12

PLAN 3522 MIRRORED EXTERIOR ELEVATIONS
SEASIDE

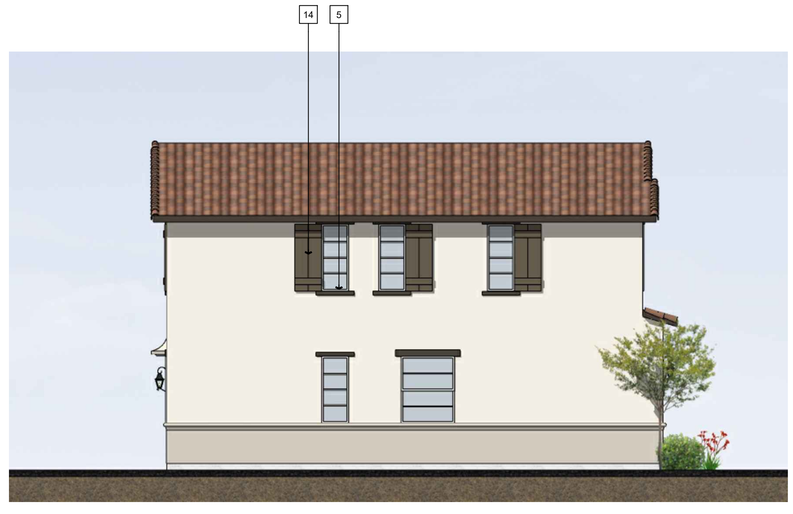
A2.24

LEGEND

1	Stucco	9	Stucco Arched Soffit
2	Low Profile Concrete "S" Roof Tile	10	Metal Railing
3	Round Faux Clay Gable End Vent	11	Fiberglass Entry Door
4	Fascia	12	Decorative Exterior Lights & Address Sign
5	Stucco Sill Trim	13	Metal Sectional Garage Door
6	Vinyl Window	14	Shutter
7	Stucco o/ Foam Corbel	15	Sliding Door
8	Trellis	16	Faux Finial



1 - FRONT



2 - RIGHT

3 - REAR

4 - LEFT

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DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

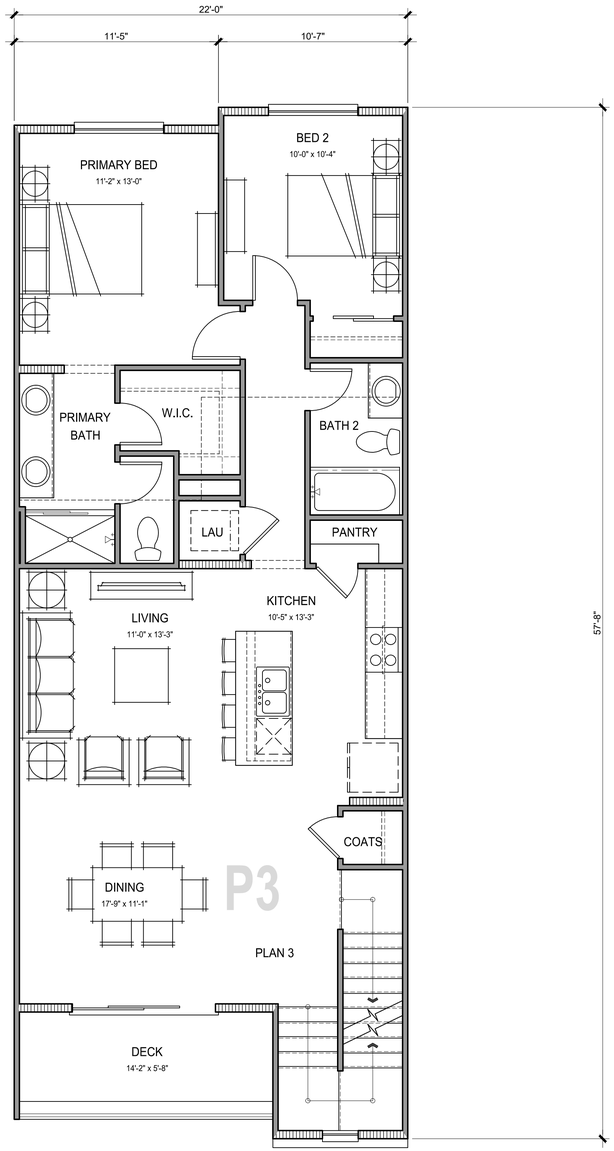
0 4 8 12

PLAN 3522 MIRRORED EXTERIOR ELEVATIONS
SPANISH

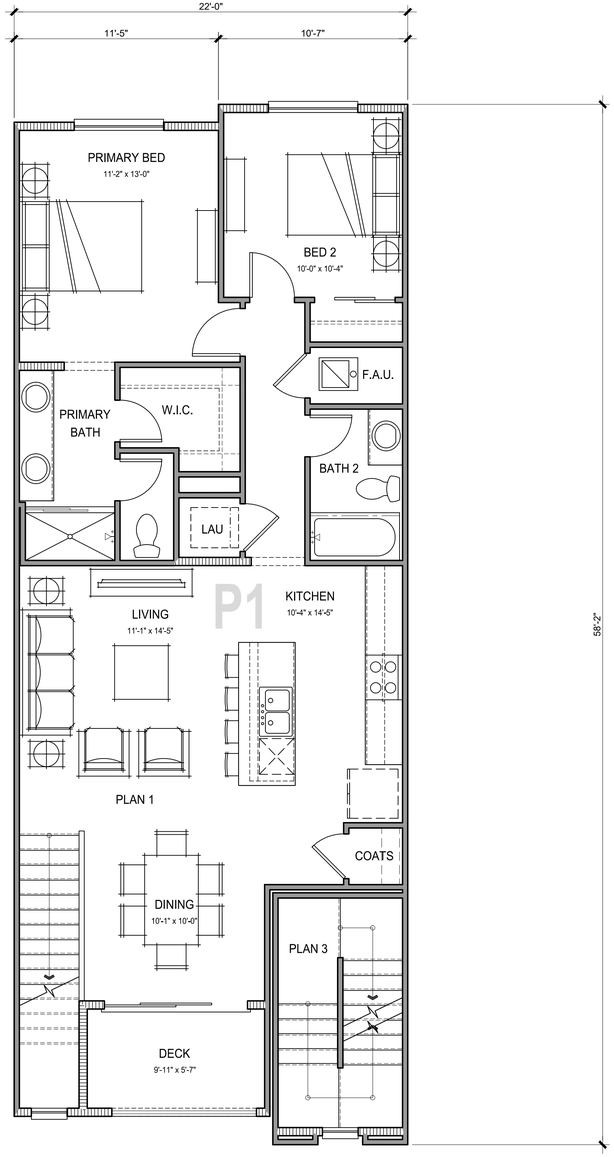
A2.25

PLAN 1 - G.S.F.	
1ST FLOOR	112 SQ. FT.
2ND FLOOR	1013 SQ. FT.
3RD FLOOR	0
4TH FLOOR	0
TOTAL LIVING	1126 SQ. FT.
GARAGE	458 SQ. FT.
DECK	59 SQ. FT.
PORCH	-

PLAN 3 - G.S.F.	
1ST FLOOR	145 SQ. FT.
2ND FLOOR	102 SQ. FT.
3RD FLOOR	1154 SQ. FT.
4TH FLOOR	558 SQ. FT.
TOTAL LIVING	1959 SQ. FT.
GARAGE	509 SQ. FT.
DECK	85 SQ. FT.
DECK 2	79 SQ. FT.



THIRD FLOOR



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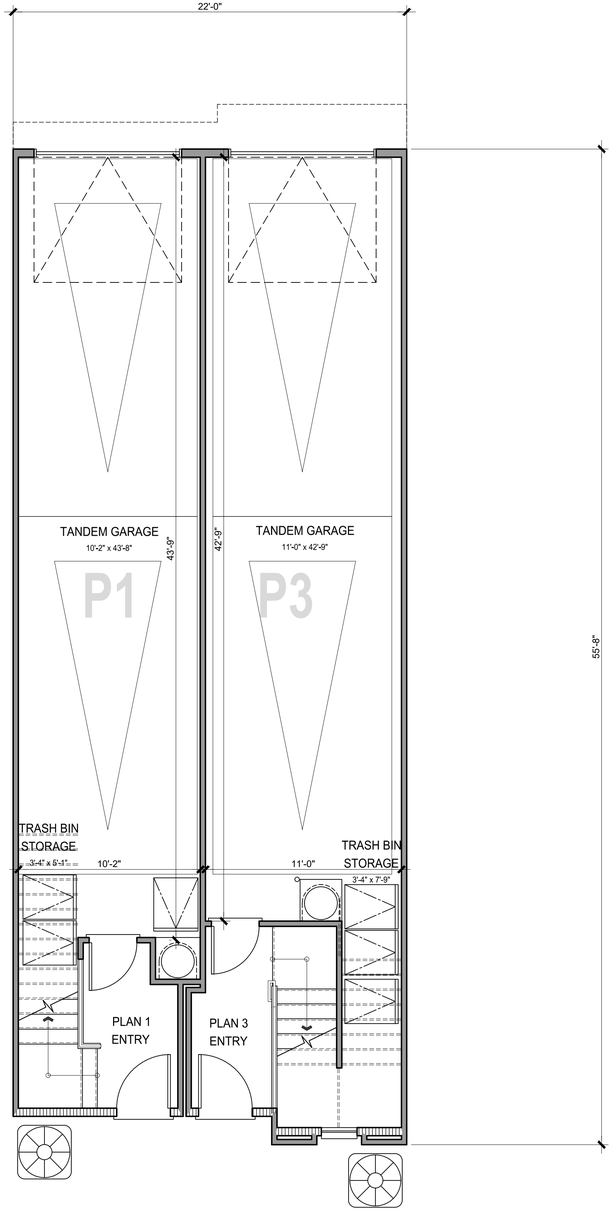

FIRST FLOOR

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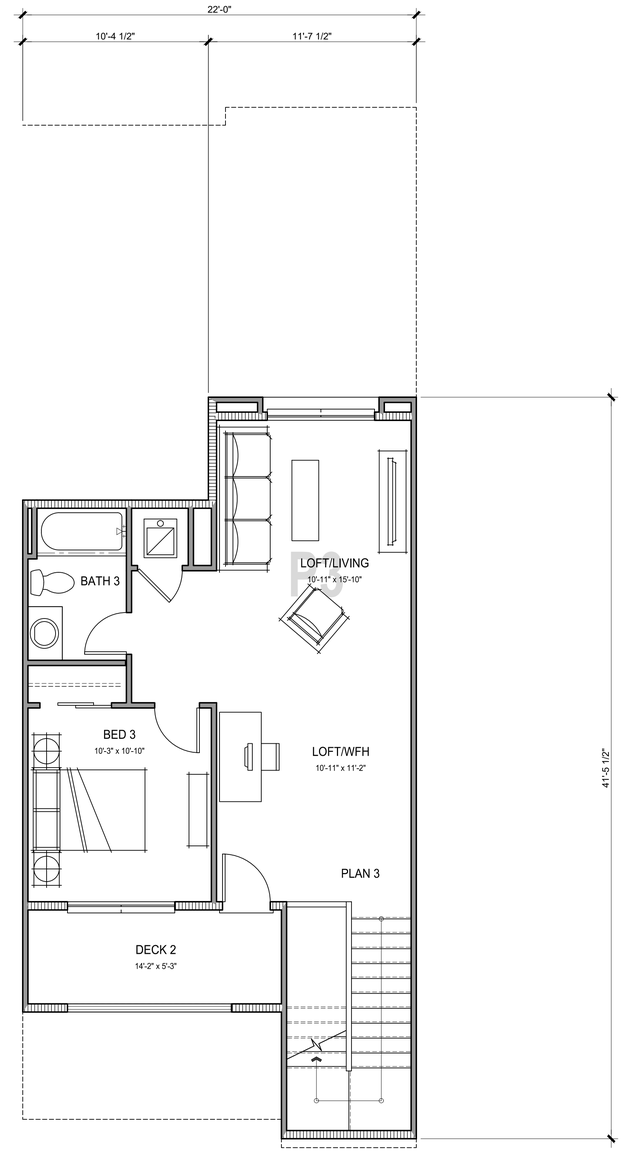
April 3, 2025

0 2 4 8

PLAN 1 & PLAN 3 FLOOR PLANS

A5.10

PLAN 3 - G.S.F.	
1ST FLOOR	145 SQ. FT.
2ND FLOOR	102 SQ. FT.
3RD FLOOR	1154 SQ. FT.
4TH FLOOR	558 SQ. FT.
TOTAL LIVING	1959 SQ. FT.
GARAGE	509 SQ. FT.
DECK	85 SQ. FT.
DECK 2	79 SQ. FT.



FOURTH FLOOR

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SCHEMATIC DESIGN
April 3, 2025

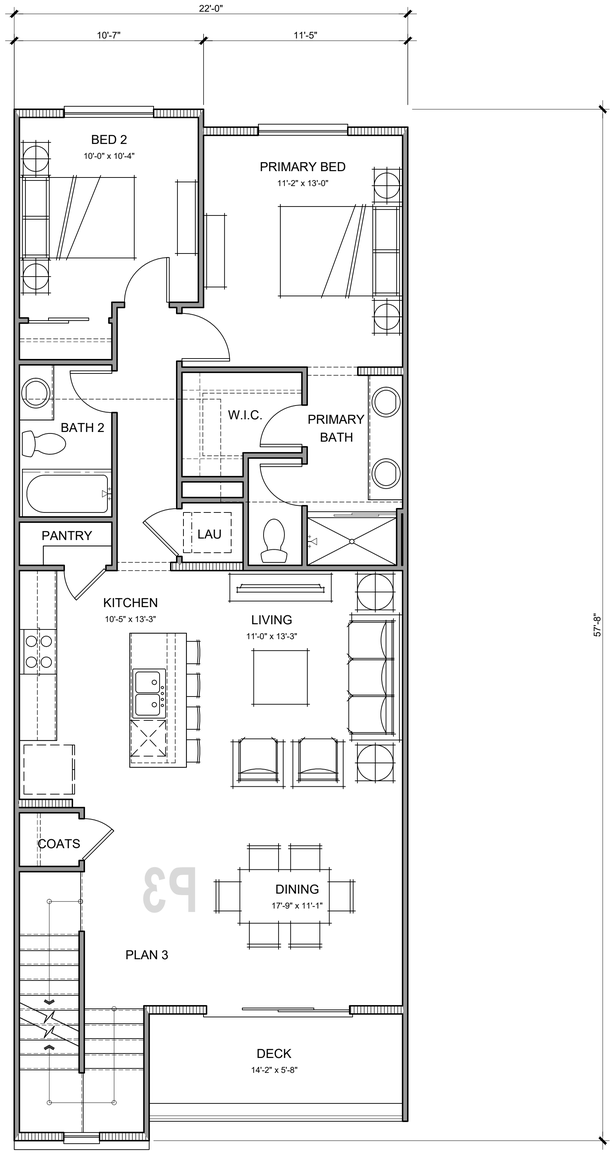
0 2 4 8

PLAN 3 4TH FLOOR

A5.11

PLAN 1 - G.S.F.	
1ST FLOOR	112 SQ. FT.
2ND FLOOR	1013 SQ. FT.
3RD FLOOR	0
4TH FLOOR	0
TOTAL LIVING	1126 SQ. FT.
GARAGE	458 SQ. FT.
DECK	59 SQ. FT.
PORCH	-

PLAN 3 - G.S.F.	
1ST FLOOR	145 SQ. FT.
2ND FLOOR	102 SQ. FT.
3RD FLOOR	1154 SQ. FT.
4TH FLOOR	558 SQ. FT.
TOTAL LIVING	1959 SQ. FT.
GARAGE	509 SQ. FT.
DECK	85 SQ. FT.
DECK 2	79 SQ. FT.



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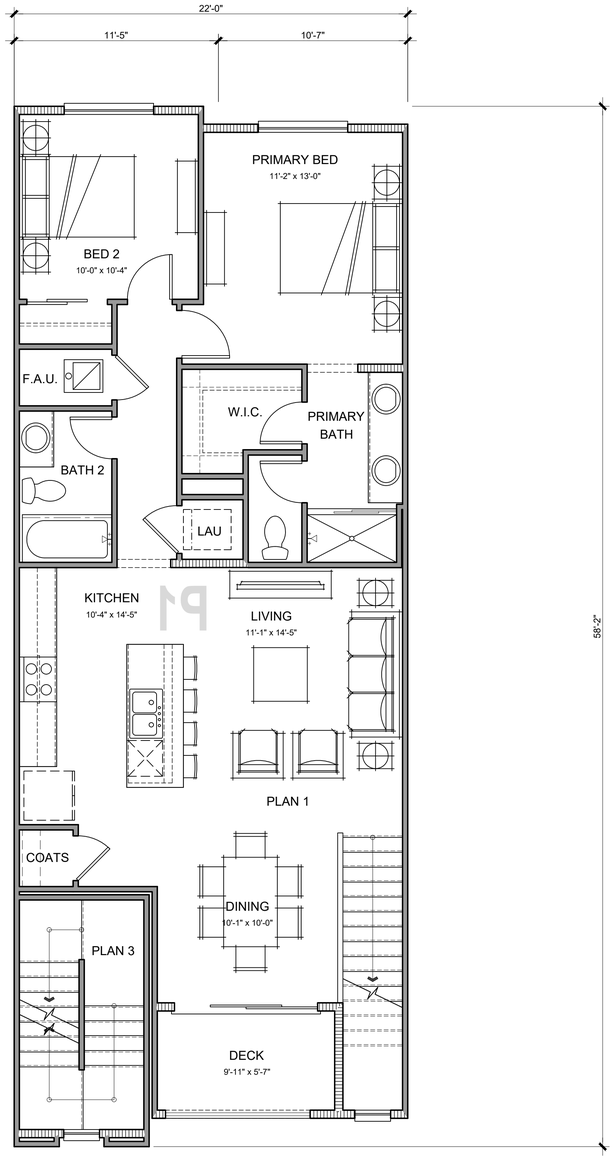

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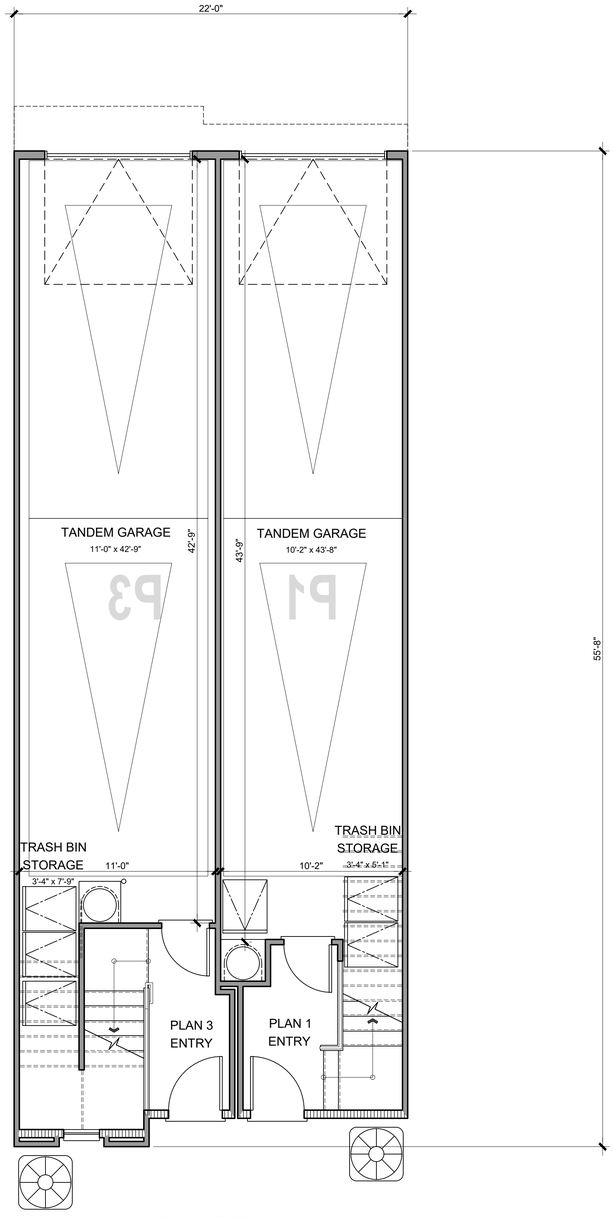

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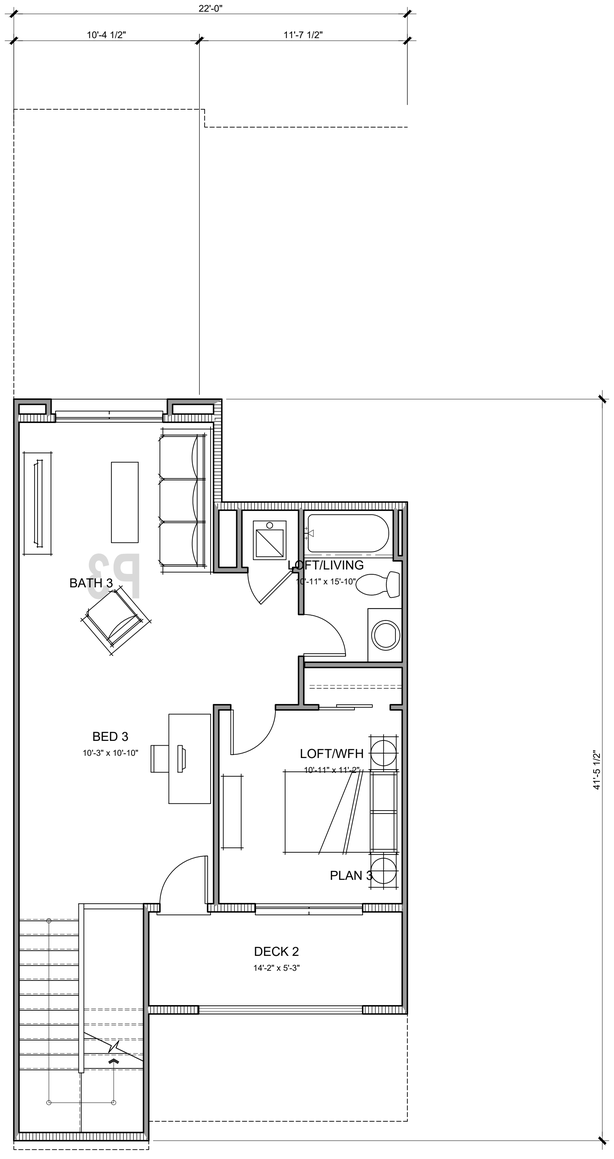
April 3, 2025

0 2 4 8

PLAN 1 & PLAN 3 MIRRORED FLOOR PLANS

A5.12

PLAN 3 - G.S.F.	
1ST FLOOR	145 SQ. FT.
2ND FLOOR	102 SQ. FT.
3RD FLOOR	1154 SQ. FT.
4TH FLOOR	558 SQ. FT.
TOTAL LIVING	1959 SQ. FT.
GARAGE	509 SQ. FT.
DECK	85 SQ. FT.
DECK 2	79 SQ. FT.



FOURTH FLOOR

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SCHEMATIC DESIGN
April 3, 2025

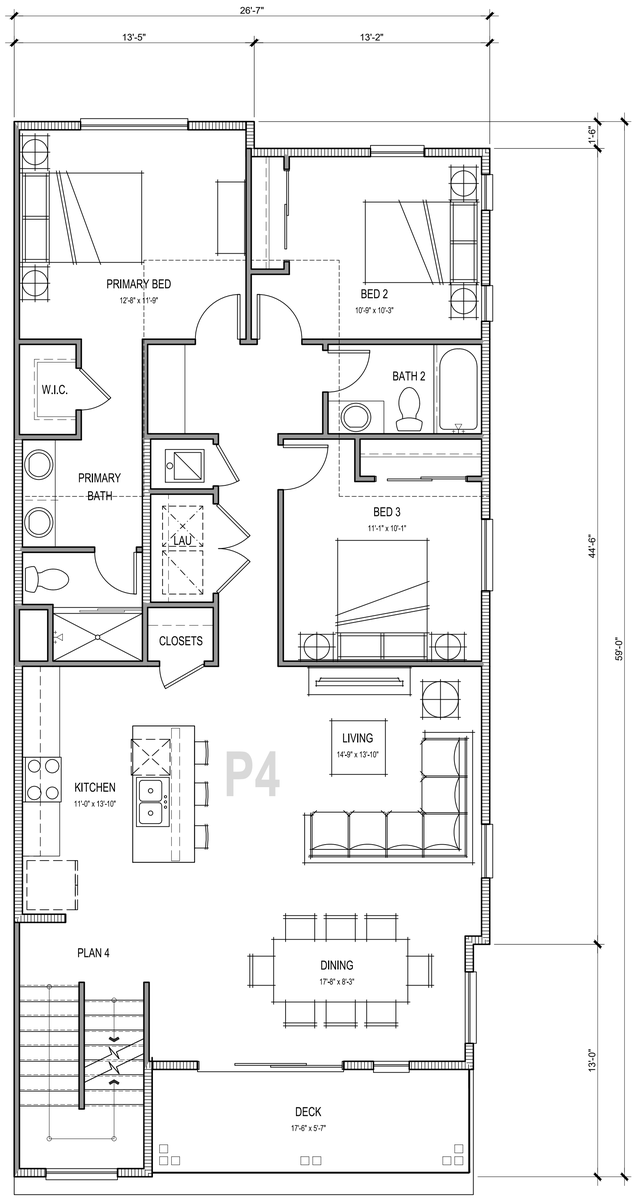
0 2 4 8

PLAN 3 MIRRORED 4TH FLOOR

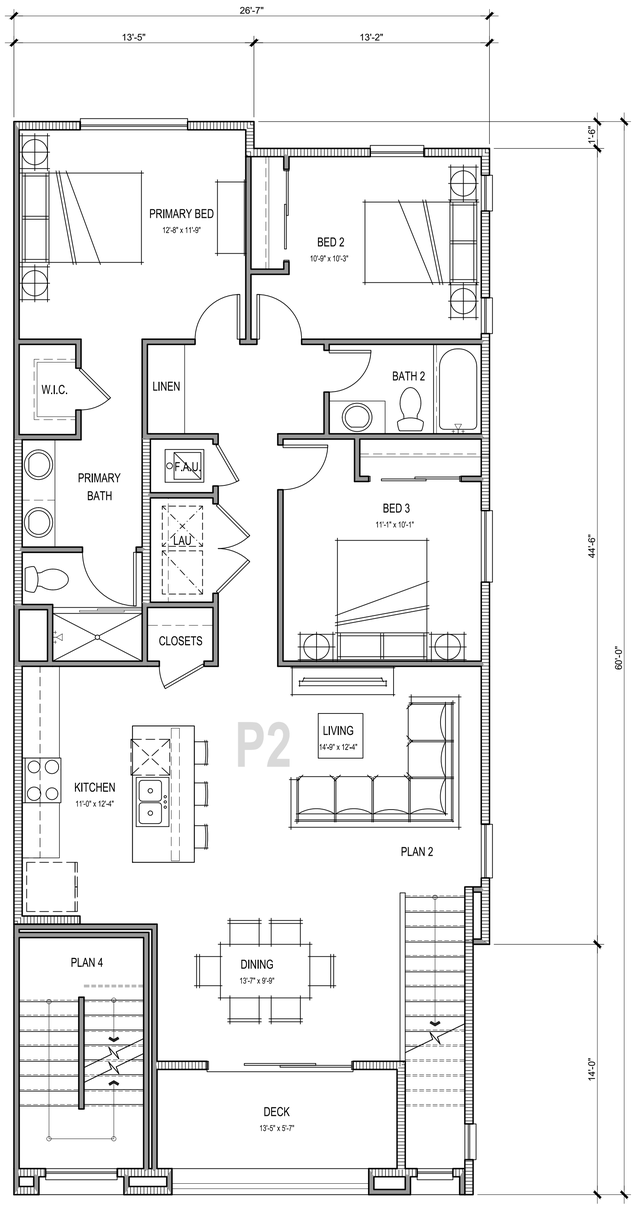
A5.13

PLAN 2 - G.S.F.	
1ST FLOOR	186 SQ. FT.
2ND FLOOR	1277 SQ. FT.
3RD FLOOR	0
4TH FLOOR	0
TOTAL LIVING	1464 SQ. FT.
GARAGE	582 SQ. FT.
DECK	90 SQ. FT.
PORCH	-

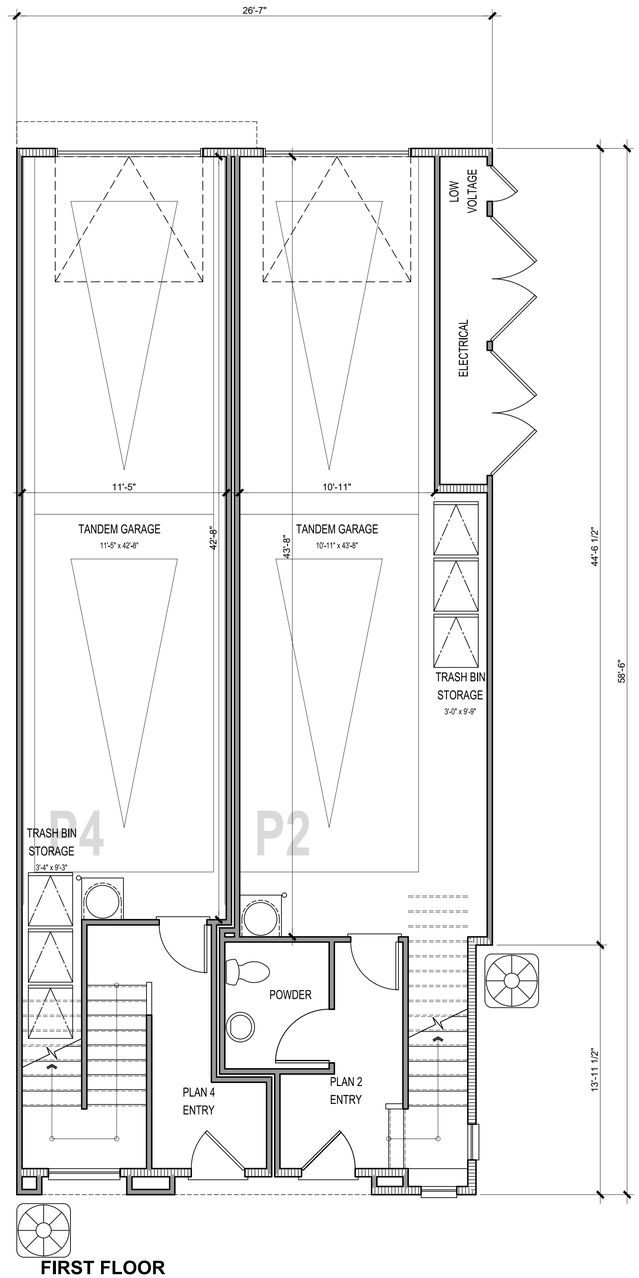
PLAN 4 - G.S.F.	
1ST FLOOR	161 SQ. FT.
2ND FLOOR	103 SQ. FT.
3RD FLOOR	1424 SQ. FT.
4TH FLOOR	796 SQ. FT.
TOTAL LIVING	2485 SQ. FT.
GARAGE	543 SQ. FT.
DECK	102 SQ. FT.
DECK 2	109 SQ. FT.



THIRD FLOOR



SECOND FLOOR



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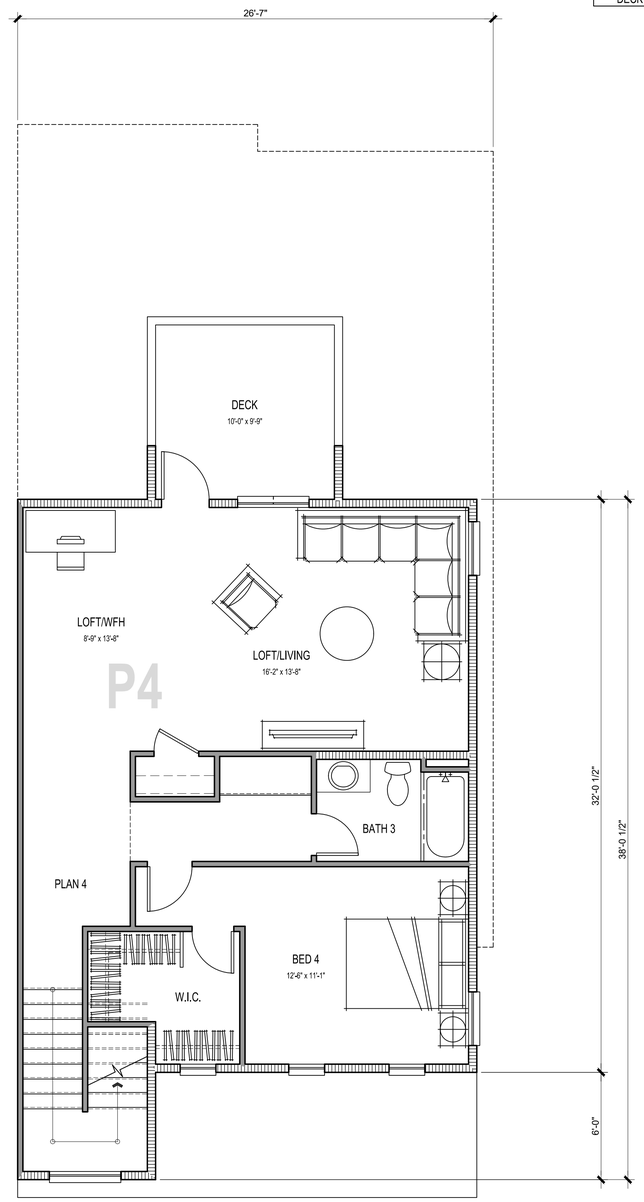
SCHEMATIC DESIGN
April 3, 2025

0 2 4 8

PLAN 2 & 4 FLOOR PLANS

A5.20

PLAN 4 - G.S.F.	
1ST FLOOR	161 SQ. FT.
2ND FLOOR	103 SQ. FT.
3RD FLOOR	1424 SQ. FT.
4TH FLOOR	796 SQ. FT.
TOTAL LIVING	2485 SQ. FT.
GARAGE	543 SQ. FT.
DECK	102 SQ. FT.
DECK 2	109 SQ. FT.



FOURTH FLOOR

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SCHEMATIC DESIGN
April 3, 2025

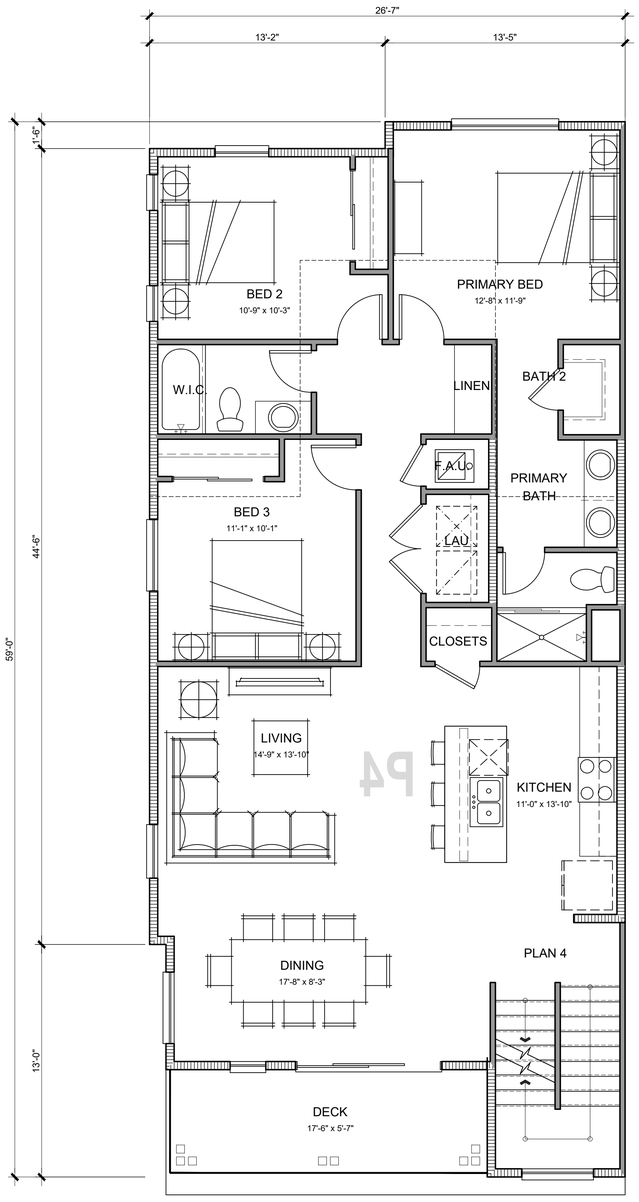
0 2 4 8

PLAN 4 4TH FLOOR

A5.21

PLAN 2 - G.S.F.	
1ST FLOOR	186 SQ. FT.
2ND FLOOR	1277 SQ. FT.
3RD FLOOR	0
4TH FLOOR	0
TOTAL LIVING	1464 SQ. FT.
GARAGE	582 SQ. FT.
DECK	90 SQ. FT.
PORCH	-

PLAN 4 - G.S.F.	
1ST FLOOR	161 SQ. FT.
2ND FLOOR	103 SQ. FT.
3RD FLOOR	1424 SQ. FT.
4TH FLOOR	796 SQ. FT.
TOTAL LIVING	2485 SQ. FT.
GARAGE	543 SQ. FT.
DECK	102 SQ. FT.
DECK 2	109 SQ. FT.



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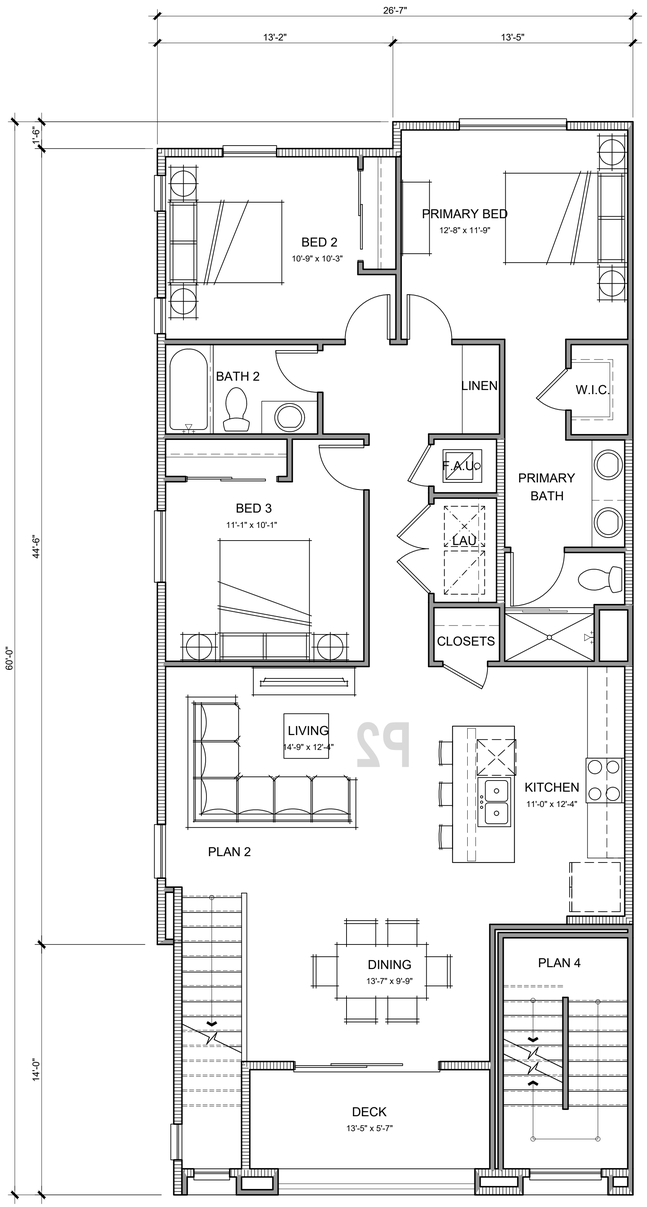
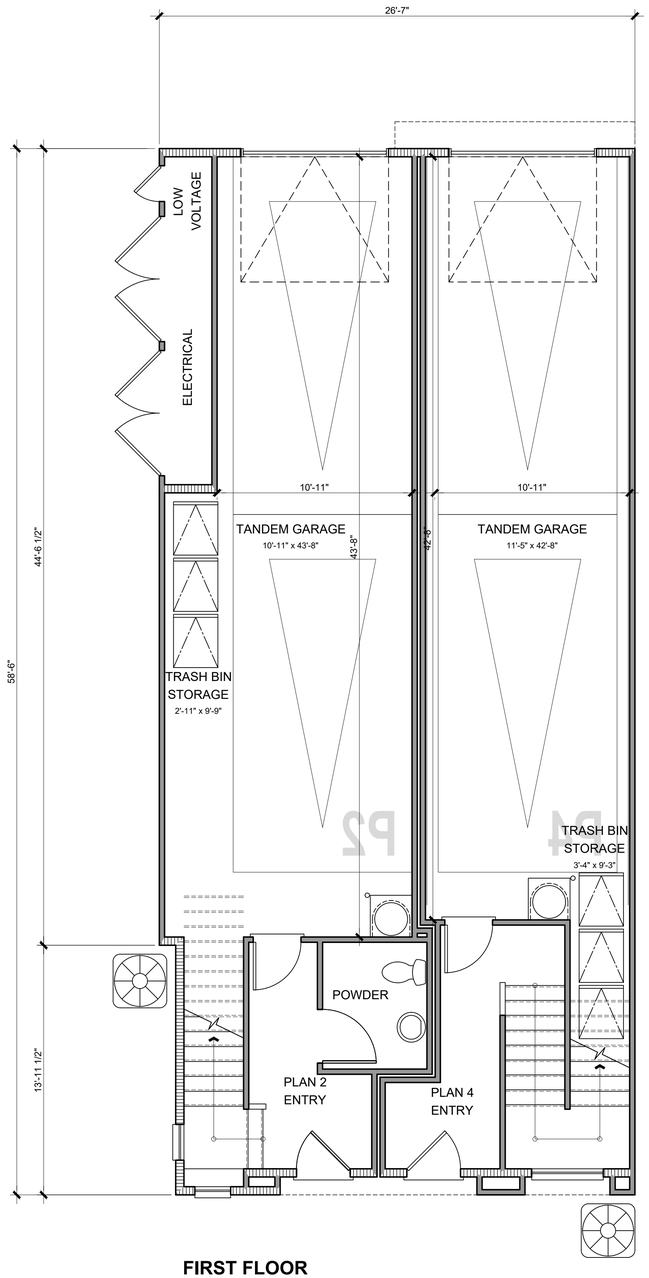


SECOND FLOOR



FIRST FLOOR

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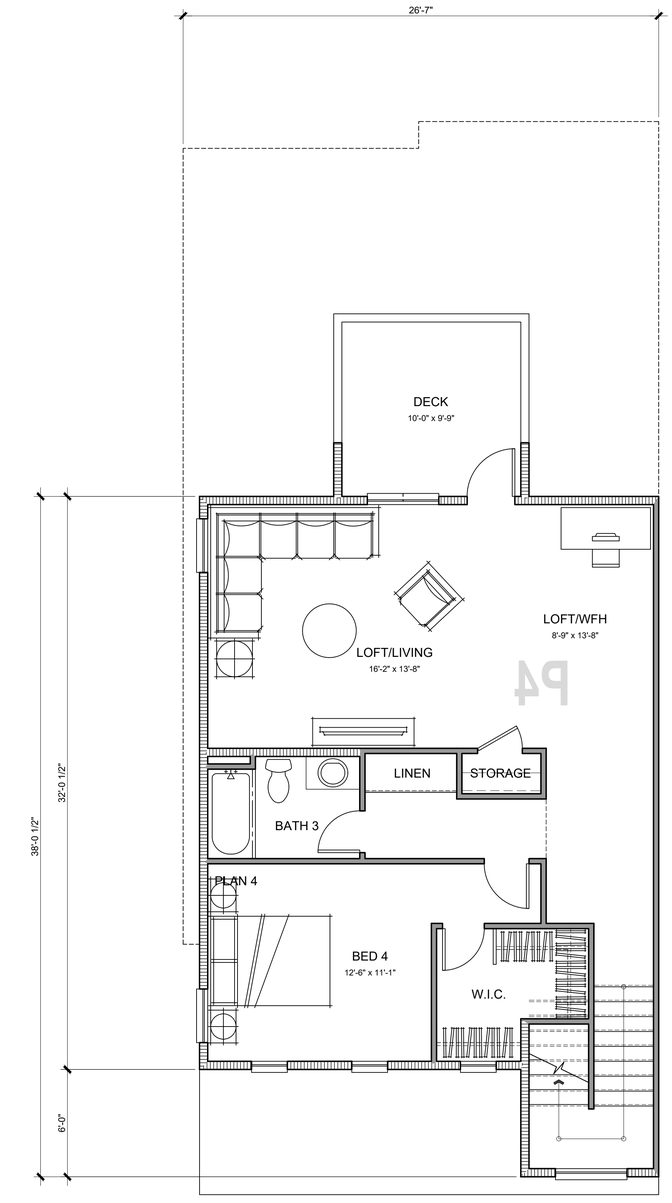
SCHEMATIC DESIGN
April 3, 2025

0 2 4 8

PLAN 2 & 4 MIRRORED FLOOR PLANS

A5.22

PLAN 4 - G.S.F.	
1ST FLOOR	161 SQ. FT.
2ND FLOOR	103 SQ. FT.
3RD FLOOR	1424 SQ. FT.
4TH FLOOR	796 SQ. FT.
TOTAL LIVING	2485 SQ. FT.
GARAGE	543 SQ. FT.
DECK	102 SQ. FT.
DECK 2	109 SQ. FT.



FOURTH FLOOR

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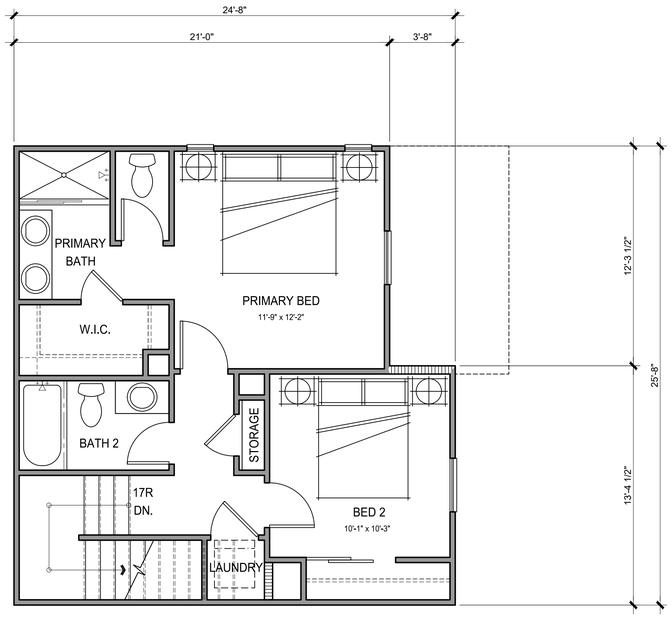
April 3, 2025

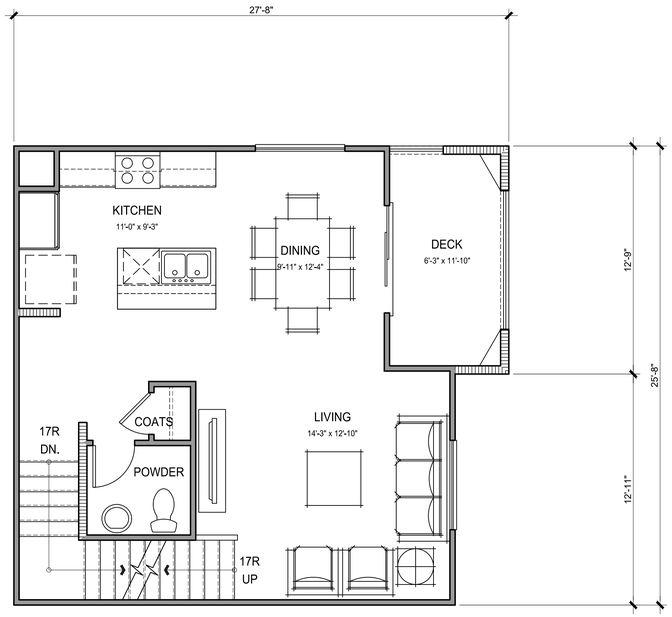
0 2 4 8

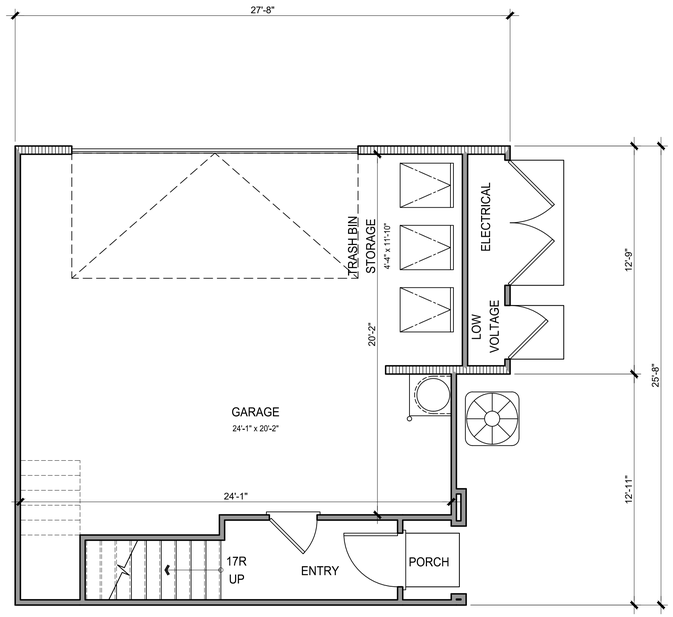
PLAN 4 MIRRORED 4TH FLOOR

A5.23

GROSS SF	
1ST FLOOR	111 SQ. FT.
2ND FLOOR	583 SQ. FT.
3RD FLOOR	532 SQ. FT.
TOTAL LIVING	1226 SQ. FT.
GARAGE	524 SQ. FT.
DECK	73 SQ. FT.
PORCH	15 SQ. FT.







THIRD FLOOR

SECOND FLOOR

FIRST FLOOR

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DEL NORTE
WEST COVINA, CA # 20240567

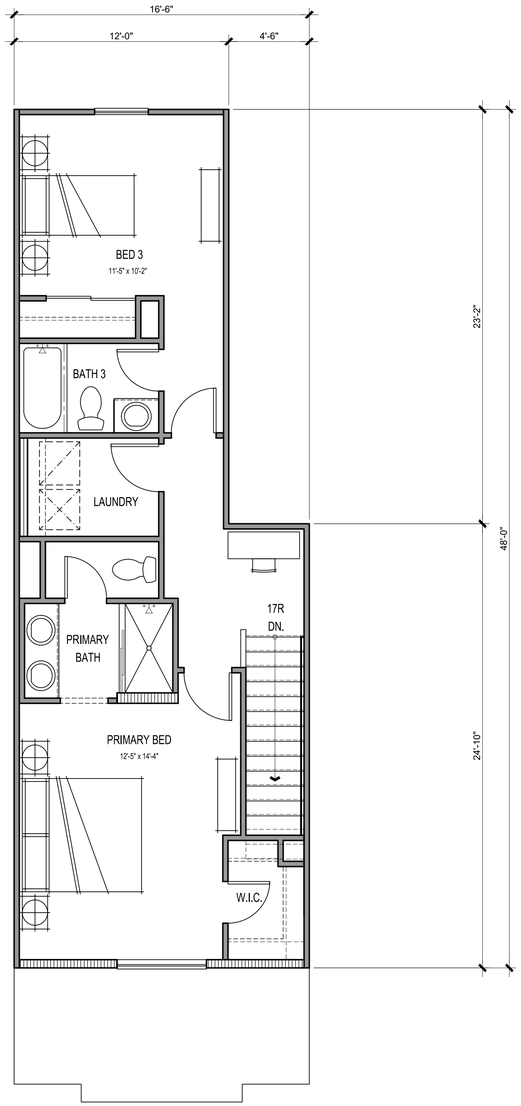
SCHEMATIC DESIGN
April 3, 2025

0 2 4 8

PLAN 5 FLOOR PLANS

A5.30

GROSS SF	
1ST FLOOR	145 SQ. FT.
2ND FLOOR	683 SQ. FT.
3RD FLOOR	642 SQ. FT.
TOTAL LIVING	1470 SQ. FT.
GARAGE	604 SQ. FT.
DECK	101 SQ. FT.
PORCH	37 SQ. FT.



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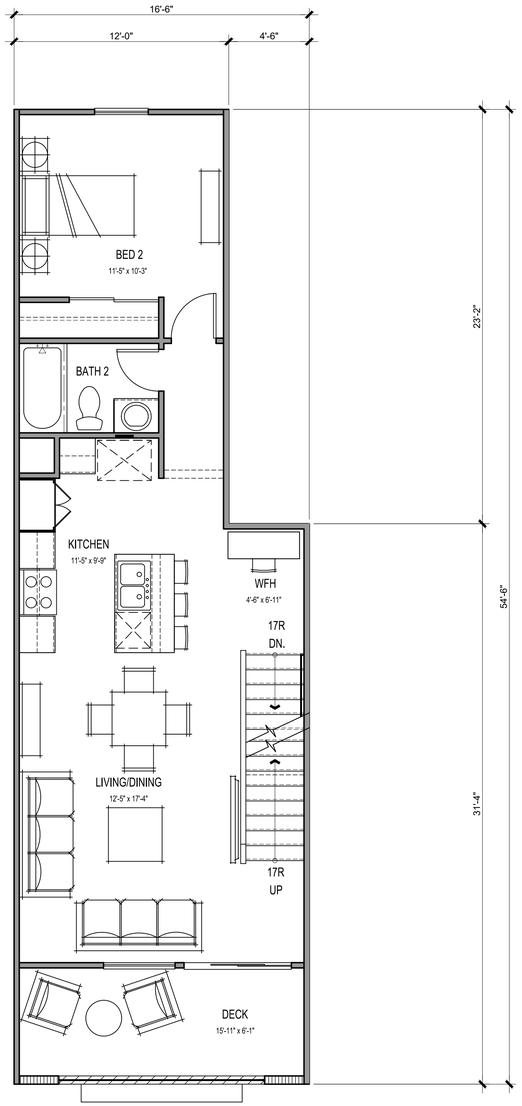

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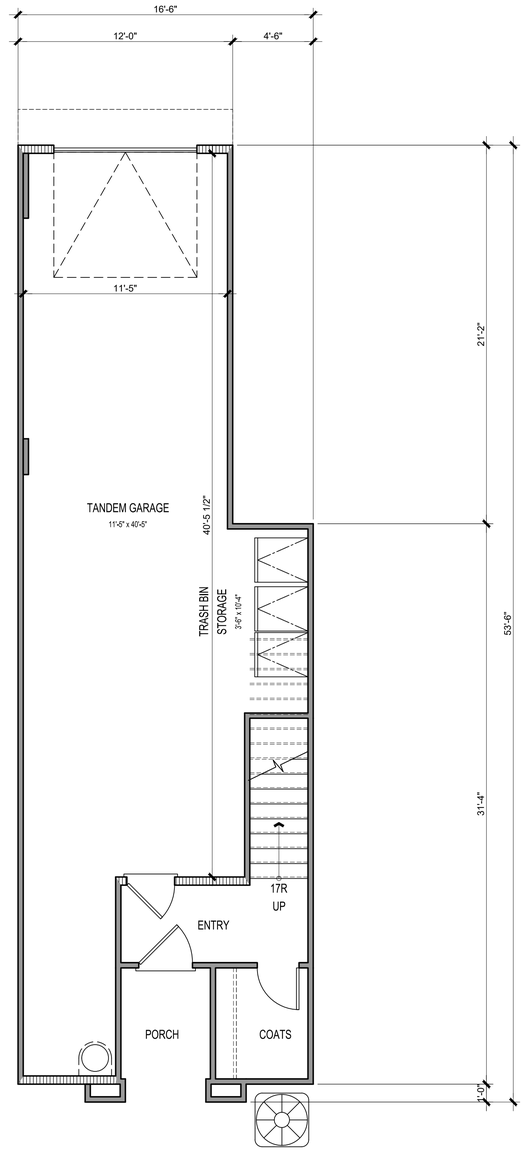

FIRST FLOOR

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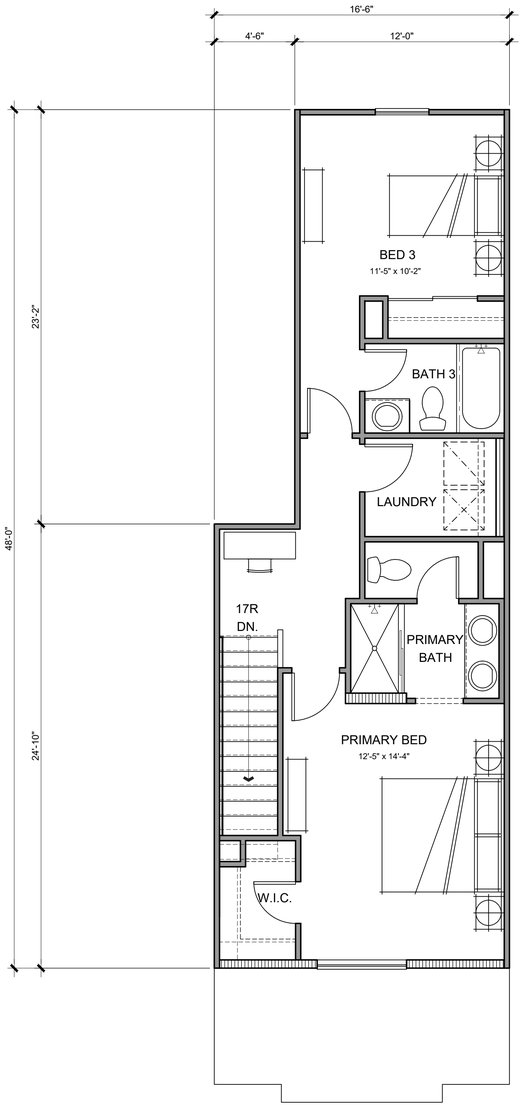
SCHEMATIC DESIGN
April 3, 2025

0 2 4 8

PLAN 6 FLOOR PLANS

A5.40

GROSS SF	
1ST FLOOR	145 SQ. FT.
2ND FLOOR	683 SQ. FT.
3RD FLOOR	642 SQ. FT.
TOTAL LIVING	1470 SQ. FT.
GARAGE	604 SQ. FT.
DECK	101 SQ. FT.
PORCH	37 SQ. FT.



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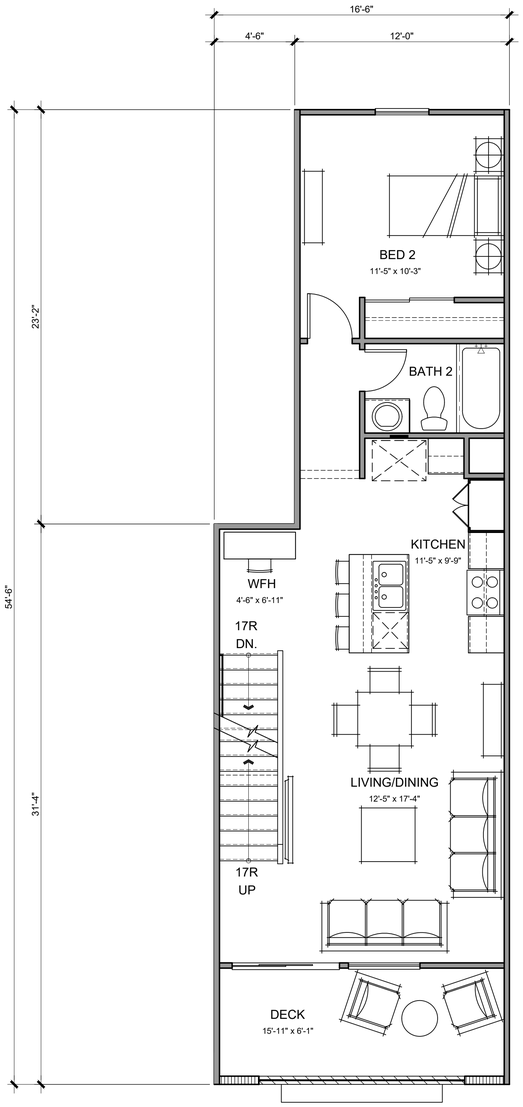

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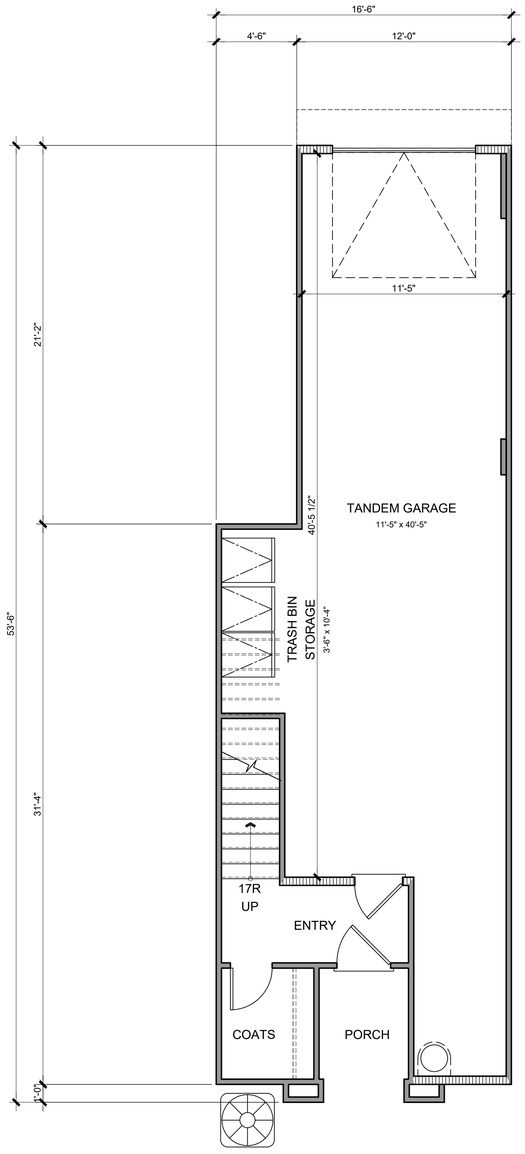

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WEST COVINA, CA # 20240567

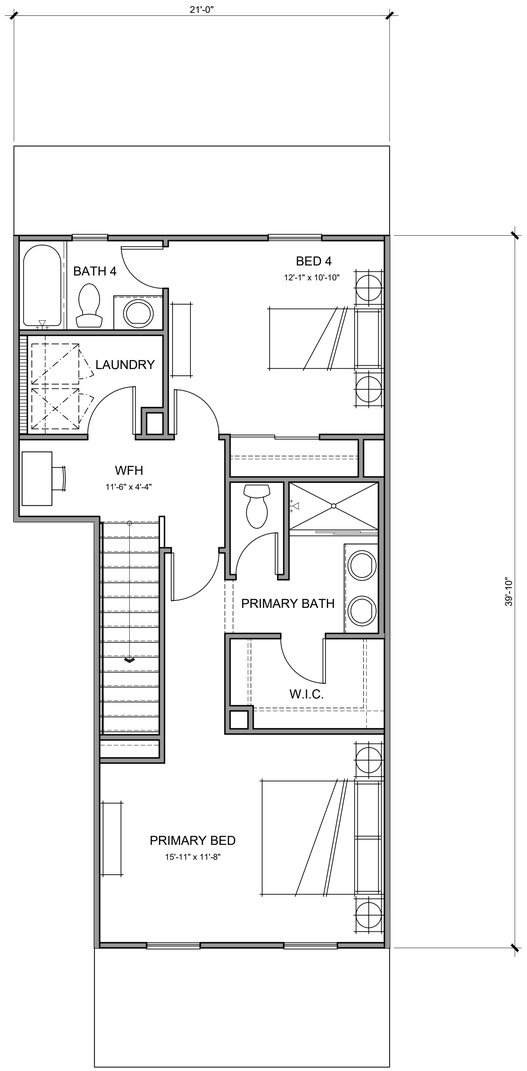
SCHEMATIC DESIGN
April 3, 2025

0 2 4 8

PLAN 6 MIRRORED FLOOR PLANS

A5.41

GROSS SF	
1ST FLOOR	356 SQ. FT.
2ND FLOOR	725 SQ. FT.
3RD FLOOR	674 SQ. FT.
TOTAL LIVING	1755 SQ. FT.
GARAGE	483 SQ. FT.
DECK	110 SQ. FT.
PORCH	104 SQ. FT.



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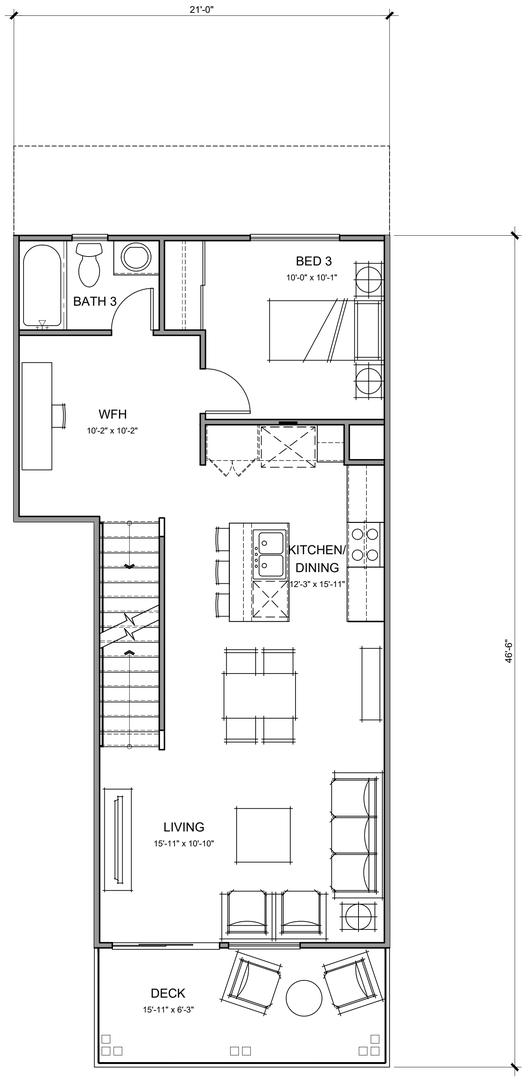

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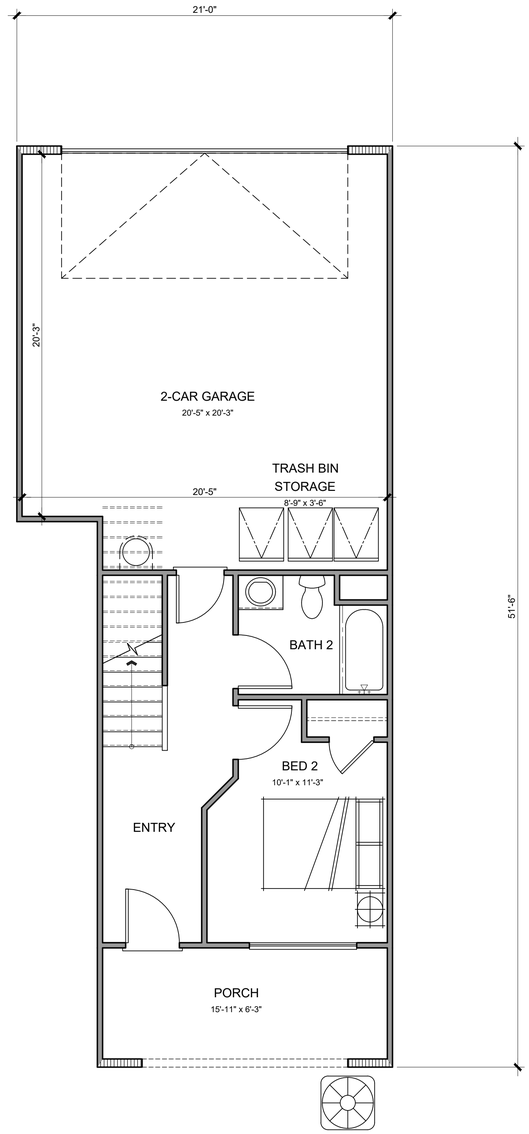

FIRST FLOOR

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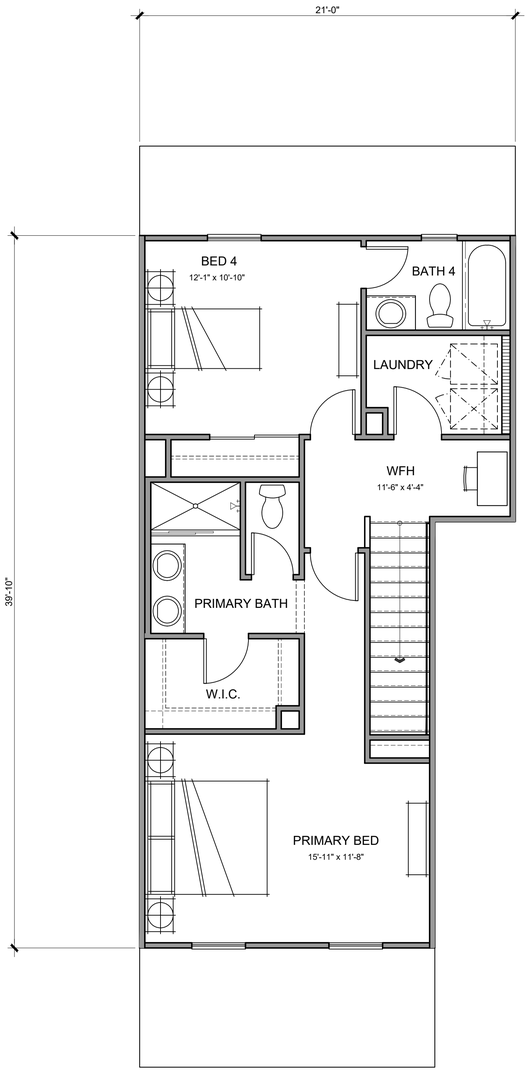
April 3, 2025

0 2 4 8

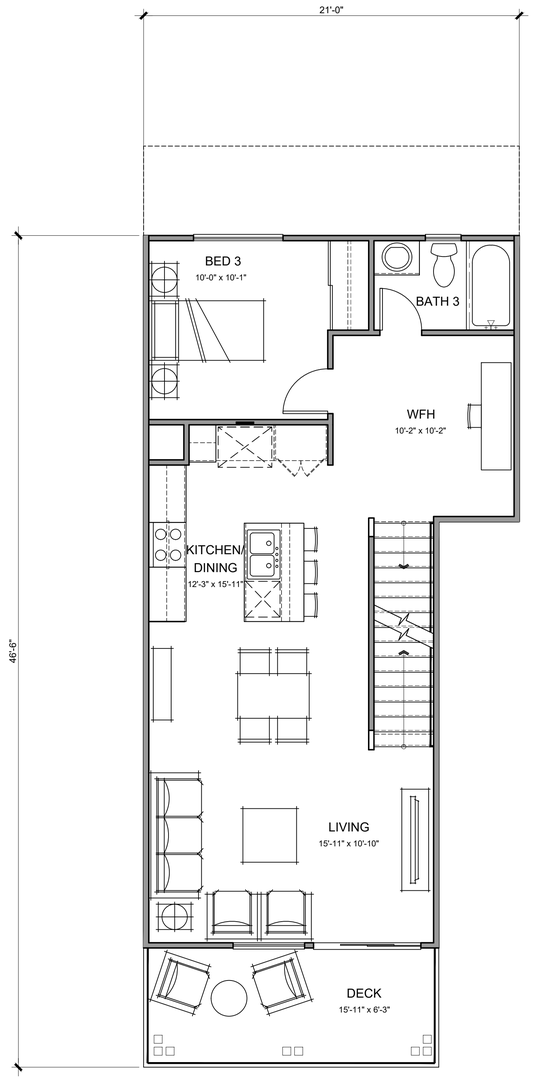
PLAN 7 FLOOR PLANS

A5.50

GROSS SF	
1ST FLOOR	356 SQ. FT.
2ND FLOOR	725 SQ. FT.
3RD FLOOR	674 SQ. FT.
TOTAL LIVING	1755 SQ. FT.
GARAGE	483 SQ. FT.
DECK	110 SQ. FT.
PORCH	104 SQ. FT.



THIRD FLOOR



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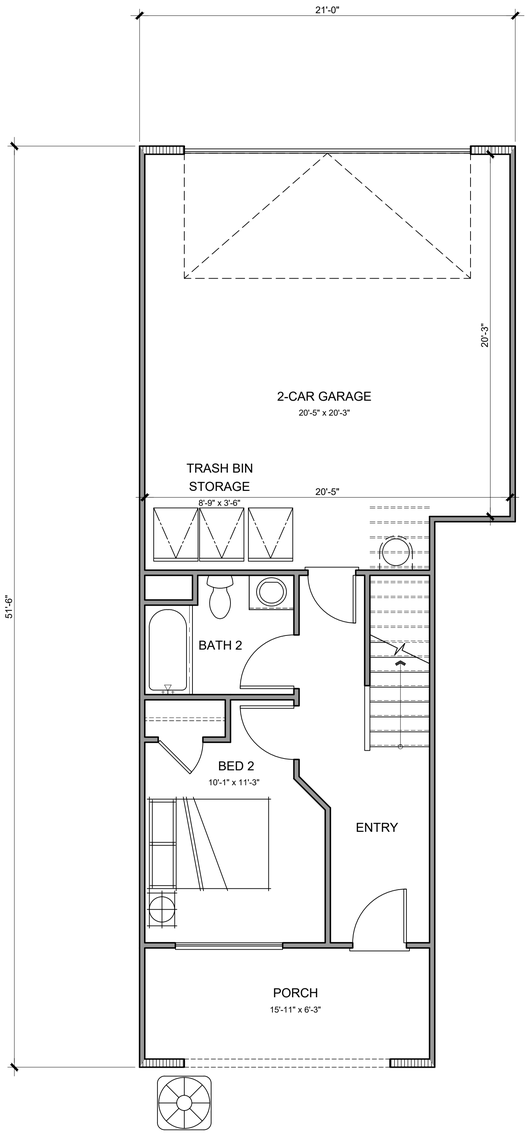

FIRST FLOOR

ktgy
17911 Von Karman Ave.
Suite 200
Irvine, CA 92614
ktgy.com
949.851.2133

MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606
MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 2 4 8

PLAN 7 MIRRORED FLOOR PLANS

A5.51

LEGEND

1 Stucco
2 Horizontal Siding
3 Composite Shingle Roof
4 Vinyl Windows
5 Fiberglass Entry Door
6 Metal Sectional Garage Door
7 Decorative Exterior Lights & Address Sign
8 Railing
9 Outrigger
10 Kicker
11 Trellis
12 Window/Opening Trim
13 Window/Opening Header
14 Faux Corbel
15 Sliding Door

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

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SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

COMPOSITE 'A' ELEVATIONS
SEASIDE

A5.60

LEGEND

1 Stucco	9 Stucco Arched Soffit
2 Low Profile Concrete "S" Roof Tile	10 Metal Railing
3 Round Faux Clay Gable End Vent	11 Fiberglass Entry Door
4 Fascia	12 Decorative Exterior Lights & Address Sign
5 Stucco Sill Trim	13 Metal Sectional Garage Door
6 Vinyl Window	14 Shutter
7 Stucco o/ Foam Corbel	15 Sliding Door
8 Trellis	16 Faux Finial

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

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April 3, 2025

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COMPOSITE 'A' ELEVATIONS
SPANISH

A5.61

LEGEND

1	Stucco	8	Railing
2	Horizontal Siding	9	Outrigger
3	Composite Shingle Roof	10	Kicker
4	Vinyl Windows	11	Trellis
5	Fiberglass Entry Door	12	Window/Opening Trim
6	Metal Sectional Garage Door	13	Window/Opening Header
7	Decorative Exterior Lights & Address Sign	14	Faux Corbel
		15	Sliding Door

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT

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MIRRORED COMPOSITE 'A' ELEVATIONS
SEASIDE

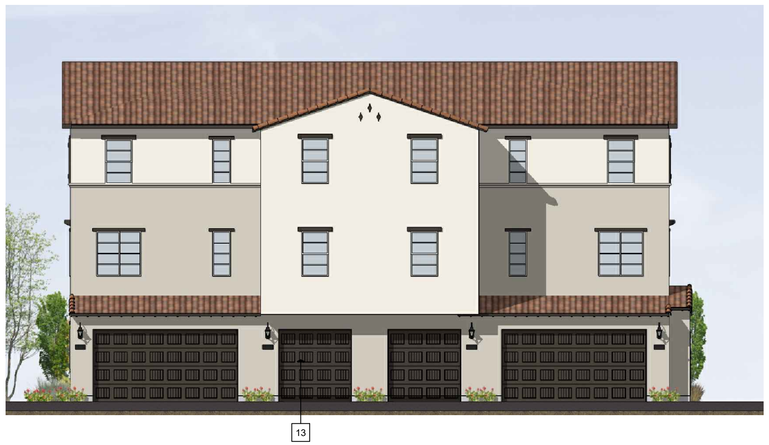
A5.62

LEGEND

1 Stucco	9 Stucco Arched Soffit
2 Low Profile Concrete "S" Roof Tile	10 Metal Railing
3 Round Faux Clay Gable End Vent	11 Fiberglass Entry Door
4 Fascia	12 Decorative Exterior Lights & Address Sign
5 Stucco Sill Trim	13 Metal Sectional Garage Door
6 Vinyl Window	14 Shutter
7 Stucco o/ Foam Corbel	15 Sliding Door
8 Trellis	16 Faux Finial

1 - FRONT

2 - RIGHT



3 - REAR

4 - LEFT

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April 3, 2025

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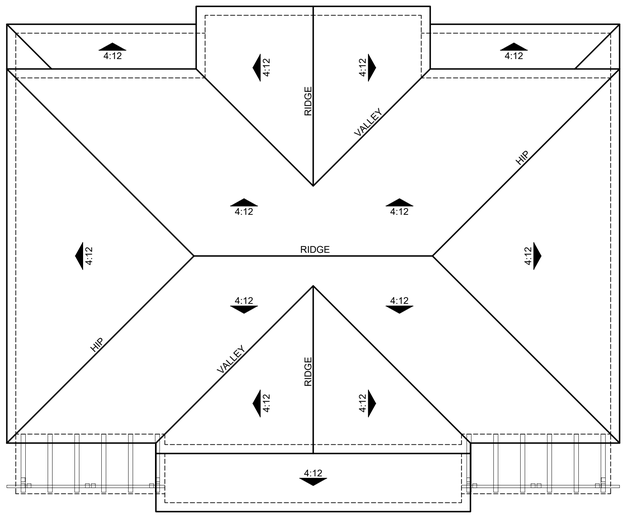
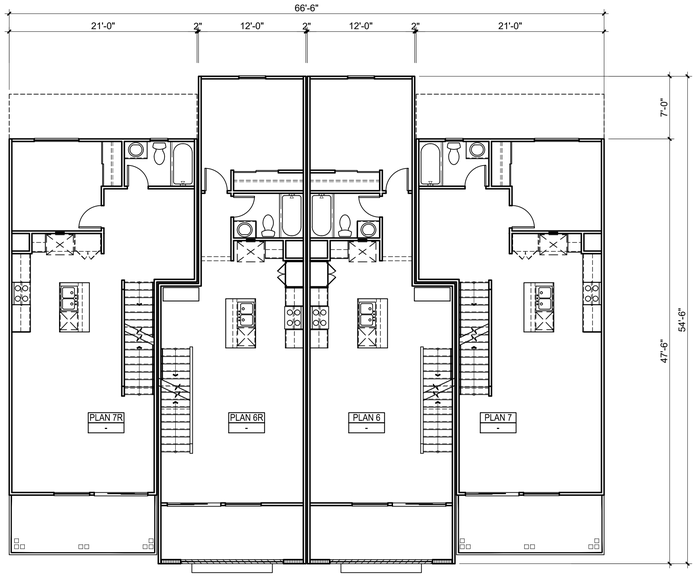
MIRRORED COMPOSITE 'A' ELEVATIONS
SPANISH

A5.63



ROOF PLAN



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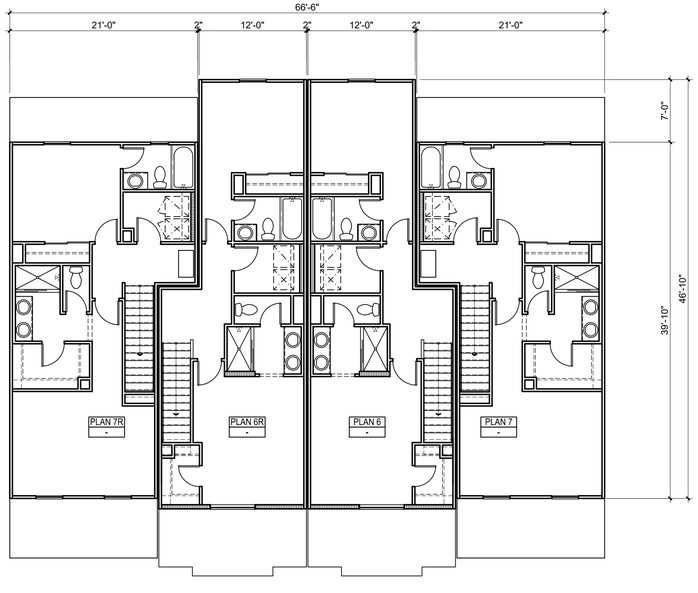

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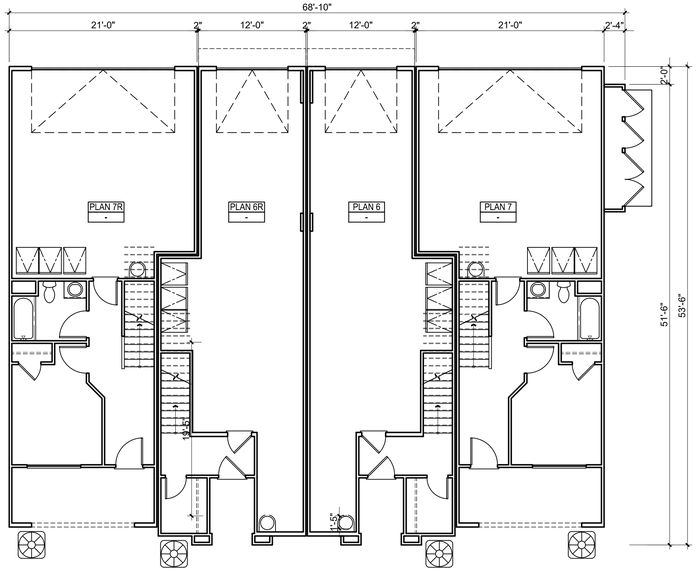

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April 3, 2025

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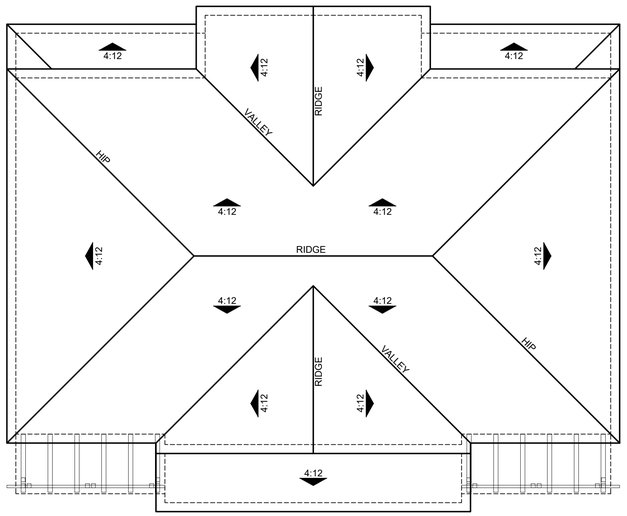
COMPOSITE 'A' FLOOR PLANS
CRC TOWNS

A5.64



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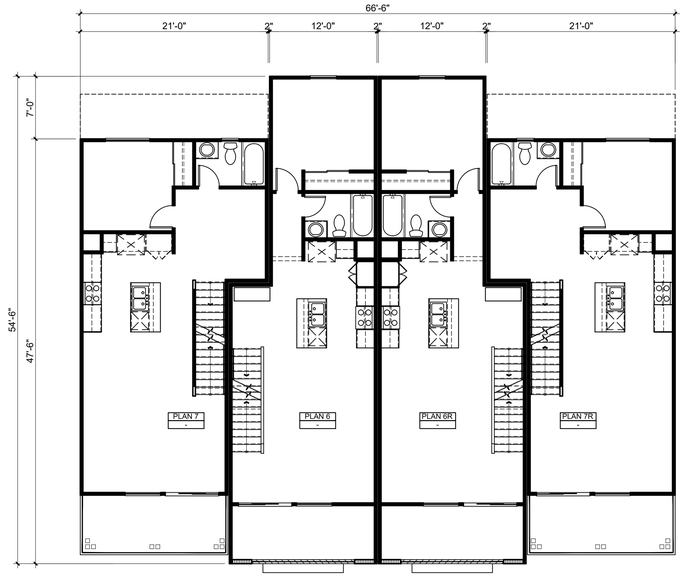

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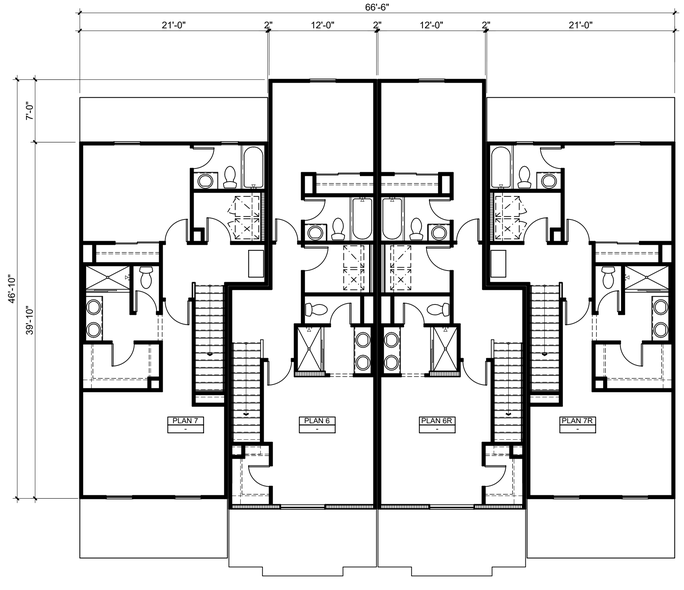

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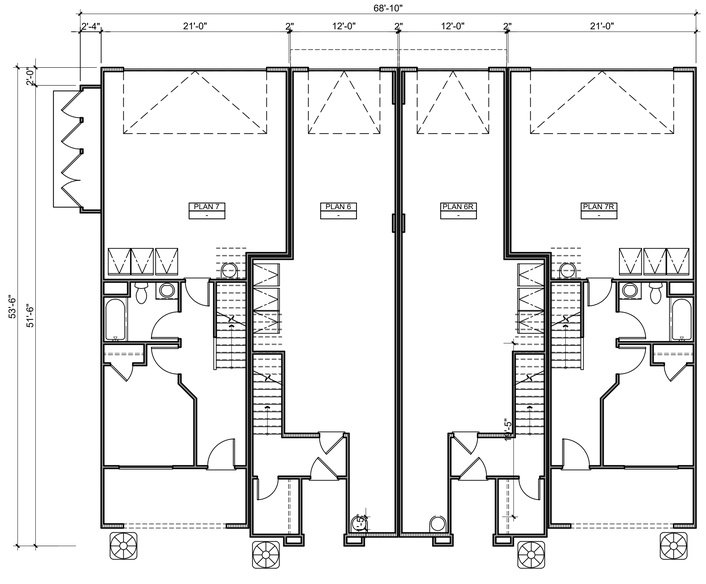

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SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

MIRRORED COMPOSITE 'A' FLOOR PLANS
CRC TOWNS

A5.65

LEGEND

1 Stucco
2 Horizontal Siding
3 Composite Shingle Roof
4 Vinyl Windows
5 Fiberglass Entry Door
6 Metal Sectional Garage Door
7 Decorative Exterior Lights & Address Sign
8 Railing
9 Outrigger
10 Kicker
11 Trellis
12 Window/Opening Trim
13 Window/Opening Header
14 Faux Corbel
15 Sliding Door

1 - FRONT

2 - LEFT

3 - REAR

4 - RIGHT

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SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

COMPOSITE 'B' ELEVATIONS
SEASIDE

A5.70

LEGEND

1 Stucco	9 Stucco Arched Soffit
2 Low Profile Concrete "S" Roof Tile	10 Metal Railing
3 Round Faux Clay Gable End Vent	11 Fiberglass Entry Door
4 Fascia	12 Decorative Exterior Lights & Address Sign
5 Stucco Sill Trim	13 Metal Sectional Garage Door
6 Vinyl Window	14 Shutter
7 Stucco o/ Foam Corbel	15 Sliding Door
8 Trellis	16 Faux Finial

1 - FRONT

2 - LEFT

3 - REAR

4 - RIGHT

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SCHEMATIC DESIGN
April 3, 2025

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COMPOSITE 'B' ELEVATIONS
SPANISH

A5.71

LEGEND

1. Stucco
2. Horizontal Siding
3. Composite Shingle Roof
4. Vinyl Windows
5. Fiberglass Entry Door
6. Metal Sectional Garage Door
7. Decorative Exterior Lights & Address Sign
8. Railing
9. Outrigger
10. Kicker
11. Trellis
12. Window/Opening Trim
13. Window/Opening Header
14. Faux Corbel
15. Sliding Door

1 - FRONT

2 - LEFT

3 - REAR

4 - RIGHT

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SCHEMATIC DESIGN
April 3, 2025

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MIRRORED COMPOSITE 'B' ELEVATIONS
SEASIDE

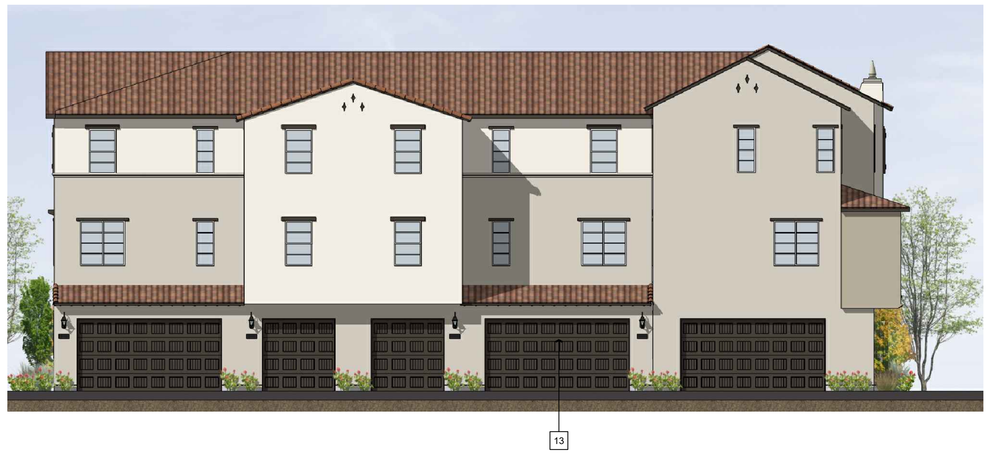
A5.72

LEGEND

1 Stucco	9 Stucco Arched Soffit
2 Low Profile Concrete "S" Roof Tile	10 Metal Railing
3 Round Faux Clay Gable End Vent	11 Fiberglass Entry Door
4 Fascia	12 Decorative Exterior Lights & Address Sign
5 Stucco Sill Trim	13 Metal Sectional Garage Door
6 Vinyl Window	14 Shutter
7 Stucco o/ Foam Corbel	15 Sliding Door
8 Trellis	16 Faux Finial

1 - FRONT

2 - LEFT



3 - REAR

4 - RIGHT

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SCHEMATIC DESIGN
April 3, 2025

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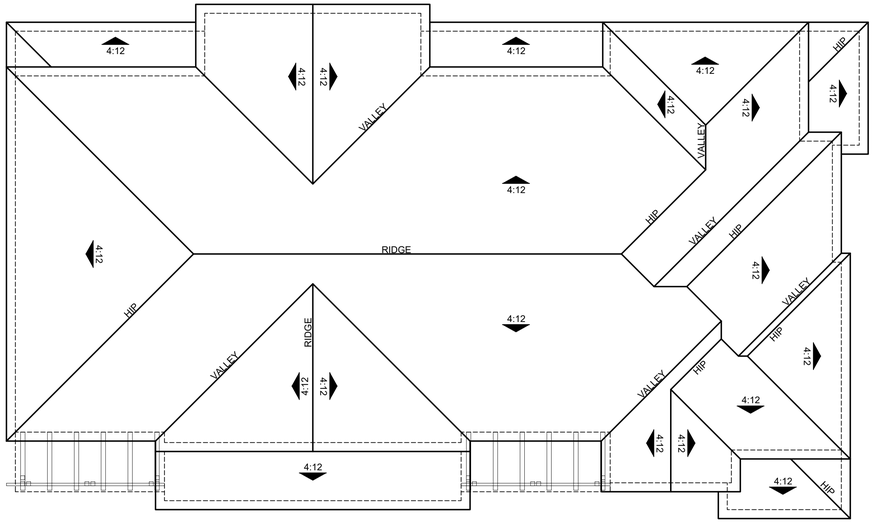
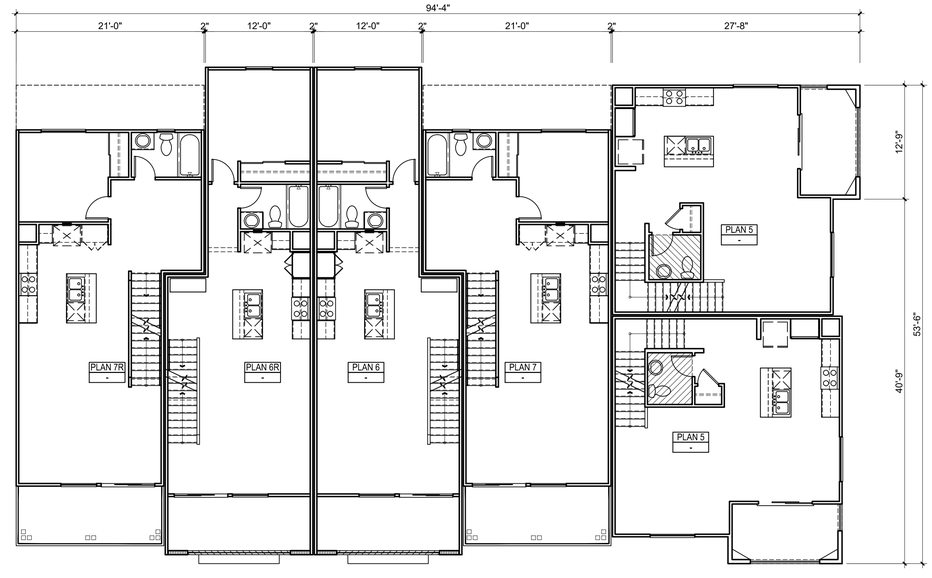
MIRRORED COMPOSITE 'B' ELEVATIONS
SPANISH

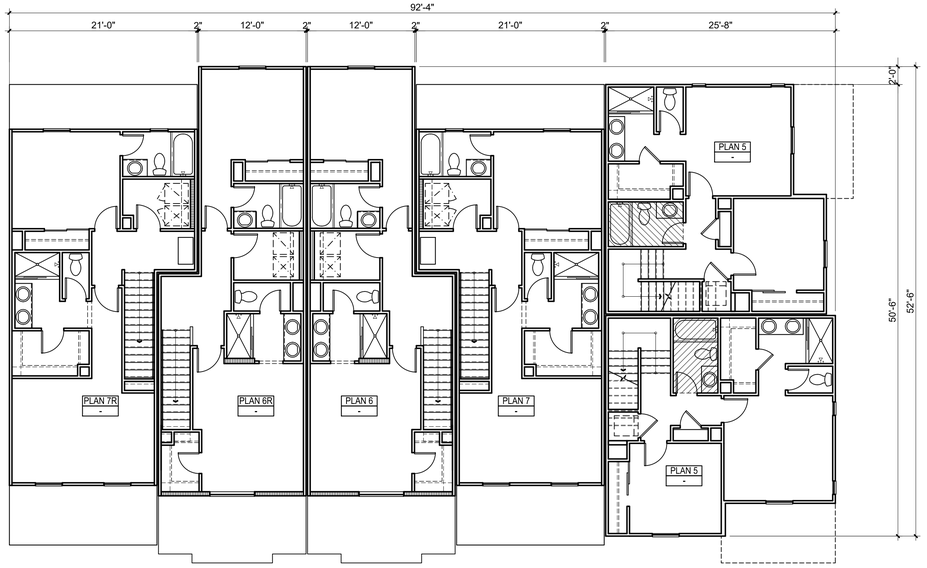
A5.73



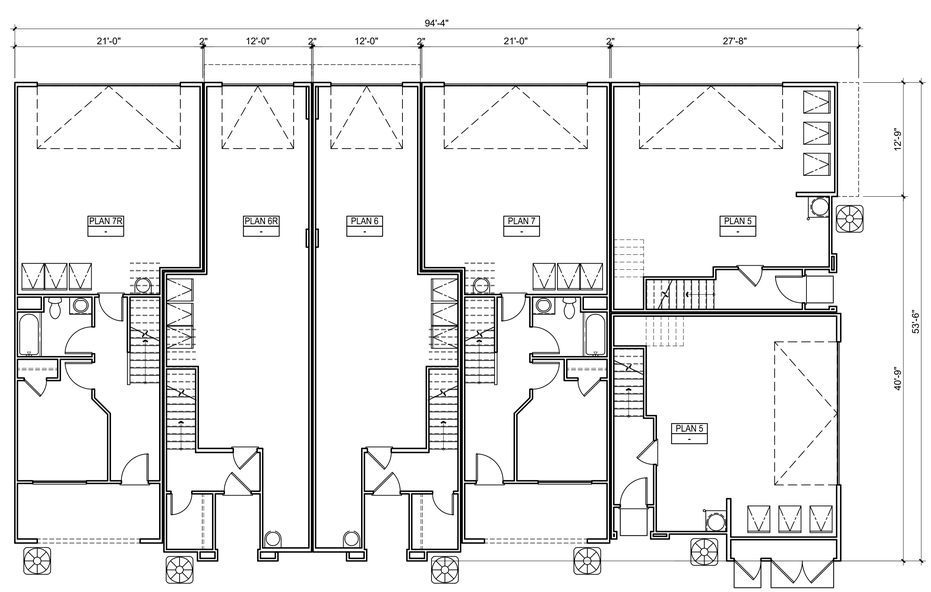
ROOF PLAN



SECOND FLOOR



THIRD FLOOR



FIRST FLOOR

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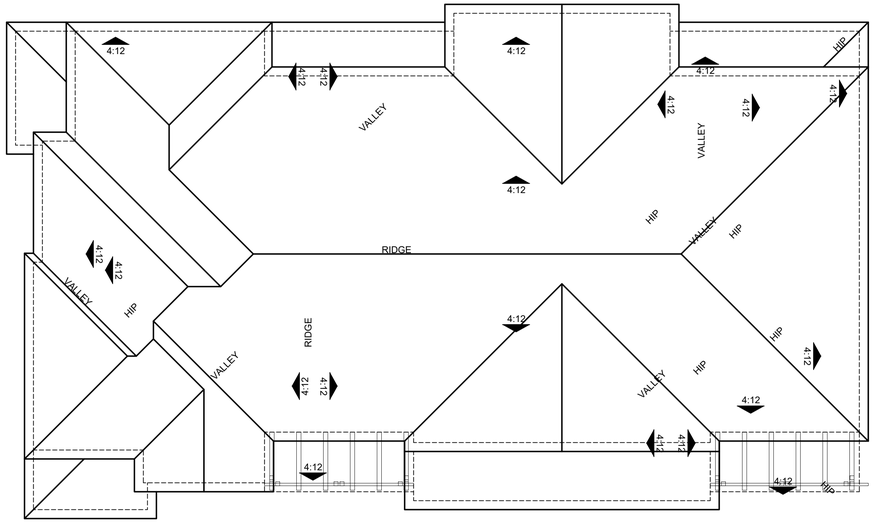
DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 7, 2025

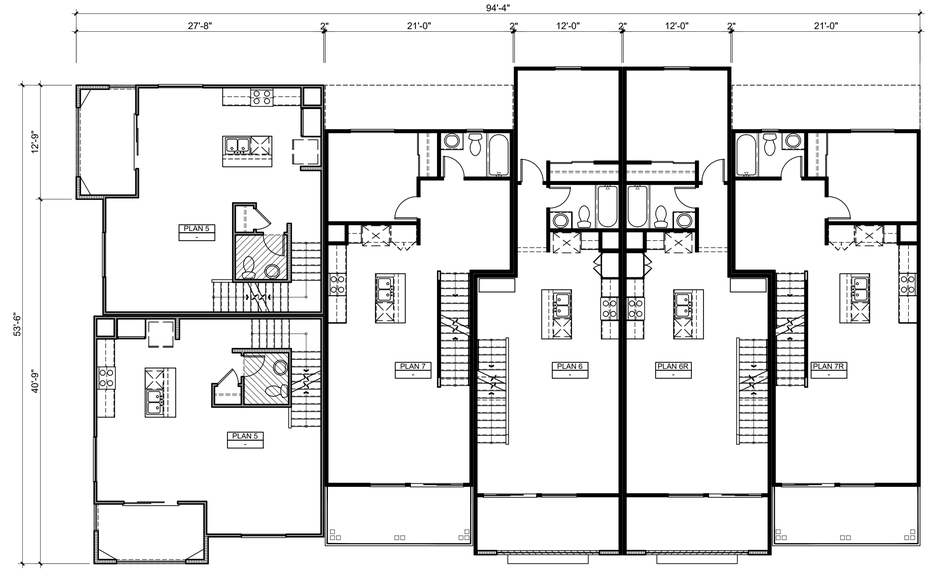
0 4 8 16

COMPOSITE 'B' FLOOR PLANS
CRC TOWNS

A5.74



ROOF PLAN



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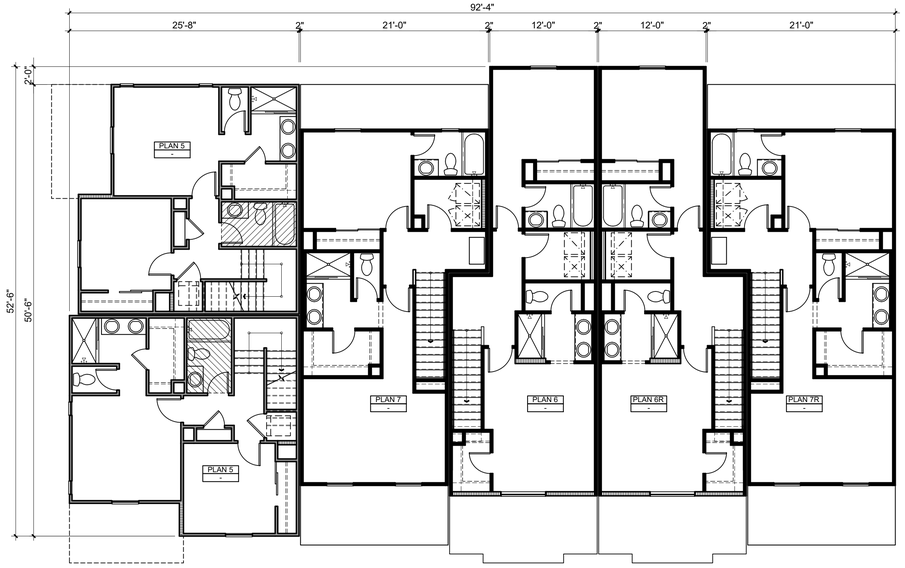

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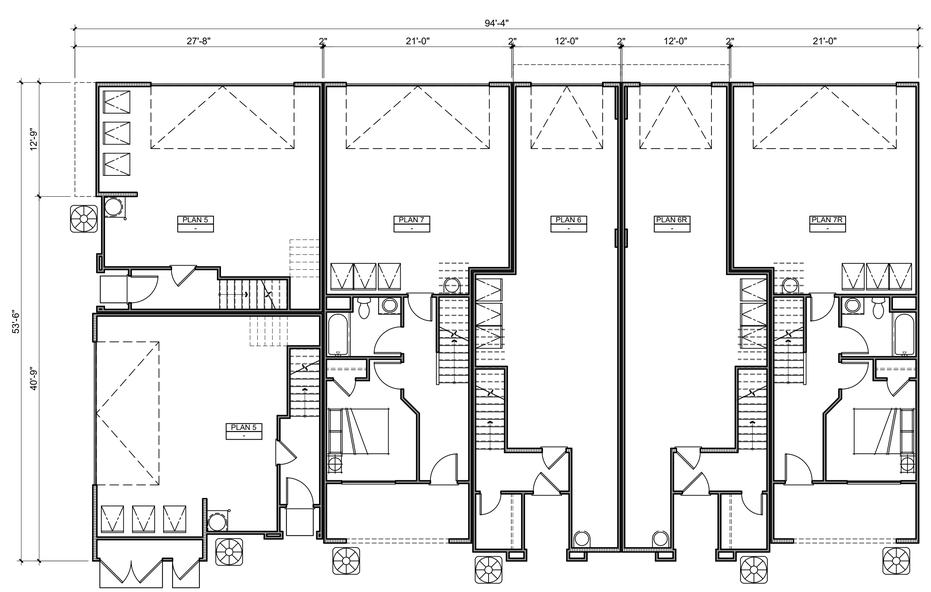

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SCHEMATIC DESIGN
April 7, 2025

0 4 8 16

MIRRORED COMPOSITE 'B' FLOOR PLANS
CRC TOWNS

A5.75

LEGEND

1	Stucco	8	Railing
2	Horizontal Siding	9	Outrigger
3	Composite Shingle Roof	10	Kicker
4	Vinyl Windows	11	Trellis
5	Fiberglass Entry Door	12	Window/Opening Trim
6	Metal Sectional Garage Door	13	Window/Opening Header
7	Decorative Exterior Lights & Address Sign	14	Faux Corbel
		15	Sliding Door

1 - FRONT

2 - LEFT

3 - REAR

4 - RIGHT

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SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

COMPOSITE 'C' ELEVATIONS
SEASIDE

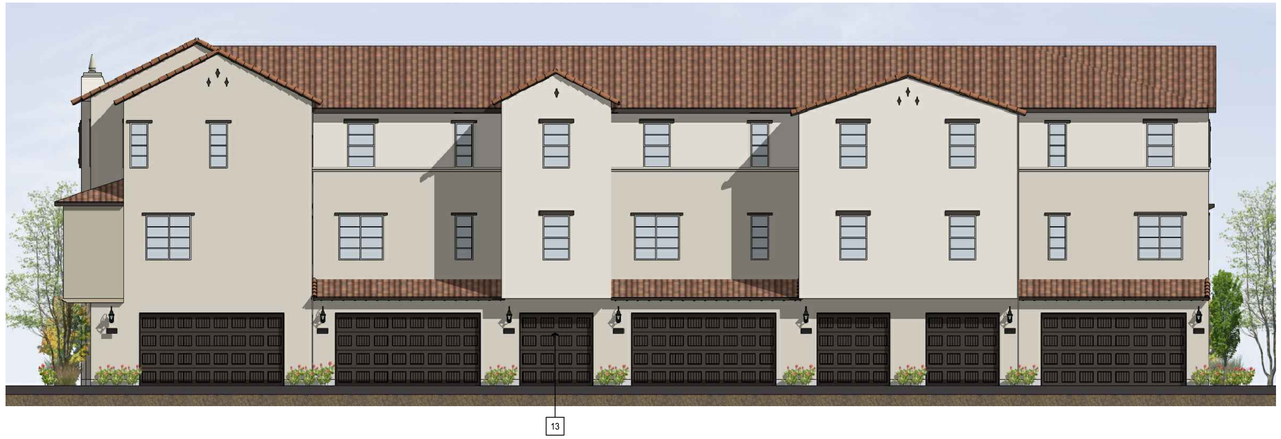
A5.80

LEGEND

1 Stucco
2 Low Profile Concrete "S" Roof Tile
3 Round Faux Clay Gable End Vent
4 Fascia
5 Stucco Sill Trim
6 Vinyl Window
7 Stucco o/ Foam Corbel
8 Trellis
9 Stucco Arched Soffit
10 Metal Railing
11 Fiberglass Entry Door
12 Decorative Exterior Lights & Address Sign
13 Metal Sectional Garage Door
14 Shutter
15 Sliding Door
16 Faux Finial

1 - FRONT

2 - LEFT



3 - REAR

4 - RIGHT

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SCHEMATIC DESIGN
April 3, 2025

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COMPOSITE 'C' ELEVATIONS
SPANISH

A5.81

LEGEND

1 Stucco
2 Horizontal Siding
3 Composite Shingle Roof
4 Vinyl Windows
5 Fiberglass Entry Door
6 Metal Sectional Garage Door
7 Decorative Exterior Lights & Address Sign
8 Railing
9 Outrigger
10 Kicker
11 Trellis
12 Window/Opening Trim
13 Window/Opening Header
14 Faux Corbel
15 Sliding Door

1 - FRONT

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MIRRORED COMPOSITE 'C' ELEVATIONS
SEASIDE

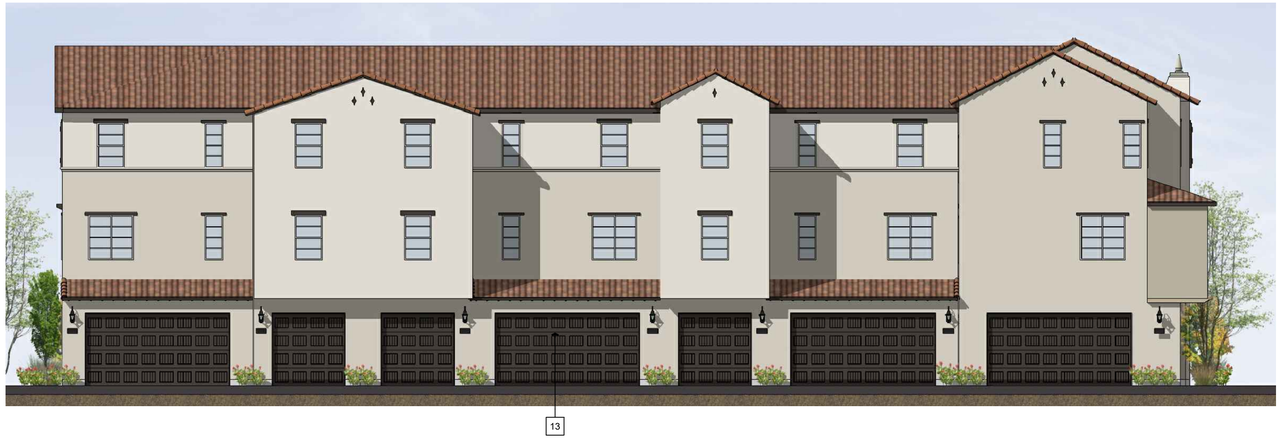
A5.82

LEGEND

1 Stucco	9 Stucco Arched Soffit
2 Low Profile Concrete "S" Roof Tile	10 Metal Railing
3 Round Faux Clay Gable End Vent	11 Fiberglass Entry Door
4 Fascia	12 Decorative Exterior Lights & Address Sign
5 Stucco Sill Trim	13 Metal Sectional Garage Door
6 Vinyl Window	14 Shutter
7 Stucco o/ Foam Corbel	15 Sliding Door
8 Trellis	16 Faux Finial

1 - FRONT

2 - LEFT



3 - REAR

4 - RIGHT

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April 3, 2025

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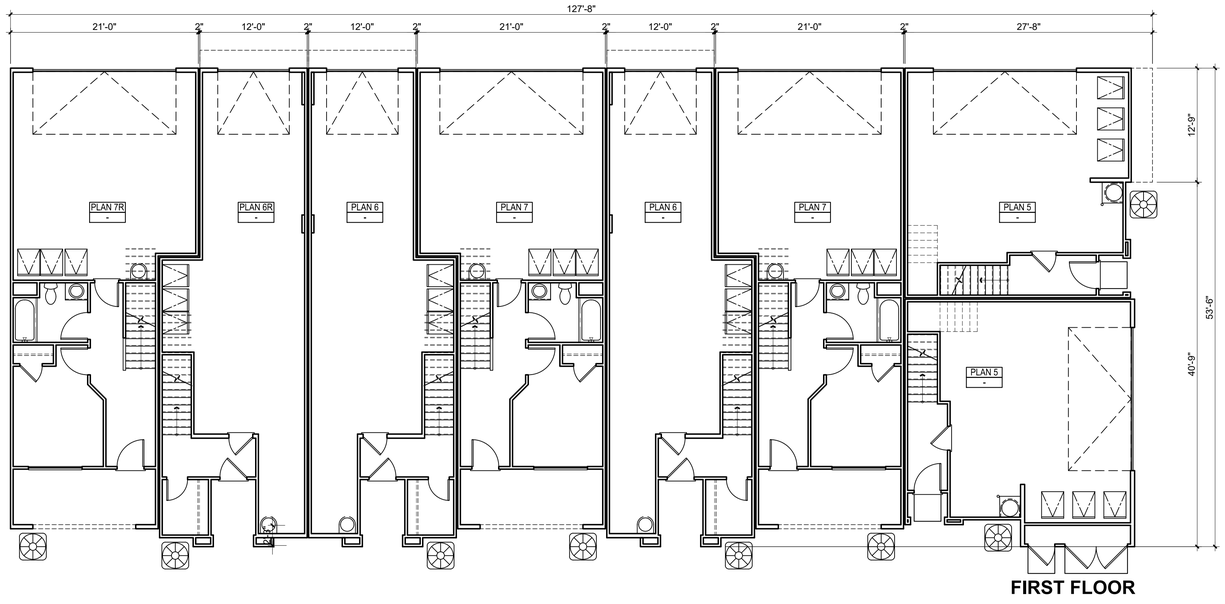
MIRRORED COMPOSITE 'C' ELEVATIONS
SPANISH

A5.83

SECOND FLOOR



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April 3, 2025

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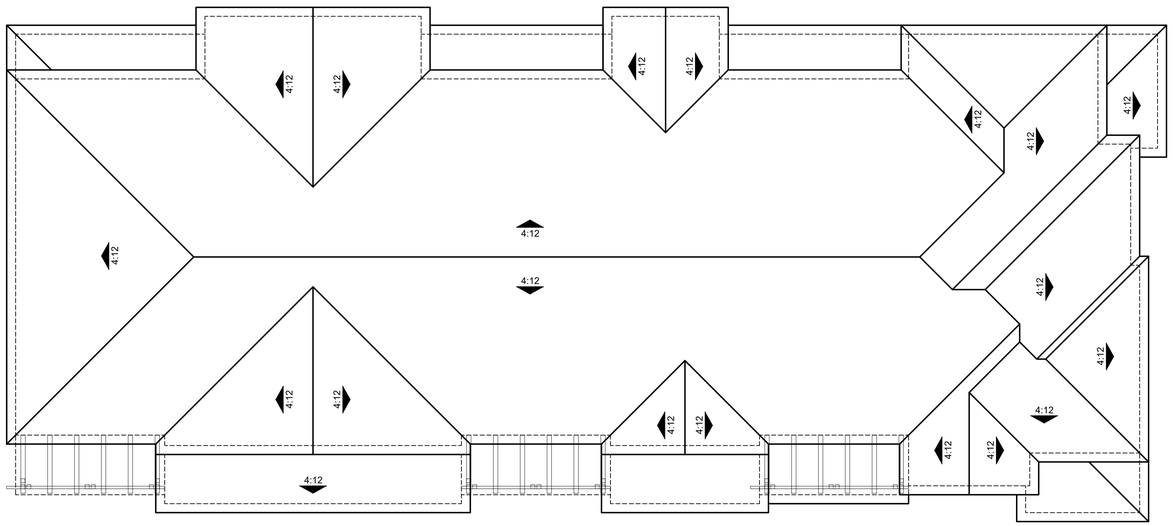
COMPOSITE 'C' FLOOR PLANS
CRC TOWNS

A5.84



ROOF PLAN

THIRD FLOOR

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SCHEMATIC DESIGN
April 3, 2025

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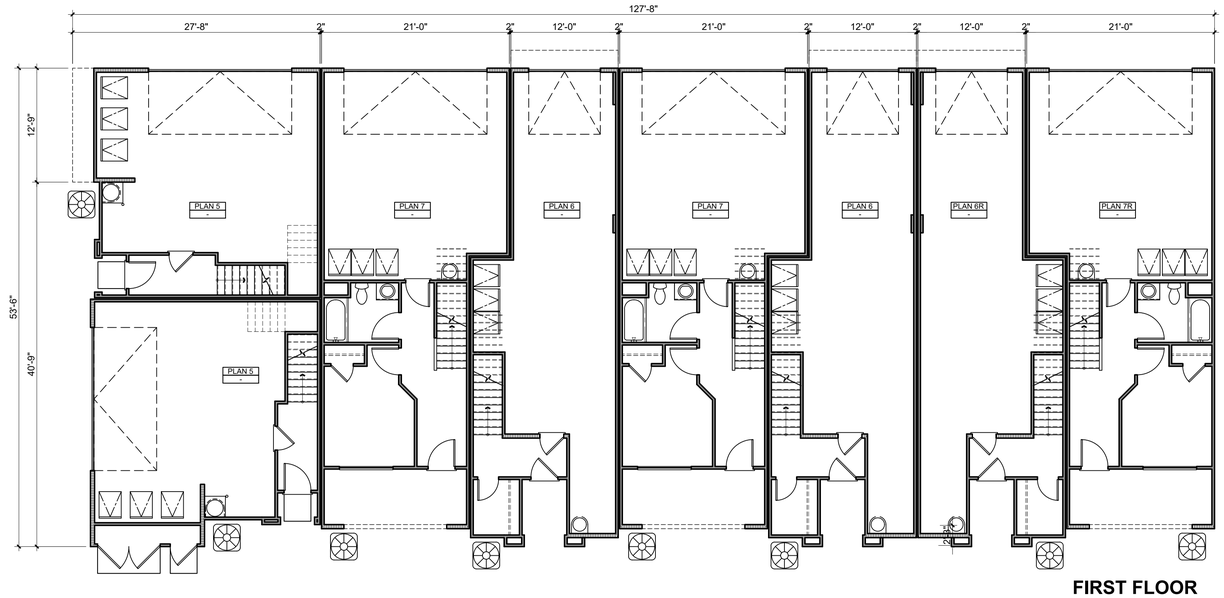
COMPOSITE 'C' FLOOR PLANS
CRC TOWNS

A5.85

SECOND FLOOR



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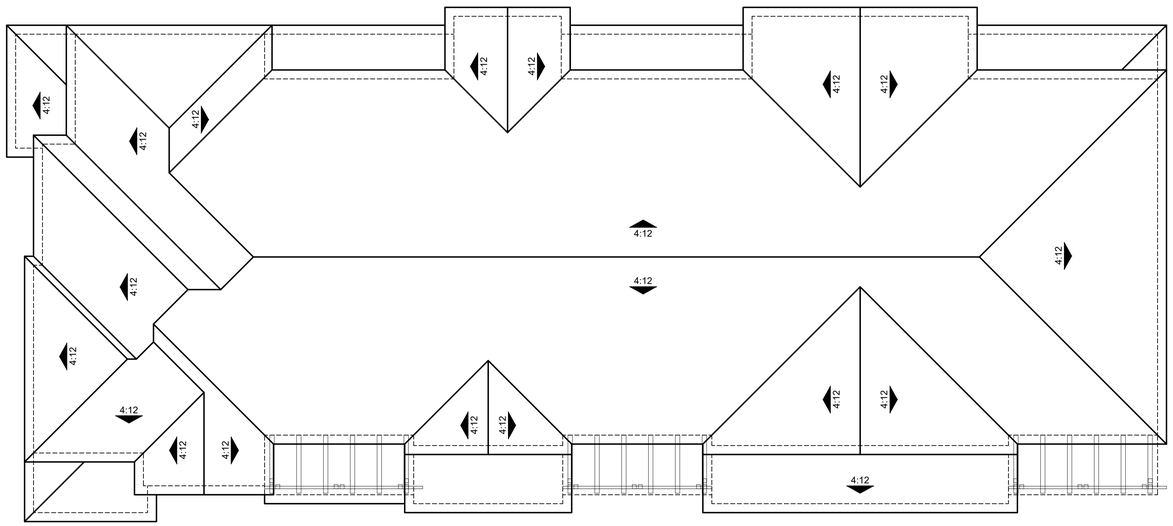
DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

MIRRORED COMPOSITE 'C' FLOOR PLANS
CRC TOWNS

A5.86



ROOF PLAN

THIRD FLOOR

ktgy
17911 Von Karman Ave.
Suite 200
Irvine, CA 92614
ktgy.com
949.851.2133

MLC Holdings Inc.
5 Peters Canyon Rd. #310
Irvine, Ca 92606
MeritageHomes

DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

MIRRORED COMPOSITE 'C' FLOOR PLANS
CRC TOWNS

A5.87

LEGEND

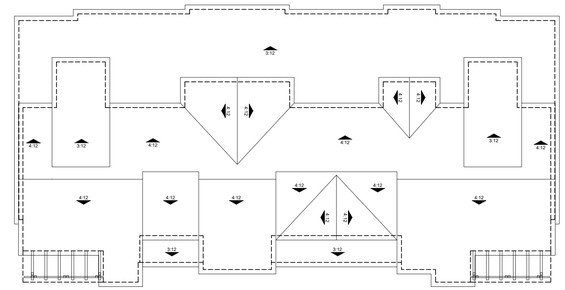
1 Stucco
2 Horizontal Siding
3 Composite Shingle Roof
4 Vinyl Windows
5 Fiberglass Entry Door
6 Metal Sectional Garage Door
7 Decorative Exterior Lights & Address
8 Railing
9 Outrigger
10 Kicker
11 Trellis
12 Window/Opening Trim
13 Window/Opening Header
14 Faux Corbel
15 Sliding Door

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT



5 - ROOF PLAN
SCALE: 1/16" = 1'-0"

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April 3, 2025

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COMPOSITE 'D' ELEVATIONS
4-STORY STACKED FLATS - SEASIDE

A5.90

LEGEND

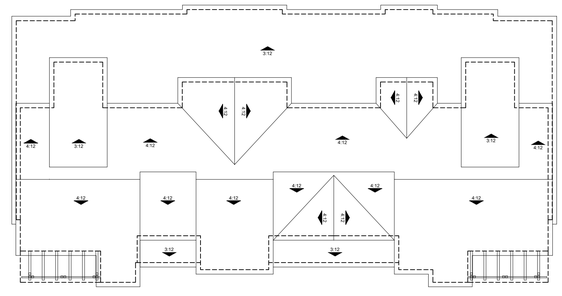
1 Stucco
2 Low Profile Concrete "S" Roof Tile
3 Round Faux Clay Gable End Vent
4 Fascia
5 Stucco Sill Trim
6 Vinyl Window
7 Stucco o/ Foam Corbel
8 Trellis
9 Stucco Arched Soffit
10 Metal Railing
11 Fiberglass Entry Door
12 Decorative Exterior Lights & Address Sign
13 Metal Sectional Garage Door
14 Shutter
15 Sliding Door
16 Faux Finial

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT



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SCHEMATIC DESIGN
April 3, 2025

0 4 8 16

COMPOSITE 'D' ELEVATIONS
4-STORY STACKED FLATS - SPANISH

A5.91

LEGEND

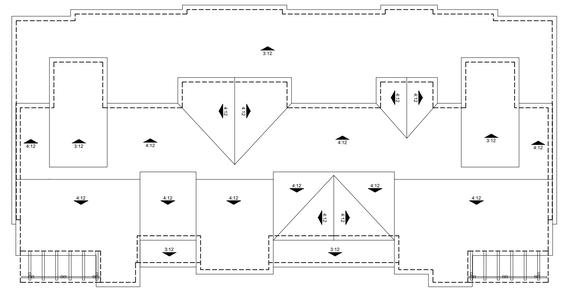
1 Stucco
2 Horizontal Siding
3 Composite Shingle Roof
4 Vinyl Windows
5 Fiberglass Entry Door
6 Metal Sectional Garage Door
7 Decorative Exterior Lights & Address Sign

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT



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SCHEMATIC DESIGN
April 3, 2025

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MIRRORED COMPOSITE 'D' ELEVATIONS
4-STORY STACKED FLATS - SEASIDE

A5.92

LEGEND

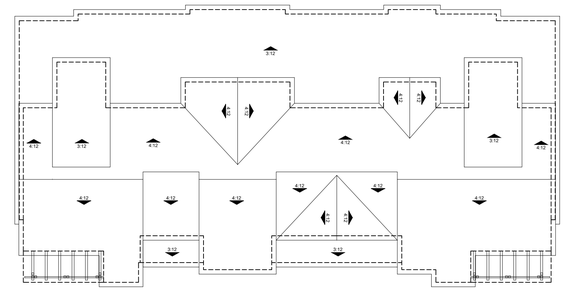
1 Stucco
2 Low Profile Concrete "S" Roof Tile
3 Round Faux Clay Gable End Vent
4 Fascia
5 Stucco Sill Trim
6 Vinyl Window
7 Stucco o/ Foam Corbel
8 Trellis
9 Stucco Arched Soffit
10 Metal Railing
11 Fiberglass Entry Door
12 Decorative Exterior Lights & Address Sign
13 Metal Sectional Garage Door
14 Shutter
15 Sliding Door
16 Faux Finial

1 - FRONT

2 - RIGHT

3 - REAR

4 - LEFT



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April 3, 2025

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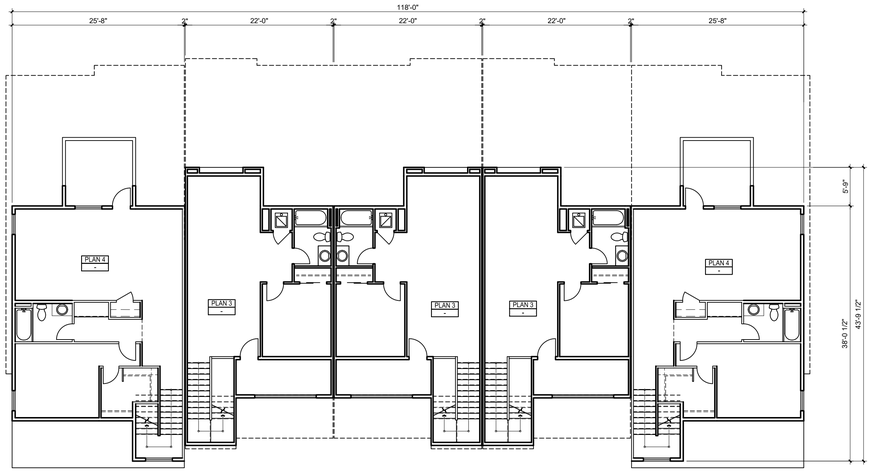
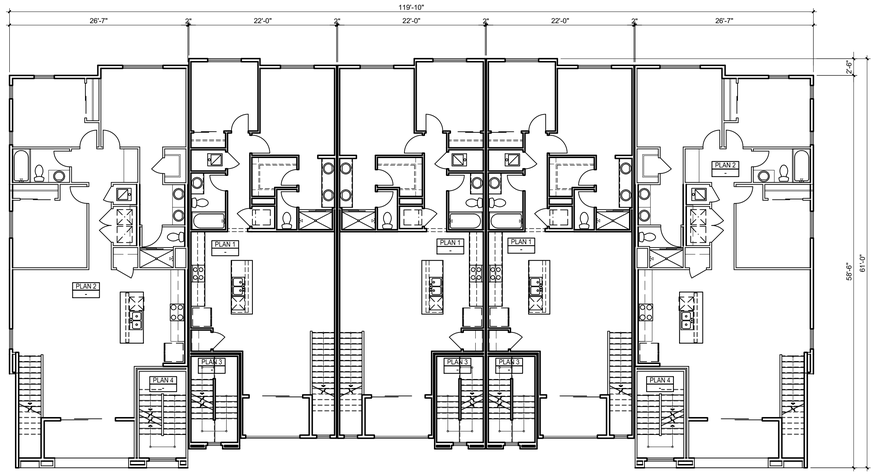
MIRRORED COMPOSITE 'D' ELEVATIONS
4-STORY STACKED FLATS - SPANISH

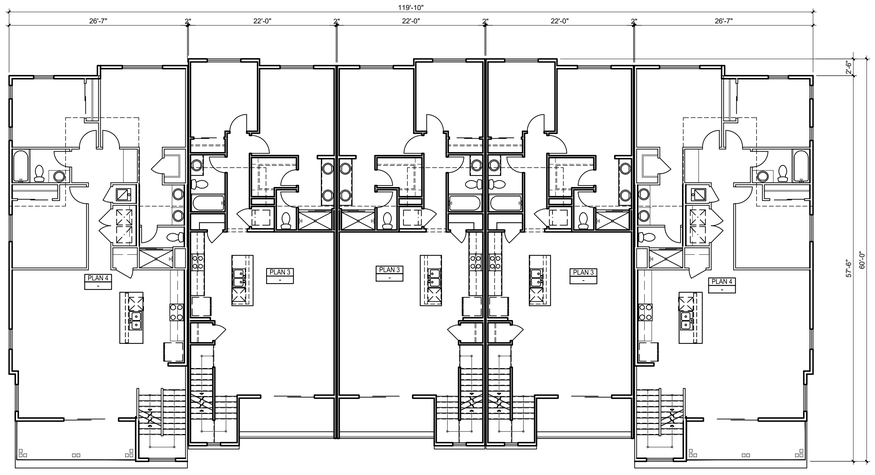
A5.91



FOURTH FLOOR



SECOND FLOOR



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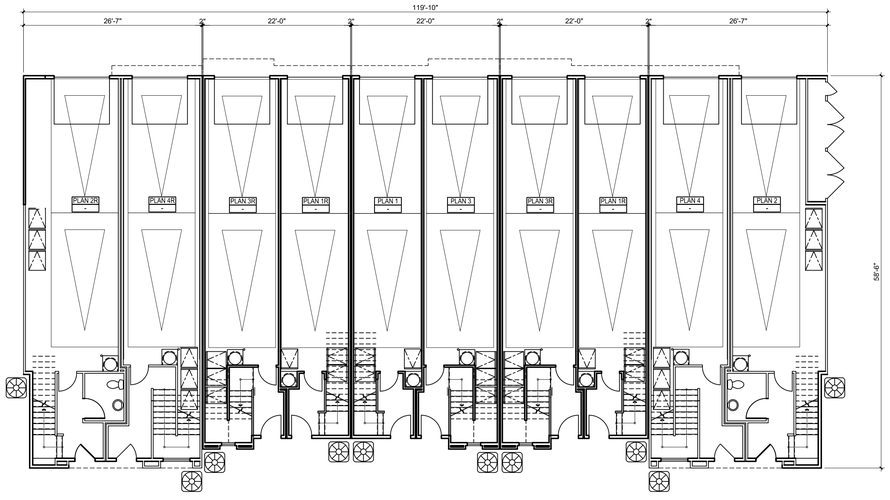

FIRST FLOOR

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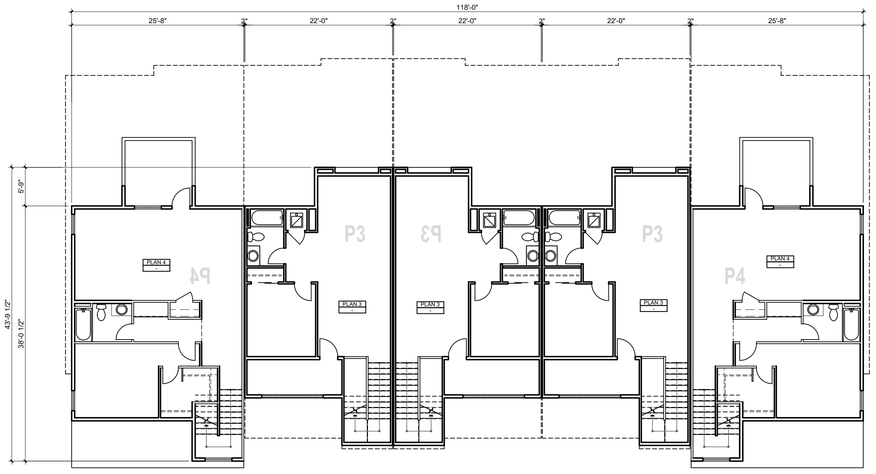
DEL NORTE
WEST COVINA, CA # 20240567

SCHEMATIC DESIGN
April 3, 2025

0 8 16 24

COMPOSITE 'D' FLOOR PLANS
4-STORY STACKED FLATS

A5.94



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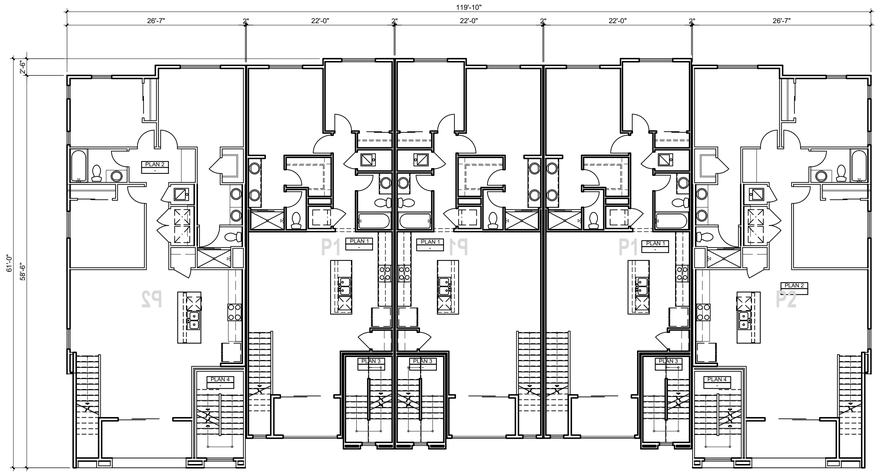

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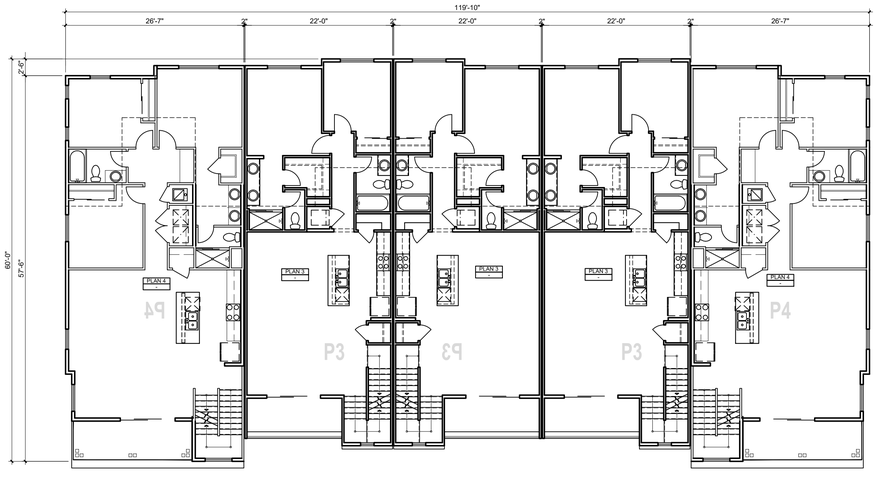

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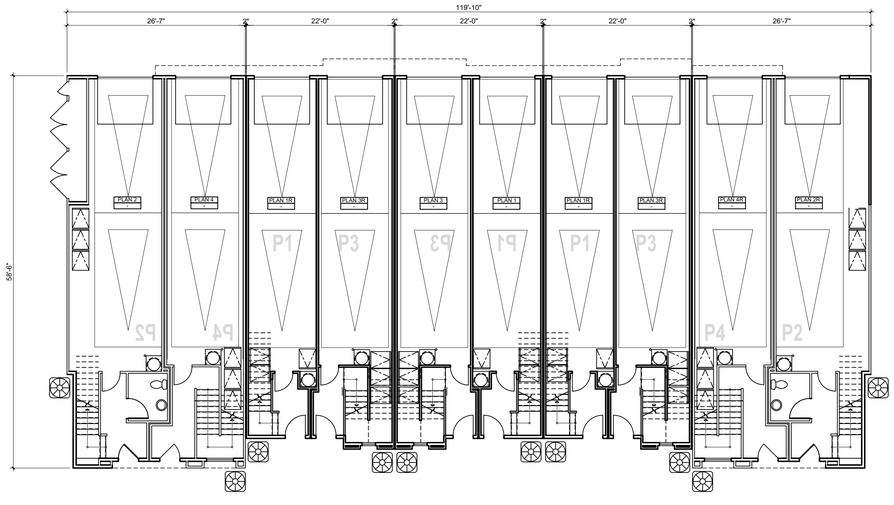

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MIRRORED COMPOSITE 'D' FLOOR PLANS
4-STORY STACKED FLATS

A5.95

LEGEND

1. Project Entry with Enhanced Paving (Refer to L-2)
2. Entry Signage Pilaster
3. Entry Open Lawn Area
4. Concrete Sidewalk
5. Townhome Private Patio
6. Recreation Center (Refer to L-3)
7. Social Open Space (Refer to L-3)
8. Green Paseo (Refer to L-4)
9. Mailbox Cluster
10. Transformer
11. Park Connection with Overhead Portal
12. Perimeter Wall and Fence (Refer to Sheet L-5)
13. Entry Specimen Tree
14. Street Tree
15. Accent Tree
16. Shade Tree
17. Evergreen Park Connection Tree
18. Screen Hedge
19. Vine Planting to Screen Wall
20. Potential City Park Sidewalk

MLC Holdings, Inc.

DEL NORTE - CONCEPTUAL LANDSCAPE SITE PLAN

WEST COVINA, CA

0 20′ 40′ 80′

Scale: 1″= 40′-0″

04.03.25

L-1

C2 Collaborative

LEGEND

1. Project Entry with Enhanced Paving
2. Entry Signage Pilaster
3. Entry Specimen Tree
4. Concrete Sidewalk
5. Single Family Side Yard Wall
6. Townhome Private Patio
7. Screening Vine

KEYMAP

Single Family Front Yard | PA 8'-0" | SW 5'-0" | PKW 5'-0" | Entry Driveway 26'-0" | PKW 5'-0" | SW 5'-0" | PA 8'-0" | Single Family Front Yard

Lot Line — Lot Line

ENTRY ELEVATION A

SCALE: 1/4"=1'-0"

MLC Holdings, Inc.

DEL NORTE - PROJECT ENTRY ENLARGEMENT

WEST COVINA, CA

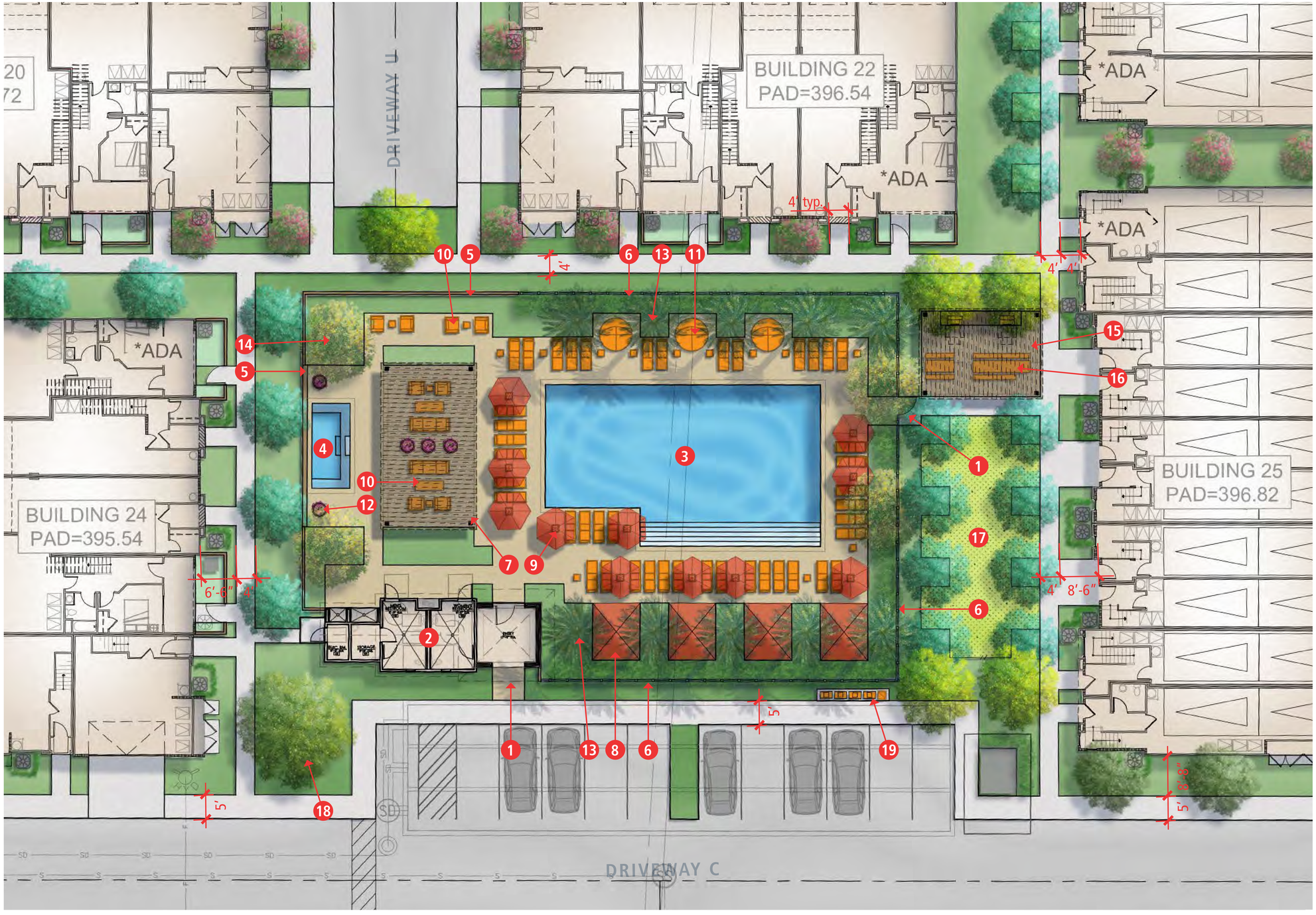
0 5' 10' 20'

Scale: 1"= 10'-0"

04.03.25

L-2

C2 Collaborative



LEGEND

1. Pool Entry
2. Pool Building
3. Pool (34'x 58')
4. Spa (8'x18')
5. Pool Enclosure Wall
6. Pool Enclosure Fence
7. Shade Structure at Rec Center
8. Cabana
9. Lounge Chair with Umbrella
10. Casual Seating
11. Daybed
12. Planter Pot
13. Palm Tree
14. Accent Tree
15. Shade Structure at Social Open Space
16. BBQ Grill with Picnic Table and Chairs
17. Event Lawn
18. Specimen Tree
19. Mailbox

KEYMAP

MLC Holdings, Inc.

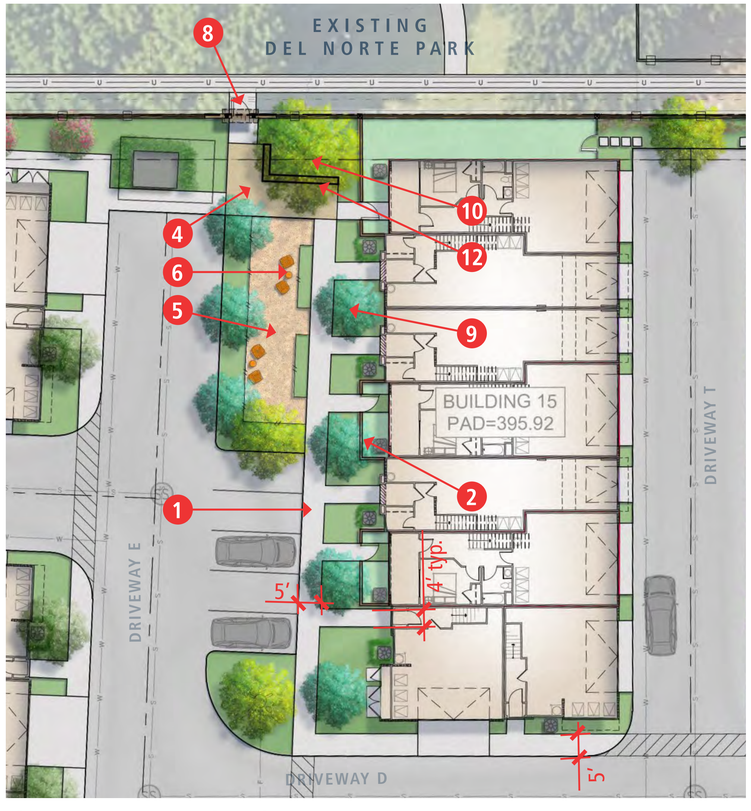
DEL NORTE - RECREATION CENTER & SOCIAL OPEN SPACE ENLARGEMENT

WEST COVINA, CA

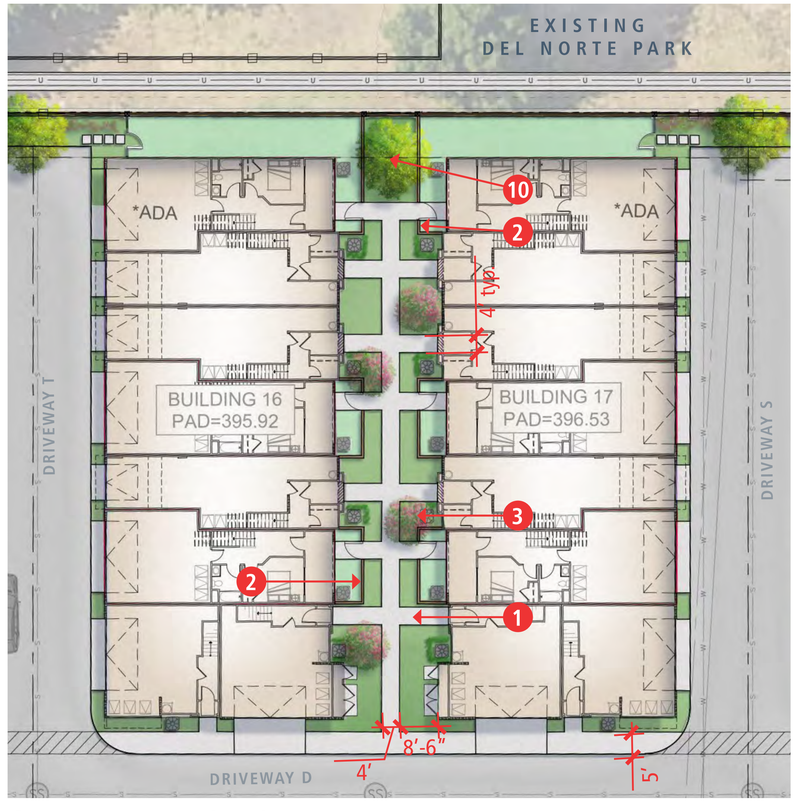
Scale: 1" = 10'-0"

04.03.25

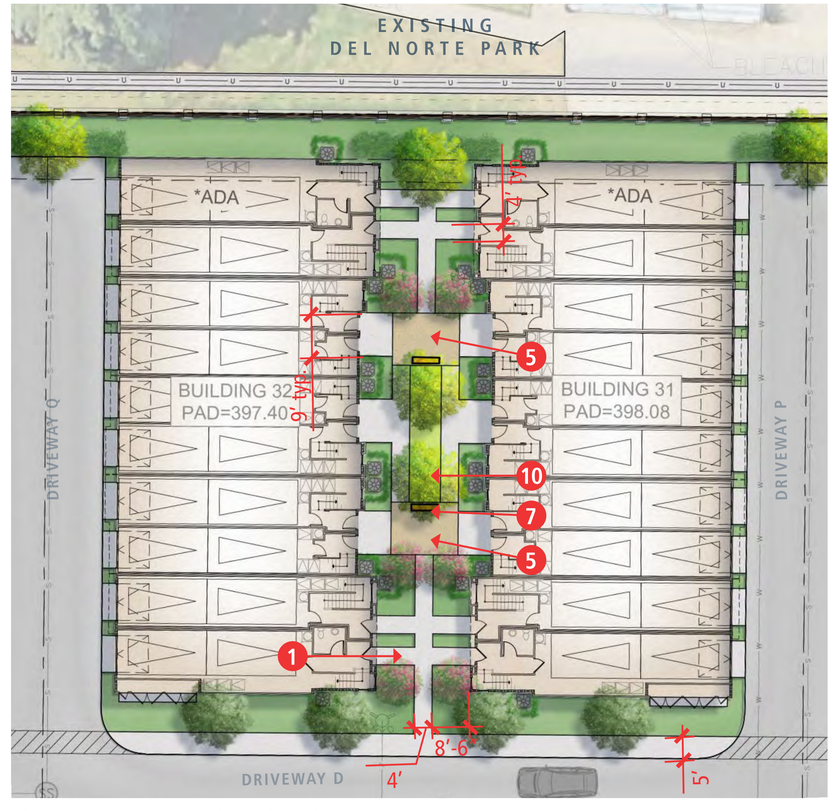
C2 Collaborative



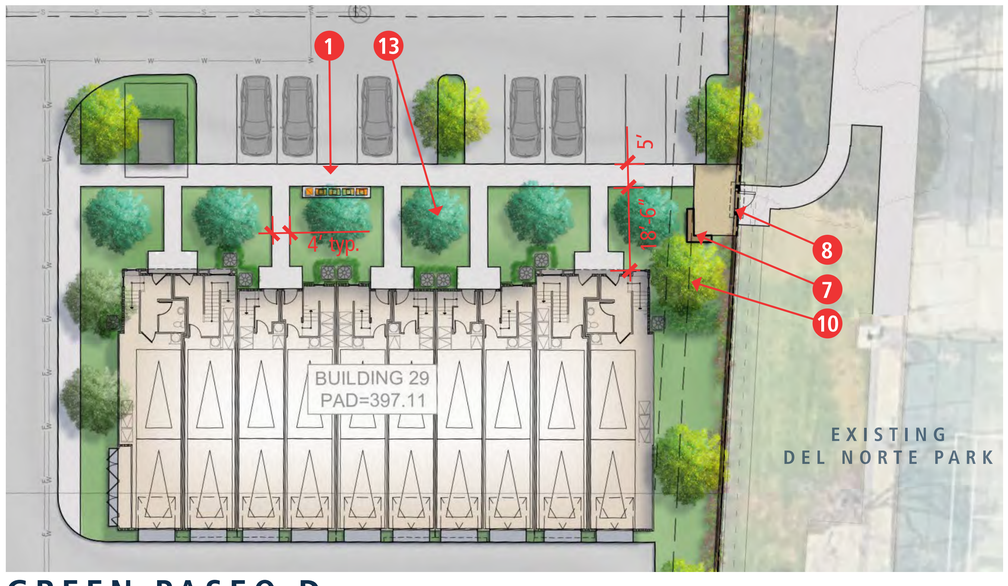
GREEN PASEO A



GREEN PASEO B



GREEN PASEO C



GREEN PASEO D

LEGEND

1. Sidewalk
2. Private Patio Fence
3. Paseo Tree
4. Enhanced Paving
5. DG Paving
6. Casual Seating
7. Benches
8. Park Connection with Overhead Portal
9. Evergreen Park Connection Tree
10. Accent Tree
11. Lawn Area
12. Low Seat Wall
13. Street Tree

KEYMAP

MLC Holdings, Inc.

DEL NORTE - TYPICAL PASEO ENLARGEMENT

WEST COVINA, CA

0 8' 16' 32'

Scale: 1/16" = 1'-0"

04.03.25

L-4

C2 Collaborative

LEGEND

- Entry Signage Pilaster - 8′-0″ht.
- Perimeter Wall - 6′-0″ ht.
- Perimeter Low Wall (3′ht.) with Tubular Steel Fence (3′ht.) - Total 6′-0″ht.
- Single Family / Townhome Side Yard Fence - 6′-0″ht.
- Townhome Private Patio Fence - 3′-6″ ht.
- Pool Enclosure Wall - 6′-0″ht.
- Pool Enclosure Fence - 6′-0″ht.
- Existing Wall to Remain (+/- 6′-0″ht.) (Paint color to match proposed wall.)

- Single Family / Townhome Side Yard Gate
- Townhome Private Patio Gate
- Pool Enclosure Gate
- Park Connection with Overhead Portal

Note:
Graffiti-resistant coatings shall be used on all walls, fences, sign structures, glass panels or similar structures to assist in deterring graffiti.

MLC Holdings, Inc.

DEL NORTE - CONCEPTUAL WALL AND FENCE PLAN

WEST COVINA, CA

0 20′ 40′ 80′
Scale: 1″ = 40′-0″

04.03.25

L-5

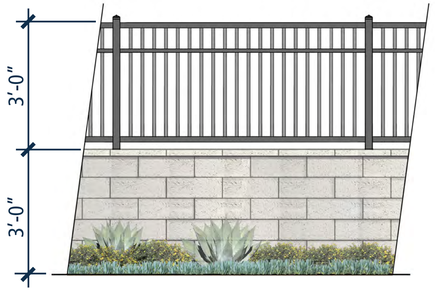
C2 Collaborative

Entry Signage Pilaster

Shot Blast CMU (or Equal)

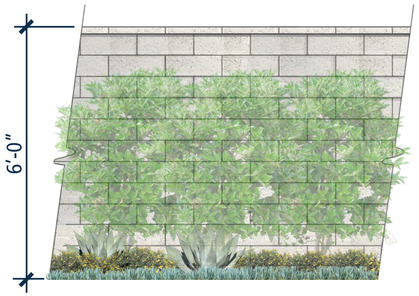
Perimeter Low Wall with Tubular Steel Fence

Slump Block - Gray (or Equal)



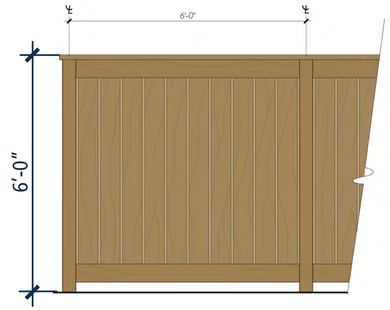
Perimeter Wall

Slump Block - Gray (or Equal)



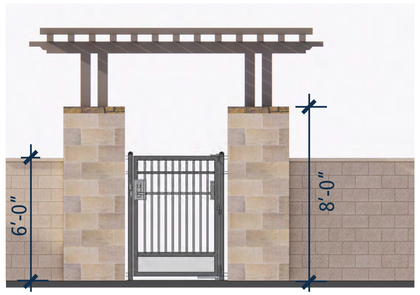
Single Family/ Townhome Side Yard Fence

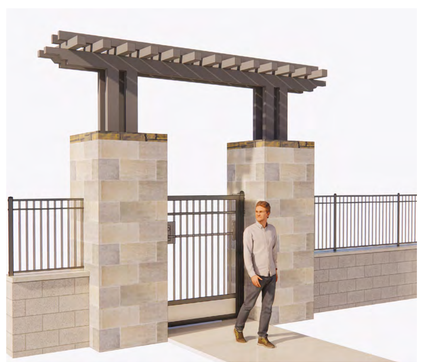
Vinyl Fence with Paint Color: SW7048 Urban Bronze (or Equal)



Park Connection With Portal

Shot Blast CMU (or Equal)





Townhome Private Patio Fence
Townhome Private Patio Gate

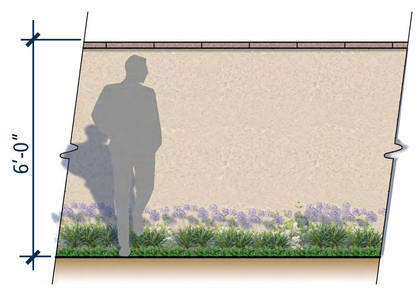
Wood Fence
Color to Match Architecture

Single Family/ Townhome Side Yard Gate

Vinyl Fence with Paint Color: SW7048 Urban Bronze (or Equal)

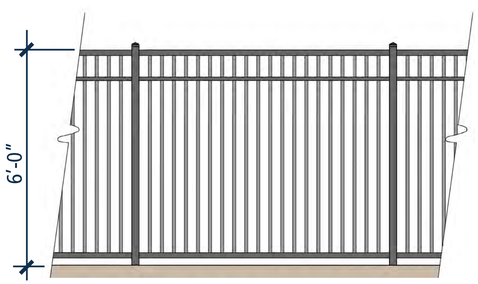
Pool Enclousre Wall

CMU Wall with Stucco finish.
Color to match pool building.



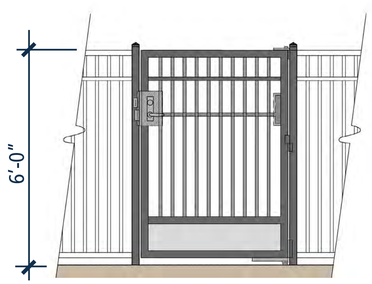
Pool Enclousre Fence

Tubular Steel



Pool Enclousre Gate

Tubular Steel



Maglin - Iconic Tables (Or Equal)

Picnic Table and Benches

Maglin - Iconic Backed/Backless Benches (Or Equal)

Bench

Patioshoppers (Or Equal)

Casual Seating

Maglin - 250 Trash Container (Or Equal)

Trash Receptacle

BBQGUYS
Electri-Chef Rubby Built-In (Or Equal)

BBQ Grill

MailboxUSA

Mailbox

Zerowasteusa (Or Equal)

Pet Waste Station

LEGEND

- Street/Parking Lot Light
- Bollard Light
- Tree Uplight
- Palm Tree Ring Light
- Column Sconce Light
- Sign Uplight

MLC Holdings, Inc.

DEL NORTE - CONCEPTUAL LIGHTING PLAN

WEST COVINA, CA

0 20′ 40′ 80′

Scale: 1″ = 40′-0″

04.03.25

L-8

C2 Collaborative

Bega (Or Equal)

Street/Parking Lot Light

Bega (Or Equal)

Bollard Light

SiteOne (Or Equal)

Tree Uplight

Focus - FA-TR Series (Or Equal)

Palm Tree Uplight

Bega (Or Equal)

Wall/Column Sconce Light

SPJ Lighting (Or Equal)

Sign Uplight

LEGEND

- Low Water Use
- Miedium Water Use
- High Water Use
- Water Feature

Project Name: Del Norte, West Covina

Date: 03/31/2025

WATER EFFICIENT WORK SHEET

Maximum Applied Water Allowance (MAWA)

Total MAWA = [Eto x 0.50 x LA in Sq.ft. x 0.62]+[Eto x 1.0 x SLA in Sq.ft. x 0.62]= Gallons per year for LA + SLA

Hydrozone:	Eto:	KL	LA Sq. Ft.	Conversion	SLA Sq. Ft.	MAWA
Landscaped Area	51.3	0.55	77,428	0.62	NA	1,354,471

MAWA= Maximum Applied Water Allowance (gallons per year)
Eto= Reference Evapotranspiration from Appendix C (inches per year)
0.50= Evapotranspiration Adjustment Factor (ETAF)
1.0= ETAF for Sprcial Landscaped Area
LA= Landscaped Area includes Special Landscape Area (square feet)
0.62= Conversion Factor (to gallons per square foot)
0.3= the additional ET adjustment Factor for Special Landscape Area (1.0- 0.7= 0.3)
SLA= Special Landscape Area (square feet)

Applicant to fill in boxes below:

Eto (Reference Evapotranspiration from Appendix C inches per year)	47.2
Landscaped Area includes Special Landscape Area (square feet)	77,428
Special Landscape Area (square feet)	0

Estimated Annual Water Use:

Total EAWU= [Eto x KL x LA in Sq.ft. / IE]= Gallons per Year

Hydrozone:	Eto:	KL	Sq. Ft.	Conversion	IE	EAWU
Low Water Use Shrubs	51.3	0.2	33,441	0.62	0.81	262,623
Medium Water Use Shrubs	51.3	0.5	39,074	0.62	0.81	767,153
High Water Use	51.3	0.8	2,955	0.62	0.73	102,999
High (Water Feature)	51.3	1.0	1,958	0.62	1.00	62,276
Total EAWU			77,428			1,195,051

EAWU= Estimated Applied Water Use (gallons per year)
Eto= Reference Evapotranspiration from Appendix C (inches per year)
Kl= Landscape Coefficient
LA= Landscaped Area (square feet)
0.62= Conversion Factor (to gallons per square foot)
IE= Irrigation Efficiency= IME X DU (See definication in Appendix E for exmaplne IE percentages)
IME= Irrigation Management Efficiency (90%)
DU= Distribution Uniformity of Irrigation Head
Kl= Ks x Kc x Kmc
Ks= species factor (range 1.0- 0.9) (see WUCOLS list for values)
Kd= density factor (range 0.5- 1.3) (see WUCOLS list for density value)
Kmc= microclimatic factor (range 0.5- 1.4) (see WUCOLS)

Table A- PF (Plant Factor)
Cool Season Turf= 0.8
Warm Season Turf= 0.7
High Water Use Plants= 0.7 (can be between 0.7-0.9)
Moderate Water Use Plants= 0.5 (can be between 0.4-0.6)
Low Water Use Plants= 0.2 (can be between 0.1-0.3)
Very Low Water Use Plants= 0.1

IE (Irrigation Efficiency)- Appendix E
Pop-up Stream Rotor= 0.73
Rotor Head= 0.76
Microspray= 0.76
Bubblers= 0.77
Drip Emitters= 0.81
Subsurface Irrigations= 0.81

Note:
1. Single family irrigation efficiency shall be calculated individually for all front and backyard aggregated planting area more than 500 sqft in later phase before building permit.

2. All planting areas shall have a fully automatic irrigation system. Utilization water conserving features such as low-precipitation rate heads; low-flow micro sprays or drip irrigation, water sensors and multi-program controllers with weather station capability and drip circuit features. "Water Efficient Landscapes" irrigation system, scheduling and water use WELO calculations shall be designed to meet the requirements of the specifications of the City of West Covina.

MLC Holdings, Inc.

DEL NORTE - PRELIMINARY IRRIGATION CALCULATION

WEST COVINA, CA

0 20' 40' 80'
Scale: 1"= 40'-0"

04.03.25 L-10

C2 Collaborative

TREE SCHEDULE:

BOTANICAL NAME	COMMON NAME	SIZE
Arbutus unedo	Strawberry Tree	15 gal min
Archontophoenix cunninghamiana	King Palm	15 gal min
Cercidium 'Desert Museum'	Desert Museum Palo Verde	15 gal min
Cercis occidentalis	Western Redbud	15 gal min
Chilopsis linearis	Desert Willow	15 gal min
Cupressus sempervirens	Italian Cypress	15 gal min
Dracaena draco	Dragon Tree	15 gal min
Magnolia g. 'St. Mary's'	Magnolia	15 gal min
Olea europaea 'Swan Hill'	Swan Hill Olive	15 gal min
Podocarpus gracilior	Fern Podocarpus	15 gal min
Platanus racemosa	California Sycamore	15 gal min
Pyrus calleryana 'Chanticleer'	Chanticleer Callery Pear	15 gal min
Quercus ilex	Holly Oak	15 gal min
Rhus lancea	African Sumac	15 gal min
Tipuana tipu	Tipu Tree	15 gal min
Tristania conferta	Brisbane Box	15 gal min
Ulmus parvifolia	Chinese Elm	15 gal min

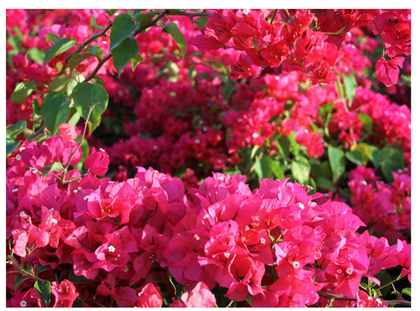
SHRUB SCHEDULE:

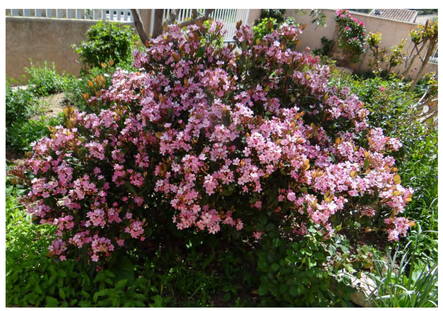
BOTANICAL NAME	COMMON NAME	SIZE
Agapanthus 'Peter Pan'	Dwarf Lily of the Nile	1 gal
Agapanthus 'Queen Anne'	Lily of the Nile	1 gal
Agave desmettiana 'Variegata'	Variegated Smooth Agave	15 gal
Aloe vera	Aloe Vera	5 gal
Bougainvillea 'Oo La La'	Bougainvillea	5 gal
Calliandra haematocephala	Pink Powder Puff	5 gal
Carissa m. 'Boxwood Beauty'	Boxwood Beauty Natal Plum	5 gal
Dietes bicolor	Fortnight Lily	5 gal
Hesperaloe parviflora	Red Yucca	1 gal
Lavandula dentata	French Lavender	5 gal
Leucophyllum f. 'Green Cloud'	Green Cloud Texas Sage	5 gal
Lomandra longifolia	Spiny-headed Mat Rush	5 gal
Prunus caroliniana 'Bright n Tight'	Cherry Laurel	15 gal
Rhaphiolepis i. 'Clara'	Clara Indian Hawthorn	5 gal
Rhaphiolepis i. 'Majestic Beauty'	Majestic Beauty Hawthorn	5 gal
Rosa x 'Radrazz'	Knock Out Shrub Rose	5 gal

GROUNDCOVER SCHEDULE:

BOTANICAL NAME	COMMON NAME	SIZE
Lantana montevidensis 'Alba'	White Trailing Lantana	1 gal
Lonicera japonica 'Halliana'	Hall's Honeysuckle	1 gal
Rosmarinus 0. 'Huntington Carpet'	Rosemary Huntington Carpet	1 gal
Senecio mandraliscae	Blue Chalk Sticks	1 gal

Note: 1. Plant selection and landscape/irrigation design should comply with the Water Efficient Landscape requirements and ordinances.





LEGEND

- Entry Specimen Tree
- Accent Tree
- Sigle Family Front Yard Tree
- Puiblic Street Tree
- Community Street Tree
- Evergreen Park Connection Tree
- Green Paseo Tree
- Pool Area Accent Tree
- Pool Area Palm Tree
- Shrub and Groundcover
- Vine/Espalier
- Hedge

TREE CALCULATION

Tree To Be Removed: 26 (Refer to L-13)

Tree Proposed: 295

Required Replacement Retio: 1:1

Proposed Replacement Retio: 1: 11

MLC Holdings, Inc.

DEL NORTE - CONCEPTUAL TREE PLAN

WEST COVINA, CA

0 20' 40' 80'

Scale: 1" = 40'-0"

04.03.25

L-12

C2 Collaborative

Tree ID #	Scientific Name	Common Name	Tree Height (Feet)	Number of Trunks	Cumulative DSH (Inches)	Individual DSH (Inches)	Overall Health	Notes	Damage/ Issues	Crown Radius N (feet)	Crown Radius NE (feet)	Crown Radius E (feet)	Crown Radius SE (feet)	Crown Radius S (feet)	Crown Radius SW (feet)	Crown Radius W (feet)	Crown Radius NW (feet)	Age Class	S or NS
13	Ficus microcarpa	Chinese banyan						13 is the starting number for tree ID											NS
14	Quercus agrifolia	coast live oak	40	1	32	32	Good		minor dieback, previous pruning	25	20	10	20	20	25	20	25	Mature	S
15	Quercus ilex	holly oak	45	1	21	21	Good			15	10	10	10	15	15	15	10	Mature	NS
16	Quercus ilex	holly oak	50	1	34	34	Good			35	35	25	35	35	35	45	40	Mature	NS
17	Ulmus parvifolia	Chinese elm																	NS
18	Ulmus parvifolia	Chinese elm																	NS
19	Olea europaea	common olive																	NS
20	Olea europaea	common olive																	NS
21	Ulmus parvifolia	Chinese elm																	NS
22	Ulmus parvifolia	Chinese elm																	NS
23	Ulmus parvifolia	Chinese elm																	NS
24	Quercus ilex	holly oak	45	1	29	29	Good		minor dieback	20	20	20	20	20	25	20	20	Mature	NS
25	Quercus ilex	holly oak	35	1	17	17	Good		healed wounds on trunk	10	10	10	10	10	10	10	10	Mature	NS
26	Quercus ilex	holly oak		1	16	16	Good			10	10	15	15	20	10	10	10	Mature	NS
27	Cedrus deodara	deodar cedar																	NS
28	Ulmus parvifolia	Chinese elm			7	2, 2, 3													NS
29	Ulmus parvifolia	Chinese elm			10	2, 2, 3, 3													NS
30	Fraxinus uhdei	shamel ash		2	35	17, 18	Good	not tagged		25	20	20	15	10	15	15	25	Mature	S
31	Cupaniopsis anacardioides	tuckeroo	30	1	17	17	Fair	not tagged, comm lines running through canopy	cracked bark, exposed cambium, 15% dieback	10	5	5	10	15	15	10	10	Mature	S
32	Ornamental	ornamental	30	1	12	12	Good	no foliage currently, not tagged		10	10	10	10	10	10	10	10	Mature	S
33	Ornamental	ornamental	30	1	13	13	Good	no foliage currently, not tagged		15	10	15	10	10	10	15	15	Mature	S
34	Liriodendron tulipifera	tulip tree	50	1	21	21	Good	minor foliage currently, not tagged		20	20	20	20	20	20	20	20	Mature	S
35	Pyrus calleryana	callery pear	30	1	12	12	Good	no foliage currently, not tagged		10	10	10	10	10	10	10	10	Mature	S
36	Pyrus calleryana	callery pear	30	1	14	14	Good	no foliage currently, not tagged		10	10	10	10	10	15	10	10	Mature	S
37	Liriodendron tulipifera	tulip tree	45	1	20	20	Good	minor foliage currently, not tagged		20	20	20	20	15	20	20	20	Mature	S
38	Liriodendron tulipifera	tulip tree	40	1	15	15	Good	no foliage currently, not tagged		15	10	10	10	10	15	15	15	Mature	S

Imagery provided by Microsoft Bing and its licensors © 2025.

24-17187 BIO
Fig X Tree Locations

Appendix C

Arborist Report

1501 Del Norte Street Residential Project

Arborist Report

prepared for

City of West Covina
Planning Division, Department of Community Development
1444 West Garvey Avenue, Suite 317
West Covina, California 91790
Contact: Jo-Anne Burns, Deputy Community Development Director

prepared by

Rincon Consultants, Inc.
250 East 1st Street Suite 1400
Los Angeles, California 90012

April 2025

RINCON CONSULTANTS, INC. SINCE 1994

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1 Introduction

Rincon Consultants, Inc. (Rincon) has prepared this Arborist Report for the residential development at 1501 Del Norte Street (project) in the city of West Covina (City). The purpose of this report is to document trees located on the project site that are protected in accordance with the City of West Covina Tree Ordinance. This report includes a summary of the methods used for the tree survey, results, an analysis of the project's proposed impacts on City protected trees, necessary mitigation, and tree protection recommendations during construction activities.

1.1 Regulatory Context

In accordance with the Article VI, Division 10 – Preservation, Protection and Removal of Trees (Ordinance No. 2519; City 2024), a tree permit is required to:

- Remove, relocate, or destroy any significant or heritage trees on private or public property.
- Prune or trim more than 20 percent of live foliage or limbs from any oak tree as defined in this article

A heritage tree generally means any tree(s) identified as such by the City's Planning Commission and/or any of the Southern California black walnut (*Juglans californica*) tree species located in the San Jose Hills, as found within the City's jurisdictional boundaries.

A significant tree is a tree located on private and/or public property that meets one or more of the following requirements:

- Is located in the front yard of a lot or parcel and has a caliper[1] of one foot or more, as measured four and one-half feet above mean natural grade;
- Is located in the street-side yard of a corner lot and has a caliper of one foot or more;
- Is located anywhere on a lot, has a caliper of six inches, or more, and is one of the following species: any oak tree native to California, including but not limited to California live, canyon, interior, mesa, scrub, or valley oak (*Quercus agrifolia, Q. chrysolepis, Q. wislezenii, Q. engelmanii, Q. dumoso, or Q. lobata*); California sycamore (*Platanus racemosa*); or American sycamore (*Platanus occidentalis*).

Tree removal is defined as the uprooting, cutting, or severing of the main trunk or any act which causes, or may be reasonably expected to cause a tree to die or to be seriously damaged. This includes damaging the root system by machinery, storage of materials within the dripline, soil compaction, or substantially changing the grade around the root system, excessive pruning, or paving with concrete, asphalt, or other inadequate irrigation.

[1] Caliper is defined by the Tree Ordinance as the maximum diameter of the trunk of a tree measured at 4.5 feet above the natural grade. In the case of multi-trunked trees, caliper shall mean the sum of the calipers of each individual trunk measured at 4.5 feet above grade.

1.2 Project Location and Description

The project involves the demolition of the existing buildings and structures on the project site, followed by construction of 34 single-family detached homes and 248 attached townhomes, for a total of 282 homes. The project site is 13.56 acres, of which 13.19 acres would be developed for residential uses, and the additional 0.37 acres would be converted and used as an extension and dedication of Del Norte Street from its current terminus east to Sunset Avenue.

The proposed project would provide approximately 120,891 square feet (sf) of common open space, including an 18,000 sf central community space which would provide amenities such as a BBQ with shade structure, seating, and a turf area for passive lawn play, and a tot lot. Landscaping, including a variety of trees, shrubs, and groundcover would be provided throughout the project site. Fencing and walls would be used throughout the project site and along the project site borders to define private and semi-private spaces and would serve as a unifying design element. Fencing and perimeter walls would range from three feet to six feet in height. In addition, the project approvals include establishing a new Specific Plan for the site, which would provide land use and development standards for the proposed project and would allow the proposed net density of 21.4 dwelling units per net acre.

Vehicles would be able to access the proposed project via a primary entrance on West Del Norte Street, and a secondary entrance on North Nora Avenue. The primary entry would be defined by pedestrian entry portals, enhanced landscaping and paving, and parkways and sidewalks on both sides. Both entrances would be defined with enhanced landscaping and paving, accent trees, and project signage. In addition, a 26-foot wide private street would provide vehicular access to all homes, which would be connected by the primary entrance on West Del Norte Street and the secondary entrance on North Nora Avenue. Pedestrians would be able to access the project site via the sidewalks along West Del Norte Street and North Nora Avenue.

Construction phases would include demolition, site preparation, grading, building construction, paving, and architectural coating.

2 Methodology

2.1 Tree Survey

On March 14, 2025, International Society of Arboriculture (ISA) Certified Arborist Alicia McCracken (WE-15724A) surveyed all protected significant and non-protected non-significant (not meeting the criteria for significant trees) on site, as well as significant trees directly adjacent to the site. Tree locations were mapped using a Geode global positioning system (GPS) device capable of sub-meter accuracy. All surveyed trees were assigned a unique identification number and corresponding round metal tag affixed to the most accessible side of the trunk of protected trees located on the project site. Only above ground portions of the trees were examined. An assessment of risks or hazardous conditions was not included as part of this survey. Trees were categorized as native and non-native (Jepson Flora Project 2025) in determining significant status.

For each significant tree, the arborist recorded the species, measured caliper using a forester's diameter tape, estimated tree height and crown spread in eight cardinal and ordinal directions, identified conditions of concern, and noted any unique features or atypical conditions. A general health assessment, including evidence of disease, insect pests, structure, damage, and vigor, was assessed to determine an overall condition rating based on archetype trees of the same species, using the criteria described in Table 1 below. For non-significant trees, the arborist only recorded the species. Appendix A (Tree Matrix) includes the data collected for all surveyed trees. Representative photographs of each tree can be found in Appendix B (Tree Photographs).

Table 1 Overall Condition Rating Criteria

Rating	Health Condition
Excellent	The tree exhibits a well-developed root flare and is structurally stable. The crown is balanced and full of dark green leaves. Tree exhibits excellent vigor and there are no signs or symptoms of biotic or abiotic disorders. Provides shading and/or is aesthetically pleasing.
Good	Trunk is well developed with well attached limbs and branches; some flaws exist but are insignificant. Foliage is healthy with good cover, density, and vigor. Annual shoot growth above average. Provides shading and has minor aesthetic flaws.
Fair	Flaw in trunk, limb and branch development are minimal and are typical of this species and geographic region. Minimal visual damage from biotic or abiotic disorders, such as insect infestation, disease, or fire damage, respectively; average foliage cover and annual growth.
Poor	Limbs or branches are poorly attached or developed. Canopy is not symmetrical and/or tree is leaning. May exhibit severe fire damage that affected its health and/or physical structure, responses to external physical barriers affecting root growth or extensive insect/disease damage.
Dead	Trunk, limbs, and branches have no visible sign of life. Canopy leaves are non-seasonally absent or uniformly necrotic throughout, with no evidence of new growth. Exfoliating bark may be present.

2.2 Root Zone Determination

The critical root zone (CRZ) is an area around a tree where the minimum amount of roots that are biologically essential to structural stability and health of the tree are located (ISA 2022, 2023). The tree protection zone (TPZ) is an area within which certain activities are prohibited or restricted to prevent or minimize potential injury to trees. The TPZ can be determined by an arborist based on

tree species, size, condition, and maturity or is determined by permitting agencies with jurisdiction over the trees (ISA 2022, 2023). The TPZ can be calculated or specified and should encompass the CRZ.

For the purposes of this report, the CRZ is defined in the Tree Ordinance §26-263(f) as the area three-and-one-half times the trunk diameter where root cutting should be prohibited. The specified TPZ is defined consistent with the Tree Ordinance §26-258(l) and §26-263(c) as the dripline[2] and a 6-foot radius around the trunk and encompasses the CRZ.

2.3 Tree Mapping Methods

All significant and non-significant trees surveyed were mapped in ArcGIS. The trunk locations shown on the Tree Location Map (Appendix C) are based on the GPS waypoint location recorded by the arborist from one side of the tree's trunk. The tree map includes the project site boundary (MLC Holdings 2025), tree number of all trees, and the dripline of significant trees. Note that for all protected trees surveyed and mapped, the dripline is equivalent to the TPZ and encompasses a 6-foot radius around the trunk and the CRZ. Also note that driplines are shown for some non-significant holly oak trees (15, 16, 24, 25, and 26) because their crown data was captured during the survey, but these trees were later determined not to be native oaks.

[2] The dripline is an imaginary line on the ground, at the furthest extension of canopy around the circumference of the tree.

3 Tree Survey Results and Discussion

A total of 26 trees were surveyed, of which 1 is a significant tree and 25 are non-significant trees. As shown on the Tree Location Map (Appendix C), seven of the non-significant trees are street trees located along North Nora Avenue outside of the project boundary and 18 are located within the project boundary within landscaped areas and adjacent to buildings. One non-significant tree (#30) is located adjacent to a single-family residence. There are no designated heritage trees within or adjacent to the project site. None of the trees are so diseased or damaged that they are no longer viable or are a threat to other protected plant species, per Tree Ordinance §26-260(c). Data collected for each tree is summarized in Appendix A.

3.1 Proposed Actions to Trees

The following actions are proposed for the surveyed trees:

- **Preservation.** Tree would be completely avoided by construction activities or minor to moderate impacts to the TPZ. The post-construction health effects for trees in this category are expected to be no effects or minor and temporary at most. Trees are not expected to be structurally destabilized.
- **Removal.** The tree would be completely removed, or serious damage to the tree. This includes the uprooting, cutting, or severing of the main trunk or any act which causes, or may be reasonably expected to cause a tree to die or to be seriously damaged. This includes damaging the root system by machinery, storage of materials within the dripline, soil compaction, or substantially changing the grade around the root system, excessive pruning, or paving with concrete, asphalt, or other inadequate irrigation. The post-construction health effects for trees in this category are expected to be minor to severe, that could be temporary or permanent (including dieback, decline, decay, and possibly death). Trees may be at increased risk of failure during atypical weather events that produce high winds and oversaturated soils. Trees that are seriously damaged should be mitigated as removals because their long-term health and survival are unknown, but they may not need to be physically removed (if an arborist determines that failure would not be imminent or probable due to loss of structural roots).

3.1.1 General Impact Discussion

Due to the nature of excavation, grading, and trenching, the greatest concern to tree health and mortality associated with the project is root damage. Proposed tree root impacts can be estimated based on the amount of construction activities that would occur within the root zone by calculating the percentage of impact within the tree's root zone (generally based on the dripline) and severity of impacts to the tree, such as the distance of root impacts from the tree's trunk. In general, encroachments within the root zone, such as root severance and soil compaction, increase the likelihood that the tree will experience negative health impacts including dieback, decline, decay, and death. The ISA acknowledges that removing 20-25 percent of the roots of a tree could result in mortality, and in general it is not recommended to remove more than 30 percent of the tree's live tissue, either above or below ground, at any given time (Arborilogical 2009). Encroachments close to the trunk within the area three to five times the diameter of the trunk, particularly root severance of larger roots (lateral or sinker roots and roots greater than two inches in diameter), increase the likelihood of tree destabilization (tree failure).

Existing conditions are also considered in estimating the tree's root zone and susceptibility to construction impacts. In general, tree roots are expected to be less abundant in paved or unpaved roads due to the compacted nature of the soil where roots may be deprived of water and oxygen, and where physical barriers such as retaining walls or drainages are present, roots may be impeded or have been previously severed. The type of tree and topography are also considered. For example, angiosperm trees (including oak trees) which are leaning or growing on a slope typically have roots which are larger and/or extend further on the tension side (opposite side of the lean or uphill side), whereas gymnosperm trees typically have roots which are larger and/or extend further on the compression side (same side of the lean or downhill side) (Groover 2016). Oak trees commonly grow on both steep slopes and flat terrain in California and develop different structural characteristics, as such, cutting roots on the uphill side of oak trees can be more impactful than on the downhill side, depending on the severity of the slope (University of California Agriculture and Natural Resources 2011).

Actual impacts at the time of construction may be more or less because of the following factors: root systems vary by depth and lateral extent based on tree species, age, slope, and soil type; the health of trees may change drastically over time due to drought or anthropogenic effects; and the exact location/extent of construction activities may vary (e.g., trench depth and width, need for trimming of crown for equipment clearance, and shifts in Project alignment). If actual impacts result in major impacts or removal that were unanticipated (as determined by a certified arborist), these trees should be documented in a subsequent report and submitted to the City. Trees which would not be removed should be protected to the maximum extent feasible while allowing for approved construction activities.

3.2 Tree Protection Plan

Pursuant to Tree Ordinance §26-263, the following protective measures shall be exercised by individuals, developers, and contractors working near preserved trees.

- No grading, construction, or construction-related activities shall occur within the dripline of a significant tree or a heritage tree. Construction-related activities include, but are not limited to, the storage of materials, grade changes, or attachment of wires to or around tree trunks, stems or limbs.
- Significant trees and heritage trees shall be shielded from damage during construction with an appropriate construction barrier, such as chain link and steel stake fence enclosing the entire dripline area. All exposed roots shall be inside the fence or barrier. The fence or barrier shall have a minimum height of 6 feet measured from the grade. In all cases where a fence or barrier is to be used around a protected tree, the fence or barrier shall be installed prior to commencement of any development activity on the site and shall remain in place throughout all phases of construction. Fences may not be removed without obtaining written authorization from the Community Development Director or their designee.
- No structure or impervious paving shall be located within the dripline or within a 6 foot radius of the trunk perimeter, whichever is greater, of any significant tree or heritage tree, unless approved as part of a tree permit. A tree with a caliper of 30 inches or more shall require additional space as determined by the Community Development Director or their designee, Public Services Department, or city arborist.

- Branches that could be injured by vehicles or that interfere with the development activity may be pruned to the satisfaction of the Community Development Director or their designee, Public Services Department, or city arborist.
- No compaction of the soil within the dripline of any tree shall be undertaken, unless approved as part of a tree permit.
- No construction, including structures and walls, that disrupts the root system shall be permitted, unless approved as part of a tree permit. As a guideline, no cutting of roots should occur within a distance equal to three and one-half (3½) times the trunk diameter, as measured at ground level. Actual setback may vary to meet the needs of individual tree species as determined by the Community Development Director or their designee, Public Services Department, or city arborist. Where some root removal is necessary, the tree crown may require thinning to prevent wind damage.
- The required landscape and irrigation plan shall be tailored per the needs of retained trees, as specified by a tree arborist. Trees of the oak family must be on a separate irrigation timer, or as specified by a tree arborist.
- The Community Development Director or their designee may impose additional measures determined necessary to preserve and protect the health of trees to remain, relocated trees, and new trees planted to replace those removed.

The following additional recommendations are based on industry standards to reduce impacts from proposed construction activities.

- A certified arborist should conduct a site walk with the Project engineer or construction manager prior to ground disturbance to establish the TPZ and determine anticipated impacts and avoidance measures. Following the site walk, the arborist should determine what activities should be monitored by the arborist or a qualified biologist in direct communication with the arborist.
- Any root pruning and crown trimming should be done under the direction of a certified arborist or qualified representative approved by the City, in direct communication with the arborist. Severed roots greater than 2 inches in diameter should be clean cut with sterilized equipment at a 90-degree angle. New cuts should be covered with absorbent cloth or heavy cloth fabric to prevent drying out until backfilling occurs.
- If roots 2 inches in diameter or greater are encountered during hardscape or wall installation; methods such as pier and grade beam footing, bridging, root shaving (using a belt sander or equivalent tool and no more than 1/3 the diameter of the root), reducing sub-grade excavation, or modifying the design should be implemented as feasible.
- Within one week prior to and/or after significant root pruning, the dripline should be deep-watered using a soaker hose under the direction of a certified arborist.
- Grading should be designed to avoid ponding and ensure that drainage is not significantly altered/worsened within and adjacent to driplines.
- Treatment of inadvertent mechanical damage to limbs and branches should be applied under direction of the certified arborist and in accordance with the American National Standards Institute (ANSI) A300 Management of Trees and Shrubs during Site Planning, Site Development, and Construction, Section 8.3 Wound Treatment (ANSI 2012)

3.3 Required Mitigation

Pursuant to Tree Ordinance §26-262, conditions for tree permits may include:

- Replacement of the removed trees with a tree of comparable species, size, and condition as determined by the Community Development Director
- Payment of the proper restitution value of the trees or donation of boxed trees to the City or other public agency should a suitable replacement location not be possible on-site or off-site.

4 References

American National Standards Institute (ANSI)

2012. Tree, Shrub, and Other Woody Plant Management - Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development, and Construction)

Arborilogical Services, Inc (Arborilogical). 2009. Dangers of Root Disturbance. Available online at: https://www.arborilogical.com/article-library/the-dangers-of-root-disturbance/#:~:text=In%20conclusion%2C%20the%20closer%20to,a%20half%20feet%20above%20grade.).

Bing. 2025. Aerial imagery.

City of West Covina, Community Development, Planning Division

2024. City Ordinance No. 2519 – Development Code Ordinance Update. Available online at: https://www.westcovina.org/home/showpublisheddocument/23694/6386. February 2024.

Groover, Andrew. 2016. "Gravitropisms and Reaction Woods of Forest Trees – Evolution, Functions and Mechanisms." *New Phytologist*, Volume 211, Issue 3. Gravitropisms and reaction woods of forest trees – evolution, functions and mechanisms - Groover - 2016 - New Phytologist - Wiley Online Library.

Jepson Flora Project. 2025. *Jepson eFlora.* Available online at: https://ucjeps.berkeley.edu/eflora/. Accessed February 2025.

International Society of Arboriculture (ISA)

2022. Arborist Certification Study Guide, 4th Edition.

2023. Best Management Practices. Managing Trees During Construction, Third Edition.

MLC Holdings. 2025. Project site data.

5 List of Preparers

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- Vivian Phan, GIS Analyst

Publishing

- Yaritza Ramirez, Formatting Specialist

Appendix A

Tree Matrix

Tree ID #	Scientific Name	Common Name	Tree Height (Feet)	Number of Trunks	Cumulative Calipers (Inches)	Individual Calipers (Inches)	Overall Health	Notes	Damage/ Issues	Crown Radius N (feet)	Crown Radius NE (feet)	Crown Radius E (feet)	Crown Radius SE (feet)	Crown Radius S (feet)	Crown Radius SW (feet)	Crown Radius W (feet)	Crown Radius NW (feet)	Age Class[1]	S or NS[2]
13	*Ficus microcarpa*	Chinese banyan	25	1			Good											Mature	NS
14	*Quercus agrifolia*	coast live oak	40	1	32	32	Good		minor dieback, previous pruning	25	20	10	20	20	25	20	25	Mature	S
15	*Quercus ilex*	holly oak	45	1	21	21	Good			15	10	10	10	15	15	15	10	Mature	NS
16	*Quercus ilex*	holly oak	50	1	34	34	Good			35	35	25	35	35	35	45	40	Mature	NS
17	*Ulmus parvifolia*	Chinese elm	35	1			Good											Mature	NS
18	*Ulmus parvifolia*	Chinese elm	50	1			Good											Mature	NS
19	*Olea europaea*	common olive	25	1			Good											Mature	NS
20	*Olea europaea*	common olive	35	1			Good											Mature	NS
21	*Ulmus parvifolia*	Chinese elm	35	1			Good											Mature	NS
22	*Ulmus parvifolia*	Chinese elm	40	1			Good											Mature	NS
23	*Ulmus parvifolia*	Chinese elm	45	1			Good											Mature	NS
24	*Quercus ilex*	holly oak	45	1	29	29	Good		minor dieback	20	20	20	20	20	25	20	20	Mature	NS
25	*Quercus ilex*	holly oak	35	1	17	17	Good		healed wounds on trunk	10	10	10	10	10	10	10	10	Mature	NS
26	*Quercus ilex*	holly oak	20	1	16	16	Good			10	10	15	15	20	10	10	10	Mature	NS
27	*Cedrus deodara*	deodar cedar	50	1			Good											Mature	NS
28	*Ulmus parvifolia*	Chinese elm	15	1	7	2, 2, 3	Good											Semimature	NS
29	*Ulmus parvifolia*	Chinese elm	20	1	10	2, 2, 3, 3	Good											Semimature	NS
30	*Fraxinus uhdei*	shamel ash	40	2	35	17, 18	Good	not tagged		25	20	20	15	10	15	15	25	Mature	NS
31	*Cupaniopsis anacardioides*	tuckeroo	30	1	17	17	Fair	not tagged, communication line through canopy	cracked bark, exposed cambium, 15% dieback	10	5	5	10	15	15	10	10	Mature	NS
32	*Pyrus calleryana*	callery pear	30	1	12	12	Good	no foliage currently, not tagged		10	10	10	10	10	10	10	10	Mature	NS
33	*Pyrus calleryana*	callery pear	30	1	13	13	Good	no foliage currently, not tagged		15	10	15	10	10	10	15	15	Mature	NS
34	*Liriodendron tulipifera*	tulip tree	50	1	21	21	Good	minor foliage currently, not tagged		20	20	20	20	20	20	20	20	Mature	NS
35	*Pyrus calleryana*	callery pear	30	1	12	12	Good	no foliage currently, not tagged		10	10	10	10	10	10	10	10	Mature	NS
36	*Pyrus calleryana*	callery pear	30	1	14	14	Good	no foliage currently, not tagged		10	10	10	10	10	15	10	10	Mature	NS
37	*Liriodendron tulipifera*	tulip tree	45	1	20	20	Good	some foliage, not tagged		20	20	20	20	15	20	20	20	Mature	NS
38	*Liriodendron tulipifera*	tulip tree	40	1	15	15	Good	no foliage currently, not tagged		15	10	10	10	10	15	15	15	Mature	NS

[1] Age class includes young, semimature, mature, and old (ISA 2023).

[2] S = Significant, NS = Non-significant per the Tree Ordinance

Appendix B

Tree Photographs

Tree #13 Chinese banyan (*Ficus microcarpa*)

Tree #14 Coast live oak (*Quercus agrifolia*)

Tree #14 Coast live oak (*Quercus agrifolia*)

Tree #15 Holly oak (*Quercus ilex*)

Tree #16 Holly oak (*Quercus ilex*)

Tree #17 Chinese elm (*Ulmus parvifolia*)

Tree #18 Chinese elm (*Ulmus parvifolia*)

Tree #19 Common olive (*Olea europaea*)

Tree #20 Common olive (*Olea europaea*)

Tree #21 Chinese elm (*Ulmus parvifolia*)

Tree #21 Chinese elm (*Ulmus parvifolia*)

Tree #22 Chinese elm (*Ulmus parvifolia*)

Tree #23 Chinese elm (*Ulmus parvifolia*)

Tree #24 Holly oak (*Quercus ilex*)

Tree #25 Holly oak (*Quercus ilex*)

Tree #26 Holly oak (*Quercus ilex*)

Tree #27 Deodar cedar (*Cedrus deodara*)

Tree #28 Chinese elm (*Ulmus parvifolia*)

Tree #29 Chinese elm (*Ulmus parvifolia*)

Tree #30 Shamel ash (*Fraxinus uhdei*)

Tree #31 Tuckeroo (*Cupaniopsis anacardioides*)

Tree #32 Ornamental (*Ornamental*)

Tree #33 Ornamental (*Ornamental*)

Tree #34 Tulip tree (*Liriodendron tulipifera*)

Tree #35 Callery pear (*Pyrus calleryana*)

Tree #36 Callery pear (*Pyrus calleryana*)

Tree #37 Tulip tree (*Liriodendron tulipifera*)

Tree #38 Tulip tree (*Liriodendron tulipifera*)

Appendix C

Tree Location Map

Imagery provided by Esri and its licensors © 2025.

24-17187 Arborist
Fig X Tree Locations

Appendix D

Air Quality Analysis

1501 DEL NORTE STREET RESIDENTIAL

AIR QUALITY ANALYSIS

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Reference Number
16435-02 AQ Report

Agency
City of West Covina

Date
June 19, 2025

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LIST OF ABBREVIATED TERMS

µg/m^3	Microgram per Cubic Meter
1992 CO Plan	1992 Federal Attainment Plan for Carbon Monoxide
1993 CEQA Handbook	SCAQMD's CEQA Air Quality Handbook (1993)
2016-2040 RTP/SCS	2016-2040 Regional Transportation Plan/Sustainable Communities Strategy
AB 2595	California Clean Air Act
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
APN	Assessor Parcel Number
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
Brief	Brief of Amicus Curiae by the SCAQMD in the Friant Ranch Case
C_2Cl_4	Perchloroethylene
C_4H_6	1,3-butadiene
C_6H_6	Benzene
C_2H_3Cl	Vinyl Chloride
C_2H_4O	Acetaldehyde
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEQA Guidelines	2019 CEQA Statute and Guidelines
CH_2O	Formaldehyde
City	City of West Covina
CO	Carbon Monoxide
COH	Coefficient of Haze
COHb	Carboxyhemoglobin
Cr(VI)	Chromium
EIR	Environmental Impact Report
EMFAC	Emissions FACtor Model
EPA	Environmental Protection Agency
GHG	Greenhouse Gas
H_2S	Hydrogen Sulfide

HI	Hazard Index
HP	Horsepower
lbs	Pounds
lbs/day	Pounds Per Day
LST	Localized Significance Threshold
LST Methodology	Final Localized Significance Threshold Methodology
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measures
N_2	Nitrogen
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
O_2	Oxygen
O_3	Ozone
O_2 Deficiency	Chronic Hypoxemia
ODC	Ozone Depleting Compounds
Pb	Lead
PDF	Project Design Feature
PM	Particulate Matter
PM_{10}	Particulate Matter 10 microns in diameter or less
$PM_{2.5}$	Particulate Matter 2.5 microns in diameter or less
ppm	Parts Per Million
Project	1501 Del Norte Street Residential
RECLAIM	Regional Clean Air Incentives Market
ROG	Reactive Organic Gases
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIPs	State Implementation Plans
SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
Title 24	California Building Code
TITLE I	Non-Attainment Provisions
TITLE II	Mobile Sources Provisions
VDEC	Verified Diesel Emission Control
VOC	Volatile Organic Compounds

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this 1501 Del Norte Street Residential Air Quality Impact Analysis (AQIA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the CEQA Guidelines (CEQA Guidelines) (1). Table ES-1 shows the findings of significance for each potential air quality impact under CEQA before and after any required mitigation measures (MM) described below.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Regional Construction Emissions	3.4	*Less Than Significant*	*n/a*
Localized Construction Emissions	3.6	*Less Than Significant*	*n/a*
Regional Operational Emissions	3.5	*Less Than Significant*	*n/a*
Localized Operational Emissions	3.6	*Less Than Significant*	*n/a*
CO "Hot Spot" Analysis	3.7	*Less Than Significant*	*n/a*
Air Quality Management Plan	3.8	*Less Than Significant*	*n/a*
Sensitive Receptors	3.10	*Less Than Significant*	*n/a*
Odors	3.11	*Less Than Significant*	*n/a*
Cumulative Impacts	3.12	*Less Than Significant*	*n/a*

ES.2 REGULATORY REQUIREMENTS

There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality. Any operation or activity that might cause the emission of any smoke, fly ash, dust, fumes, vapors, gases, or other forms of air pollution, which can cause damage to human health, vegetation, or other forms of property, or can cause excessive soiling on any other parcel shall conform to the requirements of the South Coast Air Quality Management District (SCAQMD). SCAQMD Rules that are currently applicable to this Project are described below.

SCAQMD Rule 402

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

SCAQMD Rule 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities.

SCAQMD Rule 1113

This rule serves to limit the volatile organic compounds (VOC) content of architectural coatings used on projects in the SCAQMD. This rule applies to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects.

SCAQMD Rule 1301

This rule is intended to provide that pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the National Ambient Air Quality Standards (NAAQS), while future economic growth within the SCAQMD is not unnecessarily restricted. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 also limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).

SCAQMD Rule 1401

A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States (U.S.) Bureau of Mines.

ES.3 Project Design Features

As part of the Project's design, the applicant has agreed to utilize off-road construction equipment that would meet engine standards that are equivalent to either Level 3 Verified Diesel Emission Control Strategy (VDEC) filters or CARB Tier 4 Interim engine standards for all construction equipment. Equipment meeting Tier 4 Interim engine standards achieves the required reductions and specifications for VDECs.

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1 INTRODUCTION

This report presents the results of the AQIA prepared by Urban Crossroads, Inc., for the proposed 1501 Del Norte Street Residential (Project). The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the Project and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the SCAQMD.

1.1 SITE LOCATION

The Project site is located at 1501 Del Norte Street in the City of West Covina, as shown in Exhibit 1-A. The Project site encompasses approximately 13.56 acres and has an Assessor Parcel Number (APN) of 8458-020-901. The project site is bordered by Del Norte Park to the north and northeast; North Sunset Avenue, one residential building, and one commercial building to the east; West Del Norte Street and residential properties to the south; and North Nora Avenue to the west. The areas beyond these immediately bordering uses can be generally characterized as consisting of residential neighborhoods of mostly one-story single-family homes.

1.2 PROJECT DESCRIPTION

The Project involves the demolition of the existing buildings and structures on the project site, followed by construction of 34 single-family detached homes and 248 attached townhomes, for a total of 282 homes. The Project site is 13.56 acres, of which 13.19 acres would be developed for residential uses, and the additional 0.37 acres would be converted and used as an extension and dedication of Del Norte Street from its current terminus east to Sunset Avenue. The Project will be evaluated in a single phase of development with Project Buildout anticipated in 2028. A preliminary site plan for the proposed Project is shown in Exhibit 1-B.

EXHIBIT 1-A: LOCATION MAP

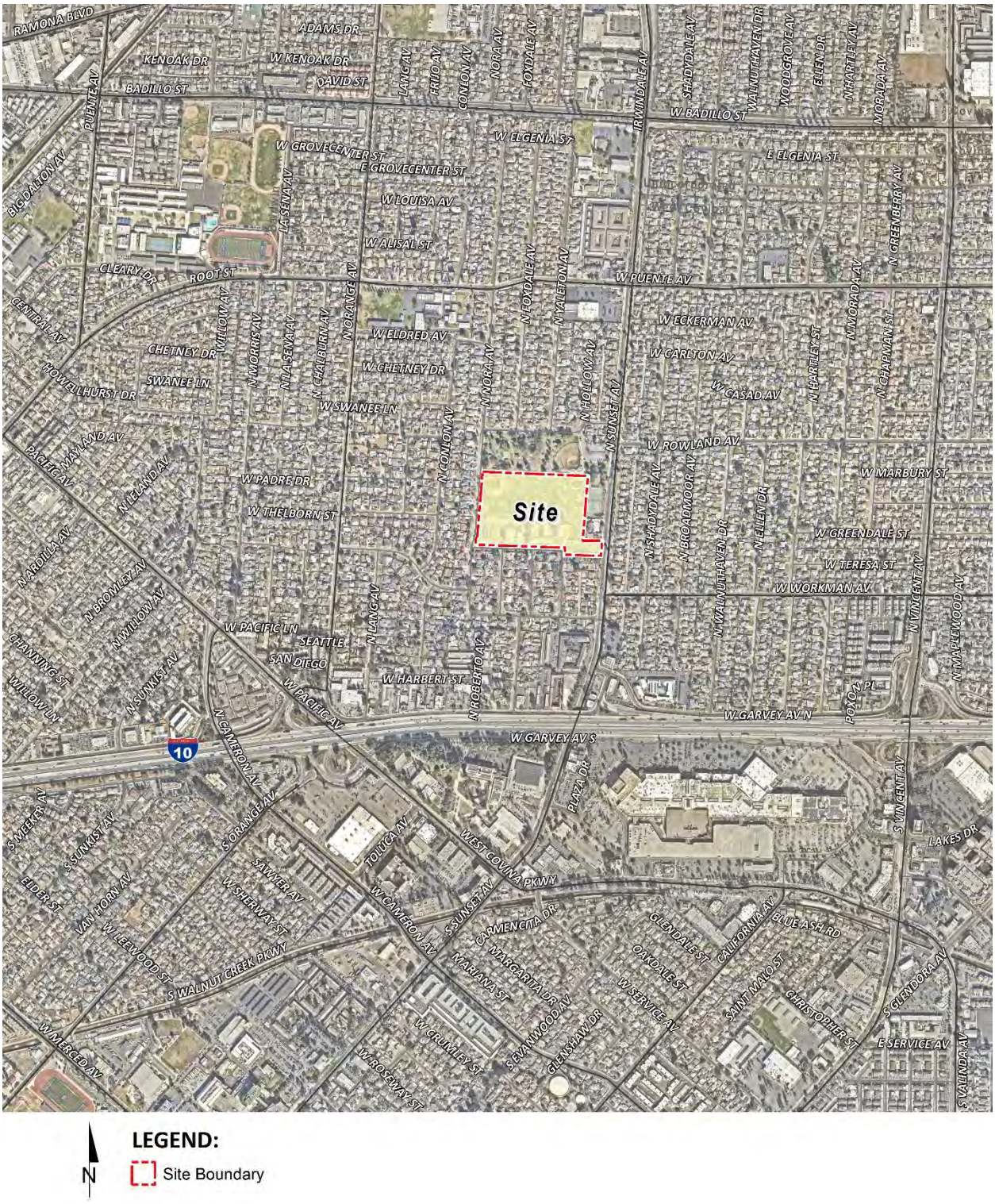

EXHIBIT 1-B: SITE PLAN

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2 AIR QUALITY SETTING

This section provides an overview of the existing air quality conditions in the Project area and region.

2.1 SOUTH COAST AIR BASIN

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD (2). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As previously stated, the Project site is located within the SCAB, a 6,745 square-mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego Air Basin to the south.

2.2 REGIONAL CLIMATE

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality. The annual average temperatures throughout the SCAB vary from the low to mid 60s (degrees Fahrenheit °[F]). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71% along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast. Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year, there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level. A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_X) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

2.3 Wind Patterns and Project Location

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

2.4 Air Pollutants

2.4.1 Criteria Pollutants

Air quality regulations were first promulgated with the Federal Clean Air Act (CAA) of 1970. Air quality is defined by ambient air concentrations of seven "criteria air pollutants," which are a group of common air pollutants identified by the United States EPA to be of concern with respect to the

health and welfare of the general public. Federal and State governments regulate criteria air pollutants by using ambient standards based on criteria regarding the health and/or environmental effects of each pollutant. The seven "criteria" air pollutants defined by the U.S. EPA are: (1) carbon monoxide (CO); (2) sulfur dioxide (SO_2); (3) nitrogen dioxide (NO_2); (4) ozone (O_3); (5) respirable particulate matter with a diameter of 10 microns or less (PM_{10}), (6) fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and (7) lead (Pb). Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below (3).

TABLE 2-1: CRITERIA POLLUTANTS (1 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
CO	CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O_3), motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O_2) supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with O_2 transport and competing with O_2 to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for O_2 supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (O_2 deficiency) as seen at high altitudes.
SO_2	SO_2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant	Coal or oil burning power plants and industries,	A few minutes of exposure to low levels of SO_2 can result in airway constriction

TABLE 2-1: CRITERIA POLLUTANTS (2 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
SO_2 (Continued)	mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms SO_4. Collectively, these pollutants are referred to as sulfur oxides (SO_X).	refineries, diesel engines	in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.

TABLE 2-1: CRITERIA POLLUTANTS (3 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
NO_2	NO_2 is a key component of nitrogen oxides (NO_X), which also includes nitric oxide (NO) and nitrous oxide (N_2O). NO_X compounds are primarily produced during combustion processes when nitrogen (N_2) reacts with oxygen (O_2). Both NO and NO_2 serve as precursors in the formation of O_3 and $PM_{2.5}$, making their monitoring crucial for air quality assessments. NO_2, being the more abundant form of NO_X in the atmosphere, has a relatively short lifespan of one to seven days, which enhances its significance as a major air pollutant. As a criteria air pollutant, NO_2 poses various health risks, including respiratory issues and increased vulnerability to infections. It also absorbs blue light, imparting a brownish-red hue to the atmosphere and contributing to reduced visibility and smog formation. Given that NO emissions largely convert to NO_2, the examination of NO_X emissions becomes essential when assessing potential air quality impacts. The concentrations of NO_2 are closely related to traffic density, often resulting in higher exposure levels for commuters in heavy traffic compared to what regional monitoring stations may indicate.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. In animals, exposure to levels of NO_2 considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O_3 exposure increases when animals are exposed to a combination of O_3 and NO_2.
O_3	O_3 is a highly reactive and unstable gas that is formed when VOCs and NO_X, both	Formed when ROGs and NO_X react in the	Individuals exercising outdoors, children, and people with preexisting lung

TABLE 2-1: CRITERIA POLLUTANTS (4 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
O_3 (Continued)	byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.	presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage and pesticides.	disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for O_3 effects. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O_3 levels are associated with increased school absences. In recent years, a correlation between elevated ambient O_3 levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and reside in communities with high O_3 levels. O_3 exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O_3 may be more toxic than exposure to O_3 alone. Although lung volume and resistance changes observed after a single exposure

TABLE 2-1: CRITERIA POLLUTANTS (5 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
O_3 (Continued)			diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.
Particulate Matter	PM_{10}: A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particulate matter pollution is a major cause of reduced visibility (haze) which is caused by the scattering of light and consequently the significant reduction of air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM_{10} is considered a criteria air pollutant. $PM_{2.5}$: A similar air pollutant to PM_{10} consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include SO_4 formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_X release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and	Sources of PM_{10} include road dust, windblown dust and construction. Also formed from other pollutants (acid rain, NO_X, SO_X, organics). Incomplete combustion of any fuel. $PM_{2.5}$ comes from fuel combustion in motor vehicles, equipment, and industrial sources, residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_X, SO_X, organics).	A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter.

TABLE 2-1: CRITERIA POLLUTANTS (6 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
Particulate Matter (Continued)	weather conditions. $PM_{2.5}$ is a criteria air pollutant.		The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.
Pb	Pb is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. In the past, the primary source of Pb in the air was emissions from vehicles burning leaded gasoline. The major sources of Pb emissions are ore and metals processing, particularly Pb smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include operational activities such as metal processing or Pb acid battery manufacturing. As such, the Project is not anticipated to generate a quantifiable amount of Pb emissions.	Metal smelters, resource recovery, leaded gasoline, deterioration of Pb paint.	Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous

TABLE 2-1: CRITERIA POLLUTANTS (7 OF 7)

Criteria Pollutant	Description	Sources	Health Effects
Pb (Continued)			environmental Pb exposure of their mothers.

2.4.2 Additional Pollutants

The SCAQMD's primary focus is to achieve the NAAQS and California Ambient Air Quality Standards (CAAQS) for criteria pollutants. However, it also has a broader mandate to control emissions of air contaminants and safeguard public health. As a result, SCAQMD regulates additional pollutants beyond criteria pollutants, including reactive organic gases (ROGs), VOCs, and odors. Additional pollutants, their typical sources, and health effects are identified below (3).

TABLE 2-2: ADDITIONAL POLLUTANTS (1 OF 2)

Pollutant	Description	Sources	Health Effects
VOC	VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a	Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while you are using them, and, to some degree, when they are stored.	Breathing VOCs can irritate the eyes, nose, and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several.

TABLE 2-2: ADDITIONAL POLLUTANTS (2 OF 2)

Pollutant	Description	Sources	Health Effects
VOC (Continued)	criteria pollutant. The terms VOC and ROG (see below) are used interchangeably.		
ROG	Similar to VOC, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC (see previous) are used interchangeably.	Sources similar to VOCs.	Health effects similar to VOCs.
Odor	Odor means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves (4).	Odors can come from many sources including animals, human activities, industry, natures, and vehicles.	Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

2.5 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. NAAQS and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 2-3 (5).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of this AQIA, the most recent state and federal standards were updated by CARB on July 16, 2024, and are presented in Table 2-3. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, and $PM_{2.5}$ are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the state assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (6).

TABLE 2-3: AMBIENT AIR QUALITY STANDARDS (1 OF 2)

Ambient Air Quality Standards						
Pollutant	**Averaging Time**	**California Standards [1]**		**National Standards [2]**		
		Concentration [3]	**Method [4]**	**Primary [3,5]**	**Secondary [3,6]**	**Method [7]**
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	9.0 µg/m^3	15.0 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		53 ppb (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

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TABLE 2-3: AMBIENT AIR QUALITY STANDARDS (2 OF 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On February 7, 2024, the national annual PM2.5 primary standard was lowered from 12.0 $\mu g/m^3$ to 9.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15.0 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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2.6 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for seven of the most common air pollutants: CO, Pb, O_3, PM_{10}, $PM_{2.5}$, NO_2, and SO_2 which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 35 permanent monitoring stations and 2 single-pollutant source Pb air monitoring sites throughout the air district (7). On January 25, 2024, CARB adopted the proposed 2023 amendments to the state and national area designations. See Table 2-4 for attainment designations for the SCAB (8). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

TABLE 2-4: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SCAB

Criteria Pollutant	State Designation	Federal Designation
O_3 - 1-hour standard	Nonattainment	--
O_3 - 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment
PB[1]	Attainment	Unclassified/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SCAB
"-" = no standard.

2.7 LOCAL AIR QUALITY

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide information regarding air quality conditions to Southern California residents. The Project site is located within SRA 9, East San Gabriel Valley 1. The monitoring station within SRA 9, located 4.28 miles north of the Project site, reports air quality data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ only for the years 2021 and 2022. The following stations will be used to report air quality data for 2023.

- SRA 9 (East San Gabriel Valley 2 located 6.79 miles northeast of the Project site) - O_3, CO, NO_2, and PM_{10}
- SRA 11 (South San Gabriel Valley located 8.51 miles southwest of the Project site) – $PM_{2.5}$

Data from the East San Gabriel Valley 2 and South San Gabriel Valley monitoring stations were utilized only in instances where data was not available from the East San Gabriel Valley 1 monitoring station.

The most recent three (3) years of data available is shown in Table 2-5 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ for 2021 through 2023 was obtained from the SCAQMD Air Quality Data Tables (9). Additionally, data

for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations.

TABLE 2-5: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2021-2023

Pollutant	Standard	Year		
		2021	2022	2023
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.108	0.111	0.155
Maximum Federal 8-Hour Concentration (ppm)		0.086	0.080	0.110
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	20	6	57
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	22	11	72
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.5	1.3	0.8
Maximum Federal 8-Hour Concentration	> 20 ppm	1.4	0.9	0.6
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.078	0.048	0.088
Annual Federal Standard Design Value		0.015	0.013	0.008
PM_{10}				
Maximum Federal 24-Hour Concentration (µg/m³)	> 150 µg/m³	79	98	126
Annual Federal Arithmetic Mean (µg/m³)		32.8	37.9	22.4
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m³	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m³	11	7	3
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (µg/m³)	> 35 µg/m³	61.9	18.4	33.2
Annual Federal Arithmetic Mean (µg/m³)	> 12 µg/m³	11.43	9.98	10.01
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m³	3	0	0

ppm = Parts Per Million
µg/m³ = Microgram per Cubic Meter
Source: Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ was obtained from SCAQMD Air Quality Data Tables.

2.8 REGULATORY BACKGROUND

2.8.1 Federal Regulations

The EPA is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and Pb (10). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB. The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (11). The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (12) (13). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 2-4 (previously presented) provides the NAAQS within the SCAB. Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_X is a collective term that includes all forms of NO_X which are emitted as byproducts of the combustion process.

2.8.2 California Regulations

CARB

CARB, which became part of CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4, visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (14) (10). Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROGs, NOX, CO and PM10. However, air basins may use an alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

The 2022 California Title 24 Energy Standards became effective on January 1, 2023, with updates for the 2025 standards set to take effect on January 1, 2026. As the Project is expected to be completed in 2028, it will need to comply with the Title 24 Energy Standards in effect at that time, which may include further updates beyond the 2025 version.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2025 California Green Building Code Standards that go into effect on January 1, 2026. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

2.8.3 Regional Regulations

Air Quality Management Plan

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMP to meet the state and federal ambient air quality standards (15). AQMPs are updated regularly to ensure an effective reduction in emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 3.8.

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3 PROJECT AIR QUALITY IMPACT

3.1 INTRODUCTION

This study quantifies air quality emissions generated by construction and operation of the Project and addresses whether the Project conflicts with implementation of the SCAQMD's AQMP and Lead Agency planning regulations. The analysis of Project-generated air emissions determines whether the Project would result in a cumulatively considerable net increase of any criteria pollutant for which the SCAB is in non-attainment under an applicable NAAQS and CAAQS. Additionally, the Project has been evaluated to determine whether the Project would expose sensitive receptors to substantial pollutant concentrations and the impacts of odors. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the *CEQA Guidelines* (14 CCR §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (1):

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD has developed regional and localized significance thresholds for criteria pollutants, as summarized at Table 3-1 (16). The SCAQMD's CEQA Air Quality Significance Thresholds (March 2023) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 3-1: REGIONAL EMISSIONS THRESHOLDS

Pollutant	Construction	Operations
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day

TABLE 3-2: LOCALIZED EMISSIONS THRESHOLDS

Pollutant	Construction	Operations
NO_2	0.18 ppm	0.18 ppm
CO (1-hour average)	20 ppm	20 ppm
CO (8-hour average)	9 ppm	9 ppm
PM_{10}	10.4 µg/m^3	2.5 µg/m^3
$PM_{2.5}$	10.4 µg/m^3	2.5 µg/m^3

ppm = Parts Per Million
µg/m^3 = Micrograms Per Cubic Meter

3.3 MODELS EMPLOYED TO ANALYZE AIR QUALITY

3.3.1 CalEEMod

Land uses such as the Project affect air quality through construction-source and operational-source emissions. The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (17). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendix 3.1.

3.4 CONSTRUCTION EMISSIONS

3.4.1 Construction Activities

Construction activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following construction activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

Demolition Activities

The Project site currently includes existing structures and extensive areas surfaced with asphalt/concrete. A review of aerial imagery indicates that approximately 45,244 square feet are occupied by existing buildings, while an estimated 176,000 square feet consist of asphalt/concrete.

These features are anticipated to be demolished, generating an estimated 2,300 tons of demolition debris which will be hauled off-site.

Grading Activities

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. Based on Project-specific grading plans, site development is anticipated to require approximately 1,871 cubic yards of cut and 6,172 cubic yards of fill, resulting in a net import of approximately 4,301 cubic yards of material.

Off-Site Utility and Infrastructure Improvements

In addition, to support the Project development, there may be paving for off-site improvements associated with roadway construction and utility installation for the Project. It is expected that the off-site construction activities would not take place at one location for the entire duration of construction. Impacts associated with these activities are not expected to exceed the emissions identified for Project-related construction activities since the off-site construction areas would have physical constraints on the amount of daily activity that could occur. The physical constraints would limit the amount of construction equipment that could be used, and any off-site and utility infrastructure construction would not use equipment totals that would exceed the equipment totals in Table 3-5. As such, no impacts beyond what has already been identified in this report are expected to occur.

3.4.2 Construction Duration

For purposes of analysis, construction will begin January 2026 and would last through January 2028. The construction schedule utilized in the analysis, shown in Table 3-3, represents a "conservative" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[1] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the *CEQA Guidelines* (1).

3.4.3 Construction Equipment

The construction equipment list presented in Table 3-4 has been developed based on information provided by the Project Applicant. Consistent with industry standards and typical construction practices, each piece of equipment listed is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City code.

[1] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offroad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 3-3: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Days
Demolition	01/01/2026	02/11/2026	30
Site Preparation	02/12/2026	03/04/2026	15
Grading	03/05/2026	05/06/2026	45
Building Construction	05/07/2026	01/26/2028	450
Paving	12/16/2027	01/26/2028	30
Architectural Coating	12/03/2026	01/26/2028	300

TABLE 3-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment[1]	Quantity	Hours
Demolition	Concrete/Industrial Saws	1	8
	Excavators	2	8
	Rubber Tired Dozers	1	8
Site Preparation	Crawler Tractors	1	8
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Crawler Tractors	1	8
Building Construction	Forklifts	1	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	2	8
Paving	Pavers	1	8
	Paving Equipment	1	8
	Rollers	2	8
Architectural Coating	Air Compressors	2	8

[1] In order to account for fugitive dust emissions, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes during Site Preparation and Grading activities.

3.4.4 On-Road Trips

Construction generates on-road vehicle emissions from vehicle usage for workers, vendors, and haul trucks commuting to and from the site. The number of daily worker, vendor, and hauling trips per phase is presented below in Table 3-5. Daily worker trips are based on CalEEMod defaults. It should be noted that for daily vendor trips, specifically, CalEEMod only assigns daily vendor trips to the Building Construction phase. Daily vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for daily vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity.

TABLE 3-5: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips/Day	Vendor Trips/Day	Hauling Trips/Day
Demolition	10	2	19
Site Preparation	3	2	0
Grading	13	3	12
Building Construction	198	27	0
Paving	10	0	0
Architectural Coating	40	0	0

3.4.5 Construction Emissions Summary

CalEEMod calculates maximum daily emissions for summer and winter periods. As such, the estimated maximum daily construction emissions without mitigation for both summer and winter periods are summarized in Table 3-6. Detailed unmitigated construction model outputs are presented in Appendix 3.1. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the SCAQMD.

TABLE 3-6: CONSTRUCTION EMISSIONS SUMMARY

Construction Emissions						
Year	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
2026	2.99	27.00	25.40	0.06	4.12	2.16
2027	33.20	7.32	23.10	0.02	3.52	0.95
Winter						
2026	33.20	27.10	25.30	0.06	4.12	2.16
2027	33.90	11.90	27.40	0.03	3.83	1.15
2028	33.80	11.50	26.60	0.03	3.79	1.11
Maximum Daily Emissions	33.90	27.10	27.40	0.06	4.12	2.16
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: CalEEMod construction-source (unmitigated) emissions are presented in Appendix 3.1.

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions are expected from the following primary sources:

- Mobile Source Emissions;
- Area Source Emissions; and
- Energy Source Emissions.

3.5.1 Mobile Source Emissions

The operational air quality emissions associated with the Project are primarily attributable to vehicle trips generated by the proposed development. In order to develop the traffic characteristics of the proposed Project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for the following land use codes (18):

- Single-Family Detached Housing (ITE Land Use Code 210)
- Multifamily (Low-Rise) Residential (ITE Land Use Code 220)
- Multifamily (Mid-Rise) Residential (ITE Land Use Code 221)

Fugitive Dust Related to Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. The emissions estimate for travel on paved roads was calculated using CalEEMod.

3.5.2 Area Source Emissions

Architectural Coatings

Over a period of time the buildings that are part of this Project would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod.

Consumer Products

Consumer products include, but are not limited to, detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross HP (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod, and do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

3.5.3 Energy Source Emissions

Combustion Emissions Associated with Electricity and Natural Gas

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation of significance. Electricity usage associated with the Project was calculated by CalEEMod using default parameters. Based on information provided by the Project Applicant, no natural gas would be used as a result of the Project, and as such use of natural gas is not considered in the analysis.

3.5.4 Operational Emissions Summary

Operational activities for summer and winter scenarios are presented in Table 3-7. Detailed operation model outputs for the Project are presented in Appendix 3.1. As shown in Table 3-7, the Project would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutant. As such, operational impacts would be considered less-than-significant.

TABLE 3-7: SUMMARY OF PEAK OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Mobile	4.37	3.08	36.70	0.09	8.71	2.25
Area	36.40	0.15	16.10	< 0.005	0.01	0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Daily Emissions	40.77	3.23	52.80	0.09	8.72	2.26
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Winter						
Mobile	4.32	3.36	33.80	0.09	8.71	2.25
Area	35.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Daily Emissions	39.32	3.36	33.80	0.09	8.71	2.25
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

3.6 LOCALIZED AIR QUALITY IMPACTS

3.6.1 Background on LST Development

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology). The SCAQMD has established that localized impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the

federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4.[2] LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology* (19).

3.6.2 Emissions Considered

Based on SCAQMD's *LST Methodology*, emissions for concern during construction activities are on-site NO_X, CO, $PM_{2.5}$, and PM_{10}. The *LST Methodology* clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs (20)." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

3.6.3 Dispersion Modeling

In order to estimate localized pollutant concentrations resulting from Project construction, the SCAQMD-approved American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model was utilized. The modeling approach utilized is discussed as follows.

3.6.4 Sources

It should be noted that in order to model worst-case conditions, the highest daily peak on-site emissions resulting from overlapping construction activity were modeled. A ground level release height and a 1 meter (approximately 3.28 feet) initial vertical dimension (sigma z) were utilized for fugitive dust emissions of PM_{10} and $PM_{2.5}$ consistent with SCAQMD's LST guidance. In order to account for equipment exhaust emissions from NO_2, CO, PM_{10}, and $PM_{2.5}$ a release height of 5.0 meters was utilized consistent with SCAQMD's LST guidance.

3.6.5 Meteorological Data and Model Options

In order to account for meteorological conditions at the Project site, meteorological data from the SCAQMD's Azusa monitoring station was utilized, as this is the nearest station to the Project site for which meteorological data is available. Additionally, a receptor height of 2 meters and regulatory default options were utilized consistent with SCAQMD's LST guidance.

[2] The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

3.6.6 Receptors

As previously stated, LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities. Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors". These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use to the Project site where an individual could remain for 24 hours has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

Per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain onsite for a full 24 hours but are typically on-site for 8 hours or less. However, *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours* (20)." Therefore, any adjacent land use where an individual could remain for 1 or 8 hours, that is located at a closer distance to the Project site than the receptor used for PM_{10} and $PM_{2.5}$ analysis, must be considered to determine construction and operational LST air impacts for emissions of NO_2 and CO since these pollutants have an averaging time of 1 and 8 hours.

Receptors in the Project study area are described below and shown on Exhibit 3-A. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site.

- Location R1 represents the Indus Cardiology medical center located at 333 North Sunset Avenue, approximately 40 feet east of the Project site. Receptor R1 is placed at the building façade facing the Project site.
- Location R2 represents the existing residence at 329 North Sunset Avenue, located immediately north adjacent to the Project site. Receptor R2 is placed at the building façade facing the Project site.
- Location R3 represents the existing residence at 332 North Hollow Avenue, located immediately south adjacent to the Project site. Receptor R3 is placed at then building façade facing the Project site.
- Location R4 represents the existing residence at 334 North Yaleton Avenue, approximately 62 feet south of the Project site. Receptor R4 is placed at the building façade facing the Project site.
- Location R5 represents the existing residence at 357 North Nora Avenue, approximately 89 feet west of the Project site. Receptor R5 is placed at the building façade facing the Project site.
- Location R6 represents the Central Bark Dog Park located at 1500 West Rowland Avenue, located immediately north adjacent to the Project site.
- Location R7 represents the existing residence at 517 North Hollow Avenue, approximately 414 feet north of the Project site. Receptor R7 is placed at the building façade facing the Project site.

EXHIBIT 3-A: RECEPTOR LOCATIONS

- Location R8 represents the existing residence at 445 North Sunset Avenue, approximately 298 feet northeast of the Project site. Receptor R8 is placed at the building façade facing the Project site.
- Location R9 represents the Monte Vista Elementary School located at 1615 West Eldred Avenue, approximately 1,232 feet northwest of the Project site. Receptor R9 is placed at the building façade facing the Project site.
- Location R10 represents the existing residence at 402 North Sunset Avenue, approximately 294 feet east of the Project site. Receptor R10 is placed at the building façade facing the Project site.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining a Project's impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time).

As previously stated, and consistent with LST Methodology, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_2 and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours.

3.6.7 Construction-Source Localized Emissions

Emissions during the peak construction activity will not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, as illustrated in Table 3-8. All other modeled locations in the study area would experience lower concentrations, resulting in a reduced impact. As such, the Project's localized impacts during construction activity would be less than significant. AERMOD Outputs from the model runs for construction LSTs are provided in Appendix 3.2.

TABLE 3-8: CONSTRUCTION LOCALIZED SIGNIFICANCE SUMMARY CONSTRUCTION

Peak Construction	Emissions (ppm)				
	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hours	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.07	0.05	2.25E-02	2.97	1.17
Background Concentration [A]	1.5	1.4	0.088		
Total Concentration	1.57	1.45	0.11	2.97	1.17
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	NO	NO	NO	NO	NO

[A] Highest concentration from the last three years of available data.

Notes: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm.

Based on SCAQMD's LST Methodology, background concentrations are considered only for CO and NO_2. According to the SCAQMD Air Quality Significance Thresholds (March 2023), the SCAB is in attainment for NO2 and CO. Therefore, a project would be considered significant if it causes or contributes to an exceedance of the applicable attainment standards. As such, the maximum background concentration values from the most recent three years of monitoring data for SRA 9 were added to the Project emissions to assess total concentrations.

3.6.8 Operational-Source Localized Emissions

The Project involves the demolition of the existing buildings and structures on the project site, followed by construction of 34 single-family detached homes and 248 attached townhomes, for a total of 282 homes. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed Project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed.

3.7 CO "Hot Spot" Analysis

A CO hotspot is defined as a localized concentration of carbon monoxide exceeding the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. At the time the most recent CEQA Air Quality Handbook (1993) was published by SCAQMD, the air basin was designated as non-attainment, requiring projects to perform hotspot analyses to ensure they did not worsen the existing conditions. Over the last two decades, background CO concentrations have been significantly reduced due to regulatory controls on tailpipe emissions, which have culminated in the air basin achieving attainment status for CO.

The 2003 AQMP's findings underscore that CO hotspots are highly unlikely due to the reduced background concentrations and the effectiveness of California's air quality management strategies. The substantial reduction in CO levels from the vehicle fleet and the state's attainment status for CO further diminish the need for detailed microscale hotspot analyses, reinforcing that existing monitoring and regulatory frameworks adequately address potential air quality concerns.

In 2003, the SCAQMD as part of its AQMP development process, prepared modeling to determine the potential for CO Hotspots at the four busiest intersections in the air basin. As summarized in the 2003 AQMP, even at one of the busiest intersections at that time, only 0.7 ppm of CO is attributable to vehicular traffic and the remaining 7.7 ppm were due to ambient background conditions. As shown on Table 2-5 in this report, the background 1-hour and 8-hour concentrations are well below the applicable AAQS. The 2003 AQMP's findings underscore that CO hotspots are highly unlikely due to the reduced background concentrations and the effectiveness of California's air quality management strategies. The substantial reduction in CO levels from the vehicle fleet and the state's attainment status for CO further diminish the need for detailed microscale hotspot analyses, reinforcing that existing monitoring and regulatory frameworks adequately address potential air quality concerns.

As such, Project-related traffic at any intersections within the Project area would not cause or contribute to a CO hotspot since the background concentrations are low and any contribution from Project traffic would be negligible.

3.8 AQMP

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, local

governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards. Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In December 2022, the SCAQMD released the *Final 2022 AQMP* (*2022 AQMP*). The *2022 AQMP* continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (21). Similar to the 2016 AQMP, the *2022 AQMP* incorporates scientific and technological information and planning assumptions, including the *2020-2045 RTP/SCS*, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements (22). The Project's consistency with the AQMP will be determined using the *2022 AQMP* as discussed below.

It should be noted that although SCAG has released an updated 2024-2050 RTP, the 2022 AQMP is based on the 2020-2045 RTP. Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (23). These indicators are discussed below:

3.8.1 Consistency Criterion No. 1

Potential to result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refer to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

As evaluated, the Project's regional and localized construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, the Project's regional and localized operation-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

3.8.2 Consistency Criterion No. 2

Potential to exceed the assumptions in the AQMP based on the years of Project build-out phase.

The *2022 AQMP* demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of West Covina General Plan is considered to be consistent with the AQMP.

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operational Impacts – Consistency Criterion 2

The Project site is designated as "Civic: Schools" under the City of West Covina General Plan. This land use designation is intended to support civic functions, including government offices, libraries, educational institutions, community centers, and places of religious assembly. Additionally, the site is zoned Single-Family Residential which permits the development of one single-family dwelling unit per lot.

As previously stated, the Project involves the demolition of the existing buildings and structures on the project site, followed by construction of 34 single-family detached homes and 248 attached townhomes, for a total of 282 homes. The Project site is 13.56 acres, of which 13.19 acres would be developed for residential uses, and the additional 0.37 acres would be converted and used as an extension and dedication of Del Norte Street from its current terminus east to Sunset Avenue.

To facilitate the proposed development, the Project includes a General Plan Amendment to change the land use designation from Civic: Schools to Neighborhood High Residential (up to 53 units per acre) and a Zone Change from Single Family Residential to Specific Plan which would allow the proposed net density of 21.4 dwelling units per acre.

Although the Project is inconsistent with the current land use and zoning designation, it would not result in any individually significant impacts. Therefore, the proposed Project would not conflict with the goals and objectives of the AQMP. Furthermore, the Project, as evaluated herein would not exceed the regional or localized air quality significance thresholds.

On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

AQMP Consistency Conclusion

Project would not have the potential to result in or cause NAAQS or CAAQS violations. Although the Project's proposed uses are not consistent with the General Plan land use and zoning designation, as the Project would not exceed the regional or localized construction and operational thresholds, the Project's development intensity is consistent with the development intensities allowed within the General Plan as previously stated. As such, the Project is therefore considered to be consistent with the AQMP.

3.9 Toxic Air Contaminants

Based on the results of the *1501 Del Norte Street Residential Construction Health Risk Assessment* (24), emissions generated from the Project during short-term construction will not exceed SCAQMD

significance thresholds for cancer and non-cancer health risks. As such, a less than significant impact is expected.

3.10 Potential Impacts to Sensitive Receptors

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Results of the LST analysis indicate that the Project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Additionally, the Project would not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

3.10.1 Friant Ranch Case

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an Environmental Impact Report's (EIR) air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided.

Most local agencies, including the City of West Covina, lack the data to do their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. The use of national or "generic" data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns, local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causing asthma), existing scientific tools cannot accurately estimate health impacts of the Project's air emissions without undue speculation. Instead, readers are directed to the Project's air quality impact analysis above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Project's construction and long-term operation.

Notwithstanding, this AQIA does evaluate the proposed Project's localized impact to air quality for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ by comparing the proposed Project's on-site emissions to the SCAQMD's applicable LST thresholds. The LST analysis above determined that the Project would not result in emissions exceeding SCAQMD's LSTs. Therefore, the proposed Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$.

As the Project's emissions would comply with federal, state, and local air quality standards, the proposed Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled.

3.11 ODORS

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with current solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors and other emissions (such as those leading to odors) associated with construction and operations activities of the proposed Project would be less than significant and no mitigation is required (25).

3.12 CUMULATIVE IMPACTS

As previously shown in Table 2-4, the CAAQS designate the Project site as nonattainment for O_3 PM_{10}, and $PM_{2.5}$ while the NAAQS designates the Project site as nonattainment for O_3 and $PM_{2.5}$. he SCAQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (26). In this report the SCAQMD clearly states (Page D-3):

> *"…the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which SCAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Conversely, project-level construction and operational emissions that exceed SCAQMD thresholds would be considered cumulatively considerable. SCAQMD's thresholds of significance for project-specific direct and cumulatively-considerable impacts have clearly been successful, as application of these thresholds has led to significant air quality improvements throughout the SCAB.

Construction-Source Emission Impacts

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project construction-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, proposed Project construction-source emissions would be considered less than significant on a Project-specific and cumulative basis.

Operational-Source Emission Impacts

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that proposed Project operation-source air pollutant emissions would not result in exceedances of regional thresholds. Therefore, the proposed Project operation-source emissions would be considered less than significant on a project-specific and cumulative basis.

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4 REFERENCES

1. **State of California.** *2020 CEQA California Environmental Quality Act.* 2020.
2. **South Coast Air Quality Management District.** Southern California Air Basins. [Online] https://www.arb.ca.gov/msprog/onroad/porttruck/maps/scabc7map.pdf.
3. —. *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.* 2005.
4. **St. Croix Sensory, Inc.** *The "Gray Line" Between Odor Nuisance and Health Effects.* 2000.
5. **California Air Resources Board.** Ambient Air Quality Standards (AAQS). [Online] 2024. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.
6. **United State Environmental Protection Agency.** Frequent Questions about General Conformity . *EPA.* [Online] https://www.epa.gov/general-conformity/frequent-questions-about-general-conformity#8.
7. **South Coast Air Quality Management District.** Annual Air Quality Monitoring Network Plan. [Online] July 2023. https://www.aqmd.gov/docs/default-source/default-document-library/south-coast-aqmd-2023-annual-air-quality-monitoring-network-plan.pdf?sfvrsn=0.
8. **Air Resources Board.** *Appendix C Maps and Tables of Area Designations for State and National Ambient Air Quality Standards.* 2024.
9. **District, South Coast Air Quality Management.** Air Quality Data Tables. [Online] https://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year.
10. **Environmental Protection Agency.** National Ambient Air Quality Standards (NAAQS). [Online] 1990. https://www.epa.gov/environmental-topics/air-topics.
11. —. Air Pollution and the Clean Air Act. [Online] http://www.epa.gov/air/caa/.
12. **United States Environmental Protection Agency.** 1990 Clean Air Act Amendment Summary: Title I. [Online] https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-i.
13. —. 1990 Clean Air Act Amendment Summary: Title II. [Online] https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-ii.
14. **Air Resources Board.** California Ambient Air Quality Standards (CAAQS). [Online] 2009. [Cited: April 16, 2018.] http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm.
15. **Southern California Association of Governments.** 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. [Online] April 2016. https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs.pdf?1606005557.
16. **South Coast Air Quality Management District.** SCAQMD Air Quality Significance Thresholds. [Online] https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf.
17. **California Air Pollution Control Officers Association (CAPCOA).** California Emissions Estimator Model (CalEEMod). [Online] March 2023. www.caleemod.com.
18. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th. 2021.
19. **Lake Environmental.** US EPA Models. *Lake Environmental.* [Online] http://www.weblakes.com/download/us_epa.html.
20. **South Coast Air Quality Management District.** *Localized Significance Thresholds Methodology.* s.l. : South Coast Air Quality Managment District, 2008.
21. —. Final 2016 Air Quality Management Plan (AQMP). [Online] March 2017. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=11.

22. **Southern California Association of Governments.** 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. [Online] September 2020. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.

23. **South Coast Air Quality Management District.** *CEQA Air Quality Handbook (1993).* 1993.

24. **Urban Crossroads, Inc.** *1501 Del Norte Street Residential Construction Health Risk Assessment.* 2025.

25. **South Coast Air Quality Management District.** RULE 402 NUISANCE. [Online] http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf.

26. **Goss, Tracy A and Kroeger, Amy.** White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. [Online] South Coast Air Quality Management District, 2003. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf.

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5 CERTIFICATION

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed 1501 Del Norte Street Residential Project. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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Professional Certifications

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Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – CARB • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 2.1:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

Appendix C
Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

Appendix C
Maps and Tables of Area Designations for State and National Ambient Air Quality Standards

This attachment fulfills the requirement of Health and Safety Code section 40718 for CARB to publish maps that identify areas where one or more violations of any State ambient air quality standard (State standard) or national ambient air quality standard (national standard) have been measured. The national standards are those promulgated under section 109 of the federal Clean Air Act (42 U.S.C. 7409).

This attachment is divided into three parts. The first part comprises a table showing the levels, averaging times, and measurement methods for each of the State and national standards. This is followed by a section containing maps and tables showing the area designations for each pollutant for which there is a State standard in the California Code of Regulations, title 17, section 70200. The last section contains maps and tables showing the most current area designations for the national standards.

(Updated 5/4/16)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page …

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$)as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Area Designations for the State Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a State standard set forth in the California Code of Regulations, title 17, section 60200. Each area is identified as attainment, nonattainment, nonattainment-transitional, or unclassified for each pollutant, as shown below:

Designation	Abbreviation
Attainment	A
Nonattainment	N
Nonattainment-Transitional	NA-T
Unclassified	U

In general, CARB designates areas by air basin for pollutants with a regional impact and by county for pollutants with a more local impact. However, when there are areas within an air basin or county with distinctly different air quality deriving from sources and conditions not affecting the entire air basin or county, CARB may designate a smaller area. Generally, when boundaries of the designated area differ from the air basin or county boundaries, the description of the specific area is referenced at the bottom of the summary table.

Figure 1

2023
Area Designations for State
Ambient Air Quality Standards
OZONE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Sutter Buttes
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
Imperial
San Diego
SAN DIEGO
Unclassified
Attainment
Nonattainment-Transitional
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 1
California Ambient Air Quality Standards Area Designations for Ozone[1]

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County	N			
Mono County	N			
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN		NA-T		
MOJAVE DESERT AIR BASIN	N			
MOUNTAIN COUNTIES AIR BASIN				
Amador County		NA-T		
Calaveras County		NA-T		
El Dorado County (portion)	N			
Mariposa County	N			
Nevada County	N			
Placer County (portion)		NA-T		
Plumas County			U	
Sierra County			U	
Tuolumne County		NA-T		
NORTH CENTRAL COAST AIR BASIN				A
NORTH COAST AIR BASIN				A
NORTHEAST PLATEAU AIR BASIN				A

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN				
Butte County		NA-T		
Colusa and Glenn Counties				A
Shasta County	N			
Sutter/Yuba Counties				
Sutter Buttes		NA-T		
Remainder of Sutter County		NA-T		
Yuba County		NA-T		
Yolo/Solano Counties		NA-T		
Remainder of Air Basin	N			
SALTON SEA AIR BASIN	N			
SAN DIEGO AIR BASIN	N			
SAN FRANCISCO BAY AREA AIR BASIN		NA-T		
SAN JOAQUIN VALLEY AIR BASIN	N			
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County	N			
Santa Barbara County		NA-T		
Ventura County	N			
SOUTH COAST AIR BASIN	N			

[1] AB 3048 (Olberg) and AB 2525 (Miller) signed into law in 1996, made changes to Health and Safety Code, section 40925.5. One of the changes allows nonattainment districts to become nonattainment-transitional for ozone by operation of law.

Figure 2

2023
Area Designations for State
Ambient Air Quality Standards
PM10
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Placer
LAKE TAHOE
Sutter
El Dorado
Yolo
Sonoma
Napa
Sac
Amador
Alpine
Yosemite NP
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
Imperial
San Diego
SAN DIEGO
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 2
California Ambient Air Quality Standards Area Designations for Suspended Particulate Matter (PM_{10})

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN	N		
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN	N		
MOJAVE DESERT AIR BASIN	N		
MOUNTAIN COUNTIES AIR BASIN			
Amador County		U	
Calaveras County	N		
El Dorado County (portion)	N		
Mariposa County			
- Yosemite National Park	N		
- Remainder of County		U	
Nevada County	N		
Placer County (portion)	N		
Plumas County	N		
Sierra County	N		
Tuolumne County		U	

Area	N	U	A
NORTH CENTRAL COAST AIR BASIN	N		
NORTH COAST AIR BASIN			
Del Norte, Mendocino, Sonoma (portion) and Trinity Counties			A
Remainder of Air Basin	N		
NORTHEAST PLATEAU AIR BASIN			
Siskiyou County			A
Remainder of Air Basin		U	
SACRAMENTO VALLEY AIR BASIN			
Shasta County			A
Remainder of Air Basin	N		
SALTON SEA AIR BASIN	N		
SAN DIEGO AIR BASIN	N		
SAN FRANCISCO BAY AREA AIR BASIN	N		
SAN JOAQUIN VALLEY AIR BASIN	N		
SOUTH CENTRAL COAST AIR BASIN	N		
SOUTH COAST AIR BASIN	N		

Figure 3

2023
Area Designations for State
Ambient Air Quality Standards
PM2.5
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
Portola Valley
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Monterey
County Portion of Federal Ozone AQMA
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Orange
Riverside
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Calexico
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 3
California Ambient Air Quality Standards Area Designations for Fine Particulate Matter ($PM_{2.5}$)

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			
Plumas County			
- Portola Valley[1]	N		
- Remainder Plumas County		U	
Remainder of Air Basin		U	
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			
Butte County			A
Colusa County			A
Glenn County			A
Placer County (portion)			A
Sacramento County			A
Shasta County			A
Sutter and Yuba Counties	N		
Remainder of Air Basin		U	

Area	N	U	A
SALTON SEA AIR BASIN			
Imperial County			
- City of Calexico[2]	N		
Remainder of Air Basin			A
SAN DIEGO AIR BASIN	N		
SAN FRANCISCO BAY AREA AIR BASIN	N		
SAN JOAQUIN VALLEY AIR BASIN	N		
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN	N		

[1] California Code of Regulations, title 17, section 60200(c)

[2] California Code of Regulations, title 17, section 60200(a)

Figure 4

2023
Area Designations for State
Ambient Air Quality Standards
CARBON MONOXIDE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Unclassified
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 4
California Ambient Air Quality Standards Area Designations for Carbon Monoxide*

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County				A
Mono County				A
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN				A
MOJAVE DESERT AIR BASIN				
Kern County (portion)			U	
Los Angeles County (portion)				A
Riverside County (portion)			U	
San Bernardino County (portion)				A
MOUNTAIN COUNTIES AIR BASIN				
Amador County			U	
Calaveras County			U	
El Dorado County (portion)			U	
Mariposa County			U	
Nevada County			U	
Placer County (portion)			U	
Plumas County				A
Sierra County			U	
Tuolumne County				A
NORTH CENTRAL COAST AIR BASIN				
Monterey County				A
San Benito County			U	
Santa Cruz County			U	
NORTH COAST AIR BASIN				
Del Norte County			U	
Humboldt County				A
Mendocino County				A
Sonoma County (portion)			U	
Trinity County			U	
NORTHEAST PLATEAU AIR BASIN			U	

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN				
Butte County				A
Colusa County			U	
Glenn County			U	
Placer County (portion)				A
Sacramento County				A
Shasta County			U	
Solano County (portion)				A
Sutter County				A
Tehama County			U	
Yolo County				A
Yuba County			U	
SALTON SEA AIR BASIN				A
SAN DIEGO AIR BASIN				A
SAN FRANCISCO BAY AREA AIR BASIN				A
SAN JOAQUIN VALLEY AIR BASIN				
Fresno County				A
Kern County (portion)				A
Kings County			U	
Madera County			U	
Merced County			U	
San Joaquin County				A
Stanislaus County				A
Tulare County				A
SOUTH CENTRAL COAST AIR BASIN				A
SOUTH COAST AIR BASIN				A

* The area designated for carbon monoxide is a county or portion of a county

Figure 5

2023
Area Designations for State
Ambient Air Quality Standards
NITROGEN DIOXIDE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
CA 60 (Portion)
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Calexico
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 5
California Ambient Air Quality Standards Area Designations for Nitrogen Dioxide

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			
CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties			A
Remainder of Air Basin			A

Figure 6

2023
Area Designations for State
Ambient Air Quality Standards
SULFUR DIOXIDE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 6
California Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	N	A
GREAT BASIN VALLEYS AIR BASIN		A
LAKE COUNTY AIR BASIN		A
LAKE TAHOE AIR BASIN		A
MOJAVE DESERT AIR BASIN		A
MOUNTAIN COUNTIES AIR BASIN		A
NORTH CENTRAL COAST AIR BASIN		A
NORTH COAST AIR BASIN		A
NORTHEAST PLATEAU AIR BASIN		A

Area	N	A
SACRAMENTO VALLEY AIR BASIN		A
SALTON SEA AIR BASIN		A
SAN DIEGO AIR BASIN		A
SAN FRANCISCO BAY AREA AIR BASIN		A
SAN JOAQUIN VALLEY AIR BASIN		A
SOUTH CENTRAL COAST AIR BASIN		A
SOUTH COAST AIR BASIN		A

* The area designated for sulfur dioxide is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 7

2023
Area Designations for State
Ambient Air Quality Standards
SULFATES
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
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Table 7
California Ambient Air Quality Standards Area Designations for Sulfates

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A

Area	N	U	A
SACRAMENTO VALLEY AIR BASIN			A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			A

Figure 8

2023
Area Designations for State
Ambient Air Quality Standards
LEAD
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
San Diego
Imperial
SAN DIEGO
Attainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 8
California Ambient Air Quality Standards Area Designations for Lead (particulate)*

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			A
LAKE COUNTY AIR BASIN			A
LAKE TAHOE AIR BASIN			A
MOJAVE DESERT AIR BASIN			A
MOUNTAIN COUNTIES AIR BASIN			A
NORTH CENTRAL COAST AIR BASIN			A
NORTH COAST AIR BASIN			A
NORTHEAST PLATEAU AIR BASIN			A
SACRAMENTO VALLEY AIR BASIN			A

Area	N	U	A
SALTON SEA AIR BASIN			A
SAN DIEGO AIR BASIN			A
SAN FRANCISCO BAY AREA AIR BASIN			A
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN			A
SOUTH COAST AIR BASIN			A

* The area designated for lead is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

Figure 9

2023
Area Designations for State
Ambient Air Quality Standards
HYDROGEN SULFIDE
N
0 40 80 120 160
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Geyser Geothermal
Yolo
El Dorado
City of Sutter Creek
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Inyo
NORTH CENTRAL COAST
Kings
Tulare
Searles Valley
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Coachella Valley
Riverside
Orange
SOUTH COAST
SALTON SEA
Imperial
San Diego
SAN DIEGO
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division, CARB

Table 9
California Ambient Air Quality Standards Area Designations for Hydrogen Sulfide*

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			U	
Inyo County				A
Mono County				A
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN			U	
MOJAVE DESERT AIR BASIN				
Kern County (portion)			U	
Los Angeles County (portion)			U	
Riverside County (portion)			U	
San Bernardino County (portion)				
- Searles Valley Planning Area[1]	N			
- Remainder of County			U	
MOUNTAIN COUNTIES AIR BASIN				
Amador County				
- City of Sutter Creek	N			
- Remainder of County			U	
Calaveras County			U	
El Dorado County (portion)			U	
Mariposa County			U	
Nevada County			U	
Placer County (portion)			U	
Plumas County			U	
Sierra County			U	
Tuolumne County			U	

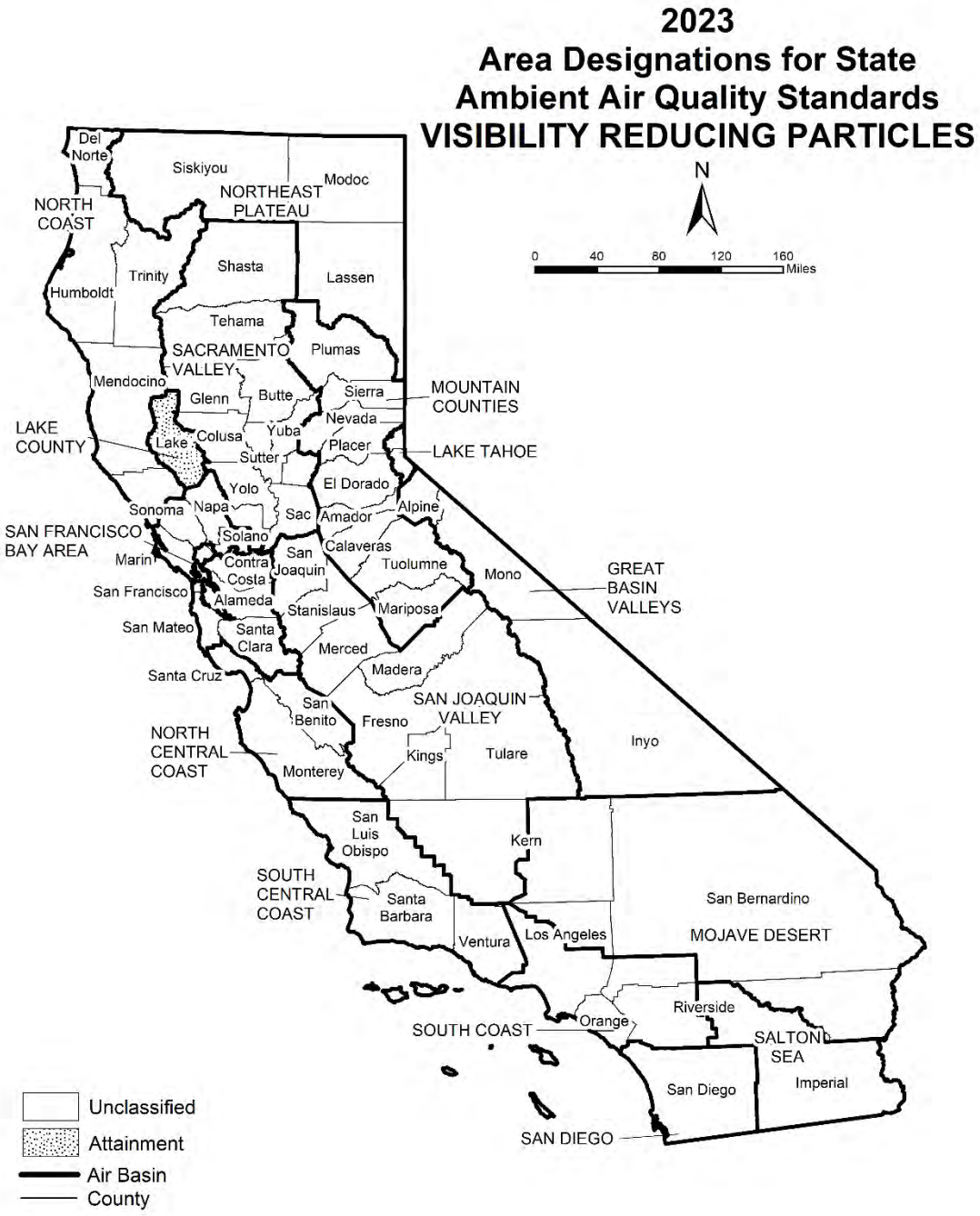
Area	N	NA-T	U	A
NORTH CENTRAL COAST AIR BASIN			U	
NORTH COAST AIR BASIN				
Del Norte County			U	
Humboldt County				A
Mendocino County			U	
Sonoma County (portion)				
- Geyser Geothermal Area[2]				A
- Remainder of County			U	
Trinity County			U	
NORTHEAST PLATEAU AIR BASIN			U	
SACRAMENTO VALLEY AIR BASIN			U	
SALTON SEA AIR BASIN				
Riverside County (portion)	N			
Imperial County			U	
SAN DIEGO AIR BASIN			U	
SAN FRANCISCO BAY AREA AIR BASIN			U	
SAN JOAQUIN VALLEY AIR BASIN			U	
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County				A
Santa Barbara County				A
Ventura County			U	
SOUTH COAST AIR BASIN			U	

* The area designated for hydrogen sulfide is a county or portion of a county

[1] 52 Federal Register 29384 (August 7, 1987)

[2] California Code of Regulations, title 17, section 60200(d)

Figure 10



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Air Quality Planning and Science Division, CARB

Table 10
California Ambient Air Quality Standards Area Designations for Visibility Reducing Particles

Area	N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN			U	
LAKE COUNTY AIR BASIN				A
LAKE TAHOE AIR BASIN			U	
MOJAVE DESERT AIR BASIN			U	
MOUNTAIN COUNTIES AIR BASIN			U	
NORTH CENTRAL COAST AIR BASIN			U	
NORTH COAST AIR BASIN			U	
NORTHEAST PLATEAU AIR BASIN			U	

Area	N	NA-T	U	A
SACRAMENTO VALLEY AIR BASIN			U	
SALTON SEA AIR BASIN			U	
SAN DIEGO AIR BASIN			U	
SAN FRANCISCO BAY AREA AIR BASIN			U	
SAN JOAQUIN VALLEY AIR BASIN			U	
SOUTH CENTRAL COAST AIR BASIN			U	
SOUTH COAST AIR BASIN			U	

Area Designations for the National Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a national ambient air quality standard. Additional information about the federal area designations is available on the U.S. EPA website:

https://www.epa.gov/green-book

Over the last several years, U.S. EPA has been reviewing the levels of the various national standards. The agency has already promulgated new standard levels for some pollutants and is considering revising the levels for others. Information about the status of these reviews is available on the U.S. EPA website:

https://www.epa.gov/criteria-air-pollutants

Designation Categories

Suspended Particulate Matter (PM_{10}). The U.S. EPA uses three categories to designate areas with respect to PM_{10}:

- Attainment (A)
- Nonattainment (N)
- Unclassifiable (U)

Ozone, Fine Suspended Particulate Matter ($PM_{2.5}$), Carbon Monoxide (CO), and Nitrogen Dioxide (NO_2). The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment (N)
- Unclassifiable/Attainment (U/A)

The national 1-hour ozone standard was revoked effective June 15, 2005, and the area designations map reflects the 2015 national 8-hour ozone standard of 0.070 ppm. Area designations were finalized on August 3, 2018.

On December 14, 2012, the U.S. EPA established a new national annual primary $PM_{2.5}$ standard of 12.0 µg/m^3. Area designations were finalized in December 2014. The current designation map reflects the most recently revised (2012) annual average standard of 12.0 µg/m^3 as well as the 24-hour standard of 35 µg/m^3, revised in 2006.

On January 22, 2010, the U.S. EPA established a new national 1-hour NO_2 standard of 100 parts per billion (ppb) and retained the annual average standard of 53 ppb. Designations for the primary NO_2 standard became effective on February 29, 2012. All areas of California meet this standard.

Sulfur Dioxide (SO_2). The U.S. EPA uses three categories to designate areas with respect to the 24-hour and annual average sulfur dioxide standards. These designation categories are:

- Nonattainment (N),
- Unclassifiable (U), and
- Unclassifiable/Attainment (U/A).

On June 2, 2010, the U.S. EPA established a new primary 1-hour SO_2 standard of 75 parts per billion (ppb). At the same time, U.S. EPA revoked the 24-hour and annual average standards. Area designations for the 1-hour SO_2 standard were finalized on December 21, 2017 and are reflected in the area designations map.

Lead (particulate). The U.S. EPA promulgated a new rolling 3-month average lead standard in October 2008 of 0.15 µg/m^3. Designations were made for this standard in November 2010.

Designation Areas

From time to time, the boundaries of the California air basins have been changed to facilitate the planning process. CARB generally initiates these changes, and they are not always reflected in the U.S. EPA's area designations. For purposes of consistency, the maps in this attachment reflect area designation boundaries and nomenclature as promulgated by the U.S. EPA. In some cases, these may not be the same as those adopted by CARB. For example, the national area designations reflect the former Southeast Desert Air Basin. In accordance with Health and Safety Code section 39606.1, CARB redefined this area in 1996 to be the Mojave Desert Air Basin and Salton Sea Air Basin. The definitions and boundaries for all areas designated for the national standards can be found in Title 40, Code of Federal Regulations (CFR), Chapter I, Subchapter C, Part 81.305. They are available on the web at: *https://ecfr.io/Title-40/se40.20.81_1305*

Figure 11

Area Designations for National Ambient Air Quality Standards
8-HOUR OZONE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
Sutter Buttes
Tuscan Buttes
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Sutter
Yuba
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Antelope Valley and Western Mojave Desert
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
MOJAVE DESERT
Riverside
Orange
SOUTH COAST
SALTON SEA
Coachella Valley
Imperial
San Diego
SAN DIEGO
Unclassified/Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Map reflects the 2015 8-hour ozone standard of 0.070 ppm
Air Quality Planning and Science Division, CARB

Table 11
National Ambient Air Quality Standards Area Designations for 8-Hour Ozone*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		
Amador County	N	
Calaveras County	N	
El Dorado County (portion)[1]	N	
Mariposa County	N	
Nevada County		
- Western Nevada County	N	
- Remainder of County		U/A
Placer County (portion)[1]	N	
Plumas County		U/A
Sierra County		U/A
Tuolumne County	N	
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		
Butte County	N	
Colusa County		U/A
Glenn County		U/A
Sacramento Metro Area[1]	N	
Shasta County		U/A
Sutter County		
- Sutter Buttes	N	
- Southern portion of Sutter County[1]	N	
- Remainder of Sutter County		U/A
Tehama County		
- Tuscan Buttes	N	
- Remainder of Tehama County		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN (cont.)		
Yolo County[1]	N	
Yuba County		U/A
SAN DIEGO COUNTY	N	
SAN FRANCISCO BAY AREA AIR BASIN	N	
SAN JOAQUIN VALLEY AIR BASIN	N	
SOUTH CENTRAL COAST AIR BASIN[2]		
San Luis Obispo County		
- Eastern San Luis Obispo County	N	
- Remainder of County		U/A
Santa Barbara County		U/A
Ventura County		
- Area excluding Anacapa and San Nicolas Islands	N	
- Channel Islands[2]		U/A
SOUTH COAST AIR BASIN[2]	N	
SOUTHEAST DESERT AIR BASIN		
Kern County (portion)	N	
- Indian Wells Valley		U/A
Imperial County	N	
Los Angeles County (portion)	N	
Riverside County (portion)		
- Coachella Valley	N	
- Non-AQMA portion		U/A
San Bernardino County		
- Western portion (AQMA)	N	
- Eastern portion (non-AQMA)		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
NOTE: This map and Table reflect the 2015 8-hour ozone standard of 0.070 ppm.

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[1] For this purpose, the Sacramento Metro Area comprises all of Sacramento and Yolo Counties, the Sacramento Valley Air Basin portion of Solano County, the southern portion of Sutter County, and the Sacramento Valley and Mountain Counties Air Basins portions of Placer and El Dorado counties.

[2] South Central Coast Air Basin Channel Islands:
Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.
Ventura County includes Anacapa and San Nicolas Islands.
South Coast Air Basin:
Los Angeles County includes San Clemente and Santa Catalina Islands.

Figure 12

Area Designations for National Ambient Air Quality Standards PM10
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Trinity
Lassen
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Alpine
Sacramento County
Sonoma
Napa
Sac
Amador
Mono
Mono Basin
SAN FRANCISCO BAY AREA
Marin
Solano
Calaveras
Mammoth Lake
San Joaquin
Tuolumne
Contra Costa
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Inyo
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Owens Valley
Coso Junction
Trona
NORTH CENTRAL COAST
Monterey
Kings
Tulare
San Luis Obispo
Kern
Indian Wells Valley
San Bernardino
Santa Barbara
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Ventura
Los Angeles
Riverside
Coachella Valley
Orange
SOUTH COAST
Imperial
San Diego
SAN DIEGO COUNTY
Unclassified
Attainment
Nonattainment
Air Basin
County
Last Updated: November 2023
Air Quality Planning and Science Division

Table 12
National Ambient Air Quality Standards Area Designations for Suspended Particulate Matter (PM_{10})*

Area	N	U	A
GREAT BASIN VALLEYS AIR BASIN			
Alpine County		U	
Inyo County			
- Owens Valley Planning Area	N		
- Coso Junction			A
- Remainder of County		U	
Mono County			
- Mammoth Lake Planning Area			A
- Mono Lake Basin	N		
- Remainder of County		U	
LAKE COUNTY AIR BASIN		U	
LAKE TAHOE AIR BASIN		U	
MOUNTAIN COUNTIES AIR BASIN		U	
NORTH CENTRAL COAST AIR BASIN		U	
NORTH COAST AIR BASIN		U	
NORTHEAST PLATEAU AIR BASIN		U	
SACRAMENTO VALLEY AIR BASIN			
Sacramento County[1]			A
Remainder of Air Basin		U	
SAN DIEGO COUNTY		U	

Area	N	U	A
SAN FRANCISCO BAY AREA AIR BASIN		U	
SAN JOAQUIN VALLEY AIR BASIN			A
SOUTH CENTRAL COAST AIR BASIN		U	
SOUTH COAST AIR BASIN			A
SOUTHEAST DESERT AIR BASIN			
Eastern Kern County			
- Indian Wells Valley			A
- Portion within San Joaquin Valley Planning Area	N		
- Remainder of County		U	
Imperial County			
- Imperial Valley Planning Area[2]			A
- Remainder of County		U	
Los Angeles County (portion)		U	
Riverside County (portion)			
- Coachella Valley	N		
- Non-AQMA portion		U	
San Bernardino County			
- Trona	N		
- Remainder of County	N		

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

[1] Air quality in Sacramento County meets the national PM_{10} standards. The request for redesignation to attainment was approved by U.S. EPA in September 2013.

[2] The request for redesignation to attainment for the Imperial Valley Planning Area was approved by U.S. EPA in September 2020, effective October 2020.

Figure 13

Area Designations for National Ambient Air Quality Standards PM2.5
N
0 50 100 150 200 Miles
NORTH COAST
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
Humboldt
Trinity
Shasta
Lassen
Tehama
SACRAMENTO VALLEY
Plumas
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Mendocino
Nevada
LAKE COUNTY
Colusa
Yuba
Placer
Lake
LAKE TAHOE
Sutter
El Dorado
Yolo
Alpine
Sonoma
Napa
Sacramento
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
GREAT BASIN VALLEYS
Marin
Tuolumne
Contra Costa
San Joaquin
Mono
Alameda
Stanislaus
Mariposa
San Mateo
Merced
Madera
Santa Clara
Santa Cruz
Fresno
NORTH CENTRAL COAST
San Benito
Inyo
Tulare
Monterey
Kings
SAN JOAQUIN VALLEY
San Luis Obispo
Kern
San Bernardino
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
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Table 13
National Ambient Air Quality Standards Area Designations for Fine Particulate Matter ($PM_{2.5}$)

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		
Plumas County		
- Portola Valley Portion of Plumas County	N	
- Remainder of Plumas County		U/A
Remainder of Air Basin		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		
Sacramento Metro Area[1]	N	
Remainder of Air Basin		U/A

Area	N	U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN[2]	N	
SAN JOAQUIN VALLEY AIR BASIN	N	
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN[3]	N	
SOUTHEAST DESERT AIR BASIN		
Imperial County (portion)[4]	N	
Remainder of Air Basin		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. This map reflects the 2006 24-hour $PM_{2.5}$ standard as well as the 1997 and 2012 $PM_{2.5}$ annual standards.

[1] For this purpose, Sacramento Metro Area comprises all of Sacramento and portions of El Dorado, Placer, Solano, and Yolo Counties. Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

[2] Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

[3] Those lands of the Santa Rosa Band of Cahulla Mission Indians in Riverside County are designated Unclassifiable/Attainment.

[4] That portion of Imperial County encompassing the urban and surrounding areas of Brawley, Calexico, El Centro, Heber, Holtville, Imperial, Seeley, and Westmorland. Air quality in this area meets the national $PM_{2.5}$ standards. A Determination of Attainment for the 2006 24-hour $PM_{2.5}$ standard was made by U.S. EPA in June 2017.

Figure 14

Area Designations for National Ambient Air Quality Standards
CARBON MONOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Lake
Sutter
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Alpine
Napa
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
San Joaquin
Contra Costa
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Tulare
Inyo
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
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Table 14
National Ambient Air Quality Standards Area Designations for Carbon Monoxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 15

Area Designations for National Ambient Air Quality Standards
NITROGEN DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
Nevada
MOUNTAIN COUNTIES
Colusa
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Lake
Sutter
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Marin
Calaveras
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
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Table 15
National Ambient Air Quality Standards Area Designations for Nitrogen Dioxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A

Area	N	U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

Figure 16

Area Designations for National Ambient Air Quality Standards
SULFUR DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
LAKE TAHOE
LAKE COUNTY
Lake
Sutter
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
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Table 16
National Ambient Air Quality Standards Area Designations for Sulfur Dioxide*

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN[1]		U/A
SOUTH COAST AIR BASIN		U/A
SOUTHEAST DESERT AIR BASIN		U/A

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
NOTE: This map and table reflect the 2010 1-hour SO_2 standard of 75 ppb.

[1] South Central Coast Air Basin Channel Islands:
Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.
Ventura County includes Anacapa and San Nicolas Islands.
Note that the San Clemente and Santa Catalina Islands are considered part of Los Angeles County, and therefore, are included as part of the South Coast Air Basin.

Figure 17

Area Designations for National Ambient Air Quality Standards
LEAD
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
Lake
Sutter
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Orange
Riverside
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
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Table 17
National Ambient Air Quality Standards Area Designations for Lead (particulate)

Area	N	U/A
GREAT BASIN VALLEYS AIR BASIN		U/A
LAKE COUNTY AIR BASIN		U/A
LAKE TAHOE AIR BASIN		U/A
MOUNTAIN COUNTIES AIR BASIN		U/A
NORTH CENTRAL COAST AIR BASIN		U/A
NORTH COAST AIR BASIN		U/A
NORTHEAST PLATEAU AIR BASIN		U/A
SACRAMENTO VALLEY AIR BASIN		U/A

Area	N	U/A
SAN DIEGO COUNTY		U/A
SAN FRANCISCO BAY AREA AIR BASIN		U/A
SAN JOAQUIN VALLEY AIR BASIN		U/A
SOUTH CENTRAL COAST AIR BASIN		U/A
SOUTH COAST AIR BASIN		
Los Angeles County (portion)[1]	N	
Remainder of Air Basin		U/A
SOUTHEAST DESERT AIR BASIN		U/A

[1] Portion of County in Air Basin, not including Channel Islands

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APPENDIX 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

1501 Del Norte Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	1501 Del Norte
Construction Start Date	1/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	22.4
Location	1501 W Del Norte St, West Covina, CA 91790, USA
County	Los Angeles-South Coast
City	West Covina
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4913
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	34.0	Dwelling Unit	1.43	124,148	398,237	—	101	—

Condo/Townhouse	248	Dwelling Unit	9.17	1,387,522	0.00	—	734	—
Parking Lot	77.0	Space	0.69	0.00	0.00	—	—	—
Recreational Swimming Pool	18.0	1000sqft	0.41	18,000	0.00	—	—	—
Other Asphalt Surfaces	64.7	1000sqft	1.48	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	33.4	33.2	27.0	25.4	0.06	1.18	3.34	4.12	1.09	1.07	2.16	—	7,159	7,159	0.30	0.24	12.0	7,229
Mit.	32.9	32.8	17.4	33.0	0.06	0.13	3.34	3.48	0.13	1.07	1.20	—	7,159	7,159	0.30	0.24	12.0	7,229
% Reduced	2%	1%	36%	-30%	—	89%	—	16%	88%	—	45%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.3	33.9	27.1	27.4	0.06	1.18	3.47	4.12	1.09	1.07	2.16	—	7,151	7,151	0.30	0.25	0.34	7,218
Mit.	33.3	33.1	17.5	32.9	0.06	0.21	3.47	3.68	0.19	1.07	1.20	—	7,151	7,151	0.30	0.25	0.34	7,218
% Reduced	3%	2%	35%	-20%	—	82%	—	11%	82%	—	45%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.9	23.7	7.22	15.6	0.02	0.26	2.36	2.49	0.24	0.56	0.71	—	3,648	3,648	0.14	0.17	3.70	3,704
Mit.	23.5	23.4	6.27	15.5	0.02	0.10	2.36	2.45	0.09	0.56	0.65	—	3,648	3,648	0.14	0.17	3.70	3,704
% Reduced	2%	1%	13%	1%	—	63%	—	1%	62%	—	9%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.36	4.33	1.32	2.84	< 0.005	0.05	0.43	0.45	0.04	0.10	0.13	—	604	604	0.02	0.03	0.61	613
Mit.	4.29	4.27	1.14	2.83	< 0.005	0.02	0.43	0.45	0.02	0.10	0.12	—	604	604	0.02	0.03	0.61	613
% Reduced	2%	1%	13%	1%	—	63%	—	1%	62%	—	9%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.60	2.99	27.0	25.4	0.06	1.18	2.94	4.12	1.09	1.07	2.16	—	7,159	7,159	0.30	0.22	11.4	7,229
2027	33.4	33.2	7.32	23.1	0.02	0.17	3.34	3.52	0.16	0.79	0.95	—	5,182	5,182	0.22	0.24	12.0	5,270
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	33.5	33.2	27.1	25.3	0.06	1.18	3.34	4.12	1.09	1.07	2.16	—	7,151	7,151	0.30	0.24	0.34	7,218
2027	34.3	33.9	11.9	27.4	0.03	0.36	3.47	3.83	0.33	0.82	1.15	—	6,041	6,041	0.16	0.25	0.32	6,120
2028	34.2	33.8	11.5	26.6	0.03	0.31	3.47	3.79	0.29	0.82	1.11	—	5,966	5,966	0.15	0.25	0.29	6,044
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.04	2.83	7.22	12.6	0.02	0.26	1.83	2.09	0.24	0.47	0.71	—	3,224	3,224	0.14	0.15	2.61	3,274
2027	23.9	23.7	5.54	15.6	0.01	0.13	2.36	2.49	0.12	0.56	0.68	—	3,648	3,648	0.09	0.17	3.70	3,704

2028	1.74	1.72	0.58	1.38	< 0.005	0.02	0.17	0.19	0.01	0.04	0.06	—	306	306	0.01	0.01	0.25	310
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.55	0.52	1.32	2.30	< 0.005	0.05	0.33	0.38	0.04	0.09	0.13	—	534	534	0.02	0.02	0.43	542
2027	4.36	4.33	1.01	2.84	< 0.005	0.02	0.43	0.45	0.02	0.10	0.12	—	604	604	0.02	0.03	0.61	613
2028	0.32	0.31	0.11	0.25	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	50.6	50.6	< 0.005	< 0.005	0.04	51.3

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.12	0.96	17.4	33.0	0.06	0.13	2.94	3.07	0.13	1.07	1.20	—	7,159	7,159	0.30	0.22	11.4	7,229
2027	32.9	32.8	8.33	22.9	0.02	0.13	3.34	3.48	0.12	0.79	0.92	—	5,182	5,182	0.22	0.24	12.0	5,270
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	33.0	32.8	17.5	32.9	0.06	0.16	3.34	3.48	0.15	1.07	1.20	—	7,151	7,151	0.30	0.24	0.34	7,218
2027	33.3	33.1	13.3	27.6	0.03	0.21	3.47	3.68	0.19	0.82	1.02	—	6,041	6,041	0.16	0.25	0.32	6,120
2028	33.3	33.1	13.2	26.8	0.03	0.21	3.47	3.68	0.19	0.82	1.02	—	5,966	5,966	0.15	0.25	0.29	6,044
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.46	2.38	5.81	13.6	0.02	0.06	1.83	1.89	0.06	0.47	0.53	—	3,224	3,224	0.14	0.15	2.61	3,274
2027	23.5	23.4	6.27	15.5	0.01	0.10	2.36	2.45	0.09	0.56	0.65	—	3,648	3,648	0.09	0.17	3.70	3,704
2028	1.69	1.68	0.67	1.39	< 0.005	0.01	0.17	0.18	0.01	0.04	0.05	—	306	306	0.01	0.01	0.25	310
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.45	0.43	1.06	2.48	< 0.005	0.01	0.33	0.34	0.01	0.09	0.10	—	534	534	0.02	0.02	0.43	542
2027	4.29	4.27	1.14	2.83	< 0.005	0.02	0.43	0.45	0.02	0.10	0.12	—	604	604	0.02	0.03	0.61	613
2028	0.31	0.31	0.12	0.25	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	50.6	50.6	< 0.005	< 0.005	0.04	51.3

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	41.3	40.7	3.23	52.7	0.09	0.06	8.66	8.72	0.06	2.20	2.26	191	11,809	12,000	19.8	0.44	27.3	12,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.7	39.3	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	191	11,383	11,573	19.8	0.46	2.27	12,208
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.6	40.1	3.42	44.9	0.09	0.06	8.35	8.41	0.05	2.12	2.17	191	10,341	10,532	19.7	0.44	12.5	11,169
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.41	7.32	0.62	8.20	0.02	0.01	1.52	1.53	0.01	0.39	0.40	31.6	1,712	1,744	3.26	0.07	2.06	1,849

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.81	4.37	3.08	36.7	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	9,279	9,279	0.43	0.36	25.7	9,424
Area	36.4	36.4	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	1,093	1,093	0.10	0.01	—	1,099
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61

Total	41.3	40.7	3.23	52.7	0.09	0.06	8.66	8.72	0.06	2.20	2.26	191	11,809	12,000	19.8	0.44	27.3	12,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.77	4.32	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	8,896	8,896	0.45	0.38	0.67	9,021
Area	35.0	35.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	39.7	39.3	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	191	11,383	11,573	19.8	0.46	2.27	12,208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.63	4.20	3.32	33.9	0.09	0.05	8.35	8.40	0.05	2.12	2.17	—	8,803	8,803	0.44	0.37	10.8	8,936
Area	36.0	35.9	0.10	11.0	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	101	101	0.01	< 0.005	—	102
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	40.6	40.1	3.42	44.9	0.09	0.06	8.35	8.41	0.05	2.12	2.17	191	10,341	10,532	19.7	0.44	12.5	11,169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.84	0.77	0.61	6.19	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,457	1,457	0.07	0.06	1.80	1,479
Area	6.57	6.56	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	16.8	16.8	< 0.005	< 0.005	—	16.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	220	220	0.02	< 0.005	—	221
Water	—	—	—	—	—	—	—	—	—	—	—	3.67	18.1	21.7	0.38	0.01	—	33.9
Waste	—	—	—	—	—	—	—	—	—	—	—	27.9	0.00	27.9	2.79	0.00	—	97.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	7.41	7.32	0.62	8.20	0.02	0.01	1.52	1.53	0.01	0.39	0.40	31.6	1,712	1,744	3.26	0.07	2.06	1,849

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.81	4.37	3.08	36.7	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	9,279	9,279	0.43	0.36	25.7	9,424
Area	36.4	36.4	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	1,093	1,093	0.10	0.01	—	1,099
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	41.3	40.7	3.23	52.7	0.09	0.06	8.66	8.72	0.06	2.20	2.26	191	11,809	12,000	19.8	0.44	27.3	12,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.77	4.32	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	8,896	8,896	0.45	0.38	0.67	9,021
Area	35.0	35.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	39.7	39.3	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	191	11,383	11,573	19.8	0.46	2.27	12,208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.63	4.20	3.32	33.9	0.09	0.05	8.35	8.40	0.05	2.12	2.17	—	8,803	8,803	0.44	0.37	10.8	8,936
Area	36.0	35.9	0.10	11.0	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	101	101	0.01	< 0.005	—	102
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	40.6	40.1	3.42	44.9	0.09	0.06	8.35	8.41	0.05	2.12	2.17	191	10,341	10,532	19.7	0.44	12.5	11,169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.84	0.77	0.61	6.19	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,457	1,457	0.07	0.06	1.80	1,479
Area	6.57	6.56	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	16.8	16.8	< 0.005	< 0.005	—	16.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	220	220	0.02	< 0.005	—	221
Water	—	—	—	—	—	—	—	—	—	—	—	3.67	18.1	21.7	0.38	0.01	—	33.9
Waste	—	—	—	—	—	—	—	—	—	—	—	27.9	0.00	27.9	2.79	0.00	—	97.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	7.41	7.32	0.62	8.20	0.02	0.01	1.52	1.53	0.01	0.39	0.40	31.6	1,712	1,744	3.26	0.07	2.06	1,849

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52	1.28	11.5	10.9	0.02	0.45	—	0.45	0.42	—	0.42	—	1,906	1,906	0.08	0.02	—	1,913
Demolition	—	—	—	—	—	—	1.04	1.04	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.94	0.90	< 0.005	0.04	—	0.04	0.03	—	0.03	—	157	157	0.01	< 0.005	—	157
Demolition	—	—	—	—	—	—	0.09	0.09	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.9	25.9	< 0.005	< 0.005	—	26.0
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	0.01	< 0.005	0.01	130
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	< 0.005	65.1
Hauling	0.09	0.02	1.63	0.62	0.01	0.02	0.36	0.37	0.02	0.10	0.11	—	1,304	1,304	0.07	0.21	0.08	1,368
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	0.01	5.36
Hauling	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	0.01	0.02	0.10	113

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.89
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.02	18.6

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	7.47	10.5	0.02	0.14	—	0.14	0.13	—	0.13	—	1,906	1,906	0.08	0.02	—	1,913
Demolition	—	—	—	—	—	—	1.04	1.04	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.61	0.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	157	157	0.01	< 0.005	—	157
Demolition	—	—	—	—	—	—	0.09	0.09	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	26.0
Demoliti on	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	0.01	< 0.005	0.01	130
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	< 0.005	65.1
Hauling	0.09	0.02	1.63	0.62	0.01	0.02	0.36	0.37	0.02	0.10	0.11	—	1,304	1,304	0.07	0.21	0.08	1,368
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	0.01	5.36
Hauling	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	0.01	0.02	0.10	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.89
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.02	18.6

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.40	2.46	< 0.005	0.17	—	0.17	0.15	—	0.15	—	349	349	0.01	< 0.005	—	350
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.3	14.3	< 0.005	< 0.005	—	14.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.37	2.37	< 0.005	< 0.005	—	2.38
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.1	32.1	< 0.005	< 0.005	< 0.005	32.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	< 0.005	65.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.34	1.34	< 0.005	< 0.005	< 0.005	1.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.56	2.56	< 0.005	< 0.005	< 0.005	2.68
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.05	0.05	1.42	2.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	349	349	0.01	< 0.005	—	350
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.06	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.3	14.3	< 0.005	< 0.005	—	14.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.37	2.37	< 0.005	< 0.005	—	2.38
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.1	32.1	< 0.005	< 0.005	< 0.005	32.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	< 0.005	65.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.34	1.34	< 0.005	< 0.005	< 0.005	1.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.56	2.56	< 0.005	< 0.005	< 0.005	2.68
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.48	2.93	25.9	24.2	0.06	1.17	—	1.17	1.08	—	1.08	—	6,083	6,083	0.25	0.05	—	6,104
Dust From Material Movement	—	—	—	—	—	—	2.53	2.53	—	0.96	0.96	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.48	2.93	25.9	24.2	0.06	1.17	—	1.17	1.08	—	1.08	—	6,083	6,083	0.25	0.05	—	6,104
Dust From Material Movement	—	—	—	—	—	—	2.53	2.53	—	0.96	0.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	3.19	2.98	0.01	0.14	—	0.14	0.13	—	0.13	—	750	750	0.03	0.01	—	753
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.58	0.54	< 0.005	0.03	—	0.03	0.02	—	0.02	—	124	124	0.01	< 0.005	—	125
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.81	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	169	169	0.01	0.01	0.57	172
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.5	93.5	< 0.005	0.01	0.25	97.9
Hauling	0.06	0.01	0.98	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	813	813	0.05	0.13	1.82	855
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.69	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	161	161	0.01	0.01	0.01	163
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.6	93.6	< 0.005	0.01	0.01	97.7
Hauling	0.06	0.01	1.02	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	814	814	0.05	0.13	0.05	853
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	20.1	20.1	< 0.005	< 0.005	0.03	20.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.0
Hauling	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	100	100	0.01	0.02	0.10	105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.33	3.33	< 0.005	< 0.005	0.01	3.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.91	1.91	< 0.005	< 0.005	< 0.005	1.99
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.02	17.4

3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.72	0.72	16.3	31.8	0.06	0.11	—	0.11	0.11	—	0.11	—	6,083	6,083	0.25	0.05	—	6,104
Dust From Material Movement	—	—	—	—	—	—	2.53	2.53	—	0.96	0.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	16.3	31.8	0.06	0.11	—	0.11	0.11	—	0.11	—	6,083	6,083	0.25	0.05	—	6,104
Dust From Material Movement	—	—	—	—	—	—	2.53	2.53	—	0.96	0.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.01	3.91	0.01	0.01	—	0.01	0.01	—	0.01	—	750	750	0.03	0.01	—	753
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.37	0.71	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	124	124	0.01	< 0.005	—	125

Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.81	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	169	169	0.01	0.01	0.57	172
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.5	93.5	< 0.005	0.01	0.25	97.9
Hauling	0.06	0.01	0.98	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	813	813	0.05	0.13	1.82	855
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.69	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	161	161	0.01	0.01	0.01	163
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.6	93.6	< 0.005	0.01	0.01	97.7
Hauling	0.06	0.01	1.02	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	814	814	0.05	0.13	0.05	853
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	20.1	20.1	< 0.005	< 0.005	0.03	20.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.0
Hauling	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	100	100	0.01	0.02	0.10	105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.33	3.33	< 0.005	< 0.005	0.01	3.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.91	1.91	< 0.005	< 0.005	< 0.005	1.99
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.02	17.4

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.53	5.37	0.01	0.13	—	0.13	0.12	—	0.12	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.53	5.37	0.01	0.13	—	0.13	0.12	—	0.12	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.65	2.51	< 0.005	0.06	—	0.06	0.06	—	0.06	—	391	391	0.02	< 0.005	—	393
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	64.8	64.8	< 0.005	< 0.005	—	65.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.73	0.77	12.8	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,688	2,688	0.11	0.09	9.09	2,727
Vendor	0.06	0.03	0.93	0.45	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	842	842	0.04	0.12	2.27	881
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.73	0.86	10.9	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,548	2,548	0.12	0.09	0.24	2,579
Vendor	0.06	0.02	0.97	0.46	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	842	842	0.04	0.12	0.06	879
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.44	5.35	0.00	0.00	1.20	1.20	0.00	0.28	0.28	—	1,209	1,209	0.05	0.04	1.84	1,226
Vendor	0.03	0.01	0.46	0.21	< 0.005	0.01	0.11	0.11	< 0.005	0.03	0.03	—	394	394	0.02	0.06	0.46	411
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.98	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	200	200	0.01	0.01	0.30	203
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.2	65.2	< 0.005	0.01	0.08	68.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.23	0.21	3.77	5.65	0.01	0.05	—	0.05	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	3.77	5.65	0.01	0.05	—	0.05	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	1.76	2.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	391	391	0.02	< 0.005	—	393
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.32	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.8	64.8	< 0.005	< 0.005	—	65.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.73	0.77	12.8	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,688	2,688	0.11	0.09	9.09	2,727
Vendor	0.06	0.03	0.93	0.45	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	842	842	0.04	0.12	2.27	881
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.73	0.86	10.9	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,548	2,548	0.12	0.09	0.24	2,579
Vendor	0.06	0.02	0.97	0.46	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	842	842	0.04	0.12	0.06	879
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.44	5.35	0.00	0.00	1.20	1.20	0.00	0.28	0.28	—	1,209	1,209	0.05	0.04	1.84	1,226
Vendor	0.03	0.01	0.46	0.21	< 0.005	0.01	0.11	0.11	< 0.005	0.03	0.03	—	394	394	0.02	0.06	0.46	411
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.98	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	200	200	0.01	0.01	0.30	203
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.2	65.2	< 0.005	0.01	0.08	68.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	3.39	5.38	0.01	0.12	—	0.12	0.11	—	0.11	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.43	0.36	3.39	5.38	0.01	0.12	—	0.12	0.11	—	0.11	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.31	0.26	2.42	3.84	0.01	0.08	—	0.08	0.08	—	0.08	—	598	598	0.02	< 0.005	—	600
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.06	0.05	0.44	0.70	< 0.005	0.02	—	0.02	0.01	—	0.01	—	99.0	99.0	< 0.005	< 0.005	—	99.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.70	0.68	11.9	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,636	2,636	0.11	0.09	8.21	2,675
Vendor	0.05	0.03	0.89	0.42	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	825	825	0.04	0.11	2.15	863
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.69	0.85	10.1	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,499	2,499	0.03	0.09	0.21	2,528
Vendor	0.05	0.02	0.92	0.43	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	826	826	0.04	0.11	0.06	861
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.56	0.49	0.61	7.58	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,811	1,811	0.02	0.07	2.53	1,835
Vendor	0.04	0.02	0.66	0.31	< 0.005	< 0.005	0.16	0.17	< 0.005	0.05	0.05	—	590	590	0.03	0.08	0.66	615
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.38	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	300	300	< 0.005	0.01	0.42	304
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	3.77	5.65	0.01	0.05	—	0.05	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	3.77	5.65	0.01	0.05	—	0.05	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.16	0.15	2.69	4.03	0.01	0.03	—	0.03	0.03	—	0.03	—	598	598	0.02	< 0.005	—	600
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.49	0.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	99.0	99.0	< 0.005	< 0.005	—	99.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.70	0.68	11.9	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,636	2,636	0.11	0.09	8.21	2,675
Vendor	0.05	0.03	0.89	0.42	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	825	825	0.04	0.11	2.15	863
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.69	0.85	10.1	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,499	2,499	0.03	0.09	0.21	2,528
Vendor	0.05	0.02	0.92	0.43	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	826	826	0.04	0.11	0.06	861
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.49	0.61	7.58	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,811	1,811	0.02	0.07	2.53	1,835
Vendor	0.04	0.02	0.66	0.31	< 0.005	< 0.005	0.16	0.17	< 0.005	0.05	0.05	—	590	590	0.03	0.08	0.66	615
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.38	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	300	300	< 0.005	0.01	0.42	304
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.29	5.38	0.01	0.11	—	0.11	0.10	—	0.10	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.27	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	42.6	42.6	< 0.005	< 0.005	—	42.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.05	7.05	< 0.005	< 0.005	—	7.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.67	0.77	9.51	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,455	2,455	0.03	0.09	0.19	2,484
Vendor	0.05	0.02	0.88	0.41	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	807	807	0.03	0.11	0.05	841
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.16	128
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.0	41.0	< 0.005	0.01	0.04	42.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.0	21.0	< 0.005	< 0.005	0.03	21.3
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	0.01	7.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.23	0.21	3.76	5.65	0.01	0.04	—	0.04	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.19	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.6	42.6	< 0.005	< 0.005	—	42.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.05	7.05	< 0.005	< 0.005	—	7.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.67	0.77	9.51	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,455	2,455	0.03	0.09	0.19	2,484
Vendor	0.05	0.02	0.88	0.41	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	807	807	0.03	0.11	0.05	841
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.16	128
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.0	41.0	< 0.005	0.01	0.04	42.8

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.0	21.0	< 0.005	< 0.005	0.03	21.3
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	0.01	7.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	4.34	5.97	0.01	0.18	—	0.18	0.17	—	0.17	—	897	897	0.04	0.01	—	900
Paving	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.65	4.65	< 0.005	< 0.005	—	4.67
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	0.01	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.00	4.00	< 0.005	< 0.005	0.01	4.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	4.70	6.29	0.01	0.07	—	0.07	0.07	—	0.07	—	897	897	0.04	0.01	—	900
Paving	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.15	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.65	4.65	< 0.005	< 0.005	—	4.67
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	0.01	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.00	4.00	< 0.005	< 0.005	0.01	4.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.16	5.94	0.01	0.16	—	0.16	0.15	—	0.15	—	897	897	0.04	0.01	—	900
Paving	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	45.6	45.6	< 0.005	< 0.005	—	45.8
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.56	7.56	< 0.005	< 0.005	—	7.58
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.39	6.39	< 0.005	< 0.005	0.01	6.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	4.70	6.29	0.01	0.07	—	0.07	0.07	—	0.07	—	897	897	0.04	0.01	—	900
Paving	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.24	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.6	45.6	< 0.005	< 0.005	—	45.8
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.56	7.56	< 0.005	< 0.005	—	7.58
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.39	6.39	< 0.005	< 0.005	0.01	6.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.32	2.28	3.02	< 0.005	0.06	—	0.06	0.06	—	0.06	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.2	20.2	< 0.005	< 0.005	—	20.3
Architectural Coatings	1.80	1.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.35	3.35	< 0.005	< 0.005	—	3.36
Architectural Coatings	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.17	2.19	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	510	510	0.02	0.02	0.05	516
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.3	29.3	< 0.005	< 0.005	0.04	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.86	4.86	< 0.005	< 0.005	0.01	4.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.06	2.85	2.57	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.16	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.2	20.2	< 0.005	< 0.005	—	20.3
Architectural Coatings	1.80	1.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.35	3.35	< 0.005	< 0.005	—	3.36
Architectural Coatings	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.17	2.19	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	510	510	0.02	0.02	0.05	516
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.3	29.3	< 0.005	< 0.005	0.04	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.86	4.86	< 0.005	< 0.005	0.01	4.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.30	2.22	3.00	< 0.005	0.05	—	0.05	0.05	—	0.05	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.30	2.22	3.00	< 0.005	0.05	—	0.05	0.05	—	0.05	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.58	2.14	< 0.005	0.04	—	0.04	0.03	—	0.03	—	254	254	0.01	< 0.005	—	255
Architectural Coatings	22.6	22.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.29	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.1	42.1	< 0.005	< 0.005	—	42.2
Architectural Coatings	4.12	4.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.14	2.38	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	527	527	0.02	0.02	1.64	535
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.17	2.02	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	500	500	0.01	0.02	0.04	506
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.52	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	362	362	< 0.005	0.01	0.51	367
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.08	60.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.06	0.06	2.85	2.57	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	2.85	2.57	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	2.04	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	254	254	0.01	< 0.005	—	255
Architectural Coatings	22.6	22.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.37	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.1	42.1	< 0.005	< 0.005	—	42.2

Architect Coatings	4.12	4.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.14	2.38	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	527	527	0.02	0.02	1.64	535
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.17	2.02	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	500	500	0.01	0.02	0.04	506
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.52	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	362	362	< 0.005	0.01	0.51	367
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.08	60.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.16	2.98	< 0.005	0.04	—	0.04	0.04	—	0.04	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Architectural Coatings	1.61	1.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.15	1.90	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	491	491	0.01	0.02	0.04	497
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.3	25.3	< 0.005	< 0.005	0.03	25.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.06	2.85	2.57	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.15	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Architectural Coatings	1.61	1.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.15	1.90	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	491	491	0.01	0.02	0.04	497
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.3	25.3	< 0.005	< 0.005	0.03	25.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.07	0.97	0.68	8.12	0.02	0.01	1.92	1.93	0.01	0.49	0.50	—	2,057	2,057	0.10	0.08	5.69	2,089

Condo/Townhouse	3.74	3.40	2.39	28.5	0.07	0.04	6.74	6.78	0.04	1.71	1.75	—	7,223	7,223	0.34	0.28	20.0	7,335
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.81	4.37	3.08	36.7	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	9,279	9,279	0.43	0.36	25.7	9,424
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.06	0.96	0.75	7.50	0.02	0.01	1.92	1.93	0.01	0.49	0.50	—	1,972	1,972	0.10	0.08	0.15	1,999
Condo/Townhouse	3.71	3.37	2.62	26.3	0.07	0.04	6.74	6.78	0.04	1.71	1.75	—	6,924	6,924	0.35	0.30	0.52	7,021
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.77	4.32	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	8,896	8,896	0.45	0.38	0.67	9,021
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.19	0.17	0.14	1.38	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	325	325	0.02	0.01	0.40	330
Condo/Townhouse	0.66	0.60	0.47	4.81	0.01	0.01	1.18	1.19	0.01	0.30	0.31	—	1,132	1,132	0.06	0.05	1.40	1,150
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.84	0.77	0.61	6.19	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,457	1,457	0.07	0.06	1.80	1,479

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.07	0.97	0.68	8.12	0.02	0.01	1.92	1.93	0.01	0.49	0.50	—	2,057	2,057	0.10	0.08	5.69	2,089
Condo/Townhouse	3.74	3.40	2.39	28.5	0.07	0.04	6.74	6.78	0.04	1.71	1.75	—	7,223	7,223	0.34	0.28	20.0	7,335
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Recreational Swimming	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.81	4.37	3.08	36.7	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	9,279	9,279	0.43	0.36	25.7	9,424
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.06	0.96	0.75	7.50	0.02	0.01	1.92	1.93	0.01	0.49	0.50	—	1,972	1,972	0.10	0.08	0.15	1,999
Condo/Townhouse	3.71	3.37	2.62	26.3	0.07	0.04	6.74	6.78	0.04	1.71	1.75	—	6,924	6,924	0.35	0.30	0.52	7,021
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.77	4.32	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	8,896	8,896	0.45	0.38	0.67	9,021
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.19	0.17	0.14	1.38	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	325	325	0.02	0.01	0.40	330
Condo/Townhouse	0.66	0.60	0.47	4.81	0.01	0.01	1.18	1.19	0.01	0.30	0.31	—	1,132	1,132	0.06	0.05	1.40	1,150
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Recreati Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.84	0.77	0.61	6.19	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,457	1,457	0.07	0.06	1.80	1,479

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	222	222	0.02	< 0.005	—	224
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,080	1,080	0.10	0.01	—	1,086
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,328	1,328	0.13	0.02	—	1,335

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	222	222	0.02	< 0.005	—	224
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,080	1,080	0.10	0.01	—	1,086
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,328	1,328	0.13	0.02	—	1,335
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	36.8	36.8	< 0.005	< 0.005	—	37.0
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	179	179	0.02	< 0.005	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.15	4.15	< 0.005	< 0.005	—	4.18
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	220	220	0.02	< 0.005	—	221

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	222	222	0.02	< 0.005	—	224
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,080	1,080	0.10	0.01	—	1,086
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,328	1,328	0.13	0.02	—	1,335
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	222	222	0.02	< 0.005	—	224
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,080	1,080	0.10	0.01	—	1,086

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,328	1,328	0.13	0.02	—	1,335
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	36.8	36.8	< 0.005	< 0.005	—	37.0
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	179	179	0.02	< 0.005	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.15	4.15	< 0.005	< 0.005	—	4.18
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	220	220	0.02	< 0.005	—	221

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.60	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.48	1.40	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.9	42.9	< 0.005	< 0.005	—	43.0

Total	36.4	36.4	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	1,093	1,093	0.10	0.01	—	1,099
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.60	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	35.0	35.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	11.9	11.9	< 0.005	< 0.005	—	12.0
Consumer Products	5.91	5.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.47	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.17	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.86	4.86	< 0.005	< 0.005	—	4.88
Total	6.57	6.56	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	16.8	16.8	< 0.005	< 0.005	—	16.9

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.60	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.48	1.40	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.9	42.9	< 0.005	< 0.005	—	43.0
Total	36.4	36.4	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	1,093	1,093	0.10	0.01	—	1,099
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.60	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	35.0	35.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	11.9	11.9	< 0.005	< 0.005	—	12.0
Consumer Products	5.91	5.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	0.47	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.17	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.86	4.86	< 0.005	< 0.005	—	4.88
Total	6.57	6.56	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	16.8	16.8	< 0.005	< 0.005	—	16.9

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.43	42.5	45.0	0.25	0.01	—	53.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	17.7	59.7	77.4	1.82	0.04	—	136
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	2.04	6.87	8.91	0.21	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.43	42.5	45.0	0.25	0.01	—	53.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	17.7	59.7	77.4	1.82	0.04	—	136
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	2.04	6.87	8.91	0.21	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.40	7.04	7.45	0.04	< 0.005	—	8.81
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	2.93	9.88	12.8	0.30	0.01	—	22.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.34	1.14	1.48	0.03	< 0.005	—	2.59
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	3.67	18.1	21.7	0.38	0.01	—	33.9

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.43	42.5	45.0	0.25	0.01	—	53.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	17.7	59.7	77.4	1.82	0.04	—	136
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	2.04	6.87	8.91	0.21	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.43	42.5	45.0	0.25	0.01	—	53.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	17.7	59.7	77.4	1.82	0.04	—	136

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	2.04	6.87	8.91	0.21	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.40	7.04	7.45	0.04	< 0.005	—	8.81
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	2.93	9.88	12.8	0.30	0.01	—	22.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.34	1.14	1.48	0.03	< 0.005	—	2.59
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.67	18.1	21.7	0.38	0.01	—	33.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	98.8	0.00	98.8	9.88	0.00	—	346
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	193
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	98.8	0.00	98.8	9.88	0.00	—	346
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	193

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.39	0.00	2.39	0.24	0.00	—	8.36
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	16.4	0.00	16.4	1.64	0.00	—	57.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	9.15	0.00	9.15	0.91	0.00	—	32.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	27.9	0.00	27.9	2.79	0.00	—	97.6

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	98.8	0.00	98.8	9.88	0.00	—	346

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	193
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	98.8	0.00	98.8	9.88	0.00	—	346
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	193
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.39	0.00	2.39	0.24	0.00	—	8.36

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	16.4	0.00	16.4	1.64	0.00	—	57.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	9.15	0.00	9.15	0.91	0.00	—	32.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	27.9	0.00	27.9	2.79	0.00	—	97.6

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.46	1.46
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.46	1.46
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.46	1.46
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.46	1.46
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24

Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	2/11/2026	5.00	30.0	—

Site Preparation	Site Preparation	2/12/2026	3/4/2026	5.00	15.0	—
Grading	Grading	3/5/2026	5/6/2026	5.00	45.0	—
Building Construction	Building Construction	5/7/2026	1/26/2028	5.00	450	—
Paving	Paving	12/16/2027	1/26/2028	5.00	30.0	—
Architectural Coating	Architectural Coating	12/3/2026	1/26/2028	5.00	300	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Interim	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Tier 4 Interim	1.00	8.00	87.0	0.43
Grading	Graders	Diesel	Tier 4 Interim	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Interim	2.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Tier 4 Interim	1.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Tier 4 Interim	1.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	2.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Interim	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	2.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	10.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	2.00	10.2	HHDT,MHDT
Demolition	Hauling	19.2	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	2.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	12.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	3.00	10.2	HHDT,MHDT
Grading	Hauling	12.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	198	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	27.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	39.7	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—

Demolition	Worker	10.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	2.00	10.2	HHDT,MHDT
Demolition	Hauling	19.2	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	2.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	12.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	3.00	10.2	HHDT,MHDT
Grading	Hauling	12.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	198	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	27.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	39.7	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,061,132	1,020,377	950	317	5,692

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	2,300	—
Site Preparation	—	—	7.50	0.00	—
Grading	4,301	—	158	0.00	—
Paving	0.00	0.00	0.00	0.00	2.55

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

Single Family Housing	0.37	0%
Condo/Townhouse	—	0%
Parking Lot	0.69	100%
Recreational Swimming Pool	0.00	0%
Other Asphalt Surfaces	1.48	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	322	322	288	115,791	2,703	2,706	2,420	972,005
Condo/Townhouse	1,132	1,131	947	403,448	9,502	9,491	7,953	3,386,747
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Single Family Housing	322	322	288	115,791	2,703	2,706	2,420	972,005
Condo/Townhouse	1,132	1,131	947	403,448	9,502	9,491	7,953	3,386,747
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	32
No Fireplaces	3
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	248

No Fireplaces	25
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	32
No Fireplaces	3
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	248
No Fireplaces	25
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3061131.75	1,020,377	950	317	5,692

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	234,435	346	0.0330	0.0040	0.00
Condo/Townhouse	1,138,857	346	0.0330	0.0040	0.00
Parking Lot	26,444	346	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	234,435	346	0.0330	0.0040	0.00
Condo/Townhouse	1,138,857	346	0.0330	0.0040	0.00
Parking Lot	26,444	346	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,267,309	6,826,243
Condo/Townhouse	9,243,902	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	1,064,577	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,267,309	6,826,243
Condo/Townhouse	9,243,902	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	1,064,577	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	26.8	—
Condo/Townhouse	183	—
Parking Lot	0.00	—
Recreational Swimming Pool	103	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	26.8	—
Condo/Townhouse	183	—
Parking Lot	0.00	—
Recreational Swimming Pool	103	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0

Condo/Townhouse	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Recreational Swimming Pool	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Recreational Swimming Pool	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	23.4	annual days of extreme heat
Extreme Precipitation	6.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	76.9
AQ-PM	77.8
AQ-DPM	68.3
Drinking Water	78.8
Lead Risk Housing	86.7
Pesticides	0.00
Toxic Releases	77.2
Traffic	84.0
Effect Indicators	—
CleanUp Sites	68.9
Groundwater	22.7
Haz Waste Facilities/Generators	10.5
Impaired Water Bodies	33.2
Solid Waste	0.00

Sensitive Population	—
Asthma	60.3
Cardio-vascular	43.2
Low Birth Weights	85.2
Socioeconomic Factor Indicators	—
Education	66.5
Housing	50.3
Linguistic	46.0
Poverty	64.7
Unemployment	48.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	55.11356345
Employed	47.8121391
Median HI	56.30694213
Education	—
Bachelor's or higher	23.67509303
High school enrollment	100
Preschool enrollment	75.20852047
Transportation	—
Auto Access	84.51174131
Active commuting	40.06159374
Social	—
2-parent households	68.61285769
Voting	28.92339279

Neighborhood	—
Alcohol availability	48.67188503
Park access	7.237264211
Retail density	45.60503016
Supermarket access	48.91569357
Tree canopy	22.25073784
Housing	—
Homeownership	57.19235211
Housing habitability	74.07930194
Low-inc homeowner severe housing cost burden	48.51790068
Low-inc renter severe housing cost burden	96.09906326
Uncrowded housing	30.86102913
Health Outcomes	—
Insured adults	19.41485949
Arthritis	59.3
Asthma ER Admissions	49.8
High Blood Pressure	74.3
Cancer (excluding skin)	55.0
Asthma	72.9
Coronary Heart Disease	47.4
Chronic Obstructive Pulmonary Disease	59.8
Diagnosed Diabetes	31.9
Life Expectancy at Birth	15.4
Cognitively Disabled	35.0
Physically Disabled	55.6
Heart Attack ER Admissions	40.9
Mental Health Not Good	46.4
Chronic Kidney Disease	55.3

Obesity	42.9
Pedestrian Injuries	45.8
Physical Health Not Good	39.2
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	50.7
Current Smoker	52.6
No Leisure Time for Physical Activity	40.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	69.7
Elderly	66.3
English Speaking	47.5
Foreign-born	73.6
Outdoor Workers	23.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	52.1
Traffic Density	85.2
Traffic Access	58.4
Other Indices	—
Hardship	54.8
Other Decision Support	—
2016 Voting	28.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	77.0

Healthy Places Index Score for Project Location (b)	48.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Net area is 13.19 acres
Construction: Construction Phases	Construction based on consultation with Applicant
Construction: Off-Road Equipment	Equipment list based on consultation with the Applicant
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction.
Construction: Architectural Coatings	Rule 1113
Operations: Vehicle Data	Trip rates based on ITE 11th Edition
Operations: Hearths	All electric
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.
Operations: Energy Use	No natural gas will be used

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APPENDIX 3.2:

AERMOD LOCALIZED EMISSIONS MODEL OUTPUTS

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**
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**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 5/15/2025
** File: C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons CO\16435 Cons CO.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 9663345 Los_Angeles_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16435 Cons CO.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL13        VOLUME     413678.759  3771046.996      120.760
   LOCATION VOL14        VOLUME     413644.379  3771048.419      120.440
   LOCATION VOL15        VOLUME     413609.792  3771050.453      120.340
   LOCATION VOL16        VOLUME     413630.138  3771220.132      121.570
   LOCATION VOL17        VOLUME     413630.260  3771186.129      121.320
   LOCATION VOL18        VOLUME     413632.986  3771151.772      121.170
   LOCATION VOL19        VOLUME     413629.104  3771118.263      120.940
   LOCATION VOL20        VOLUME     413625.918  3771084.065      120.660
   LOCATION VOL21        VOLUME     413596.212  3771220.733      121.340
   LOCATION VOL22        VOLUME     413596.335  3771186.730      121.160
   LOCATION VOL23        VOLUME     413599.061  3771152.374      121.000
   LOCATION VOL24        VOLUME     413595.179  3771118.864      120.760
   LOCATION VOL25        VOLUME     413591.993  3771084.666      120.730
   LOCATION VOL26        VOLUME     413562.226  3771224.344      121.200
   LOCATION VOL27        VOLUME     413562.349  3771190.341      120.990
   LOCATION VOL28        VOLUME     413565.075  3771155.985      120.810
   LOCATION VOL29        VOLUME     413561.193  3771122.475      120.730
   LOCATION VOL30        VOLUME     413558.007  3771088.277      120.770
   LOCATION VOL31        VOLUME     413528.453  3771224.132      121.010
   LOCATION VOL32        VOLUME     413528.576  3771190.129      120.780
   LOCATION VOL33        VOLUME     413531.301  3771155.772      120.650
   LOCATION VOL34        VOLUME     413527.420  3771122.263      120.560
   LOCATION VOL35        VOLUME     413524.234  3771088.065      120.770
   LOCATION VOL36        VOLUME     413494.892  3771226.893      120.870
   LOCATION VOL37        VOLUME     413495.015  3771192.890      120.630
   LOCATION VOL38        VOLUME     413497.741  3771158.533      120.460
   LOCATION VOL39        VOLUME     413493.859  3771125.024      120.410
   LOCATION VOL40        VOLUME     413490.673  3771090.826      120.550
   LOCATION VOL41        VOLUME     413461.331  3771229.230      120.830
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     LOCATION VOL42        VOLUME     413461.454  3771195.226      120.620
     LOCATION VOL43        VOLUME     413464.180  3771160.870      120.410
     LOCATION VOL44        VOLUME     413460.298  3771127.361      120.290
     LOCATION VOL45        VOLUME     413457.112  3771093.162      120.290
     LOCATION VOL46        VOLUME     413427.770  3771229.442      120.700
     LOCATION VOL47        VOLUME     413427.893  3771195.439      120.500
     LOCATION VOL48        VOLUME     413430.619  3771161.082      120.340
     LOCATION VOL49        VOLUME     413426.737  3771127.573      120.190
     LOCATION VOL50        VOLUME     413423.551  3771093.375      120.040
     LOCATION VOL51        VOLUME     413397.396  3771227.531      120.420
     LOCATION VOL52        VOLUME     413394.545  3771194.164      120.300
     LOCATION VOL53        VOLUME     413397.058  3771160.445      120.180
     LOCATION VOL54        VOLUME     413392.327  3771126.086      120.090
     LOCATION VOL55        VOLUME     413390.415  3771093.800      119.780
     LOCATION VOL56        VOLUME     413576.851  3771062.824      120.680
     LOCATION VOL57        VOLUME     413543.290  3771064.735      120.680
     LOCATION VOL58        VOLUME     413510.154  3771066.222      120.700
     LOCATION VOL59        VOLUME     413389.080  3771161.170      120.140
     LOCATION VOL60        VOLUME     413476.594  3771068.771      120.480
     LOCATION VOL61        VOLUME     413443.033  3771068.984      120.130
     LOCATION VOL62        VOLUME     413409.684  3771070.258      119.840
     LOCATION VOL63        VOLUME     413380.371  3771072.807      119.720
** Source Parameters **
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     SRCPARAM VOL14        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL15        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL16        0.009820423     5.000     7.760     1.400
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     SRCPARAM VOL20        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL21        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL22        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL23        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL24        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL25        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL26        0.009820423     5.000     7.760     1.400
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     SRCPARAM VOL31        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL32        0.009820423     5.000     7.760     1.400
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     SRCPARAM VOL37        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL38        0.009820423     5.000     7.760     1.400
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     SRCPARAM VOL40        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL41        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL42        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL43        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL44        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL45        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL46        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL47        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL48        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL49        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL50        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL51        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL52        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL53        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL54        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL55        0.009820423     5.000     7.760     1.400
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   SRCPARAM VOL58        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL59        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL60        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL61        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL62        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL63        0.009820423     5.000     7.760     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16435 Cons CO.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
```

```
**
**
ME STARTING
   SURFFILE AZUS_V11_trimmed.sfc
   PROFFILE AZUS_V11_trimmed.PFL
   SURFDATA 3179 2017
   UAIRDATA 3190 2017
   SITEDATA 60370002 2017
   PROFBASE 187.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16435 CONS CO.AD\01H1GALL.PLT" 31
   PLOTFILE 8 ALL 1ST "16435 CONS CO.AD\08H1GALL.PLT" 32
   SUMMFILE "16435 Cons CO.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 5/15/2025
** File: C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons CO\16435 Cons CO.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 9663345 Los_Angeles_County
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16435 Cons CO.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL13        VOLUME     413678.759  3771046.996      120.760
   LOCATION VOL14        VOLUME     413644.379  3771048.419      120.440
   LOCATION VOL15        VOLUME     413609.792  3771050.453      120.340
   LOCATION VOL16        VOLUME     413630.138  3771220.132      121.570
   LOCATION VOL17        VOLUME     413630.260  3771186.129      121.320
   LOCATION VOL18        VOLUME     413632.986  3771151.772      121.170
   LOCATION VOL19        VOLUME     413629.104  3771118.263      120.940
   LOCATION VOL20        VOLUME     413625.918  3771084.065      120.660
   LOCATION VOL21        VOLUME     413596.212  3771220.733      121.340
   LOCATION VOL22        VOLUME     413596.335  3771186.730      121.160
   LOCATION VOL23        VOLUME     413599.061  3771152.374      121.000
   LOCATION VOL24        VOLUME     413595.179  3771118.864      120.760
   LOCATION VOL25        VOLUME     413591.993  3771084.666      120.730
   LOCATION VOL26        VOLUME     413562.226  3771224.344      121.200
   LOCATION VOL27        VOLUME     413562.349  3771190.341      120.990
   LOCATION VOL28        VOLUME     413565.075  3771155.985      120.810
   LOCATION VOL29        VOLUME     413561.193  3771122.475      120.730
   LOCATION VOL30        VOLUME     413558.007  3771088.277      120.770
   LOCATION VOL31        VOLUME     413528.453  3771224.132      121.010
   LOCATION VOL32        VOLUME     413528.576  3771190.129      120.780
   LOCATION VOL33        VOLUME     413531.301  3771155.772      120.650
   LOCATION VOL34        VOLUME     413527.420  3771122.263      120.560
   LOCATION VOL35        VOLUME     413524.234  3771088.065      120.770
   LOCATION VOL36        VOLUME     413494.892  3771226.893      120.870
   LOCATION VOL37        VOLUME     413495.015  3771192.890      120.630
   LOCATION VOL38        VOLUME     413497.741  3771158.533      120.460
   LOCATION VOL39        VOLUME     413493.859  3771125.024      120.410
   LOCATION VOL40        VOLUME     413490.673  3771090.826      120.550
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     LOCATION VOL41        VOLUME     413461.331  3771229.230      120.830
     LOCATION VOL42        VOLUME     413461.454  3771195.226      120.620
     LOCATION VOL43        VOLUME     413464.180  3771160.870      120.410
     LOCATION VOL44        VOLUME     413460.298  3771127.361      120.290
     LOCATION VOL45        VOLUME     413457.112  3771093.162      120.290
     LOCATION VOL46        VOLUME     413427.770  3771229.442      120.700
     LOCATION VOL47        VOLUME     413427.893  3771195.439      120.500
     LOCATION VOL48        VOLUME     413430.619  3771161.082      120.340
     LOCATION VOL49        VOLUME     413426.737  3771127.573      120.190
     LOCATION VOL50        VOLUME     413423.551  3771093.375      120.040
     LOCATION VOL51        VOLUME     413397.396  3771227.531      120.420
     LOCATION VOL52        VOLUME     413394.545  3771194.164      120.300
     LOCATION VOL53        VOLUME     413397.058  3771160.445      120.180
     LOCATION VOL54        VOLUME     413392.327  3771126.086      120.090
     LOCATION VOL55        VOLUME     413390.415  3771093.800      119.780
     LOCATION VOL56        VOLUME     413576.851  3771062.824      120.680
     LOCATION VOL57        VOLUME     413543.290  3771064.735      120.680
     LOCATION VOL58        VOLUME     413510.154  3771066.222      120.700
     LOCATION VOL59        VOLUME     413389.080  3771161.170      120.140
     LOCATION VOL60        VOLUME     413476.594  3771068.771      120.480
     LOCATION VOL61        VOLUME     413443.033  3771068.984      120.130
     LOCATION VOL62        VOLUME     413409.684  3771070.258      119.840
     LOCATION VOL63        VOLUME     413380.371  3771072.807      119.720
** Source Parameters **
     SRCPARAM VOL13        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL14        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL15        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL16        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL17        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL18        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL19        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL20        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL21        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL22        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL23        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL24        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL25        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL26        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL27        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL28        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL29        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL30        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL31        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL32        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL33        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL34        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL35        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL36        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL37        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL38        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL39        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL40        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL41        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL42        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL43        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL44        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL45        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL46        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL47        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL48        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL49        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL50        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL51        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL52        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL53        0.009820423     5.000     7.760     1.400
     SRCPARAM VOL54        0.009820423     5.000     7.760     1.400
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   SRCPARAM VOL55        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL56        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL57        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL58        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL59        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL60        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL61        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL62        0.009820423     5.000     7.760     1.400
   SRCPARAM VOL63        0.009820423     5.000     7.760     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16435 Cons CO.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
```

```
924  ************************************
925  **
926  **
927  ME STARTING
928     SURFFILE AZUS_V11_trimmed.sfc
929     PROFFILE AZUS_V11_trimmed.PFL
930     SURFDATA 3179 2017
931     UAIRDATA 3190 2017
932     SITEDATA 60370002 2017
933     PROFBASE 187.0 METERS
934  ME FINISHED
935  **
936  ************************************
937  ** AERMOD Output Pathway
938  ************************************
939  **
940  **
941  OU STARTING
942     RECTABLE ALLAVE 1ST
943     RECTABLE 1 1ST
944     RECTABLE 8 1ST
945  ** Auto-Generated Plotfiles
946     PLOTFILE 1 ALL 1ST "16435 CONS CO.AD\01H1GALL.PLT" 31
947     PLOTFILE 8 ALL 1ST "16435 CONS CO.AD\08H1GALL.PLT" 32
948     SUMMFILE "16435 Cons CO.sum"
949  OU FINISHED
950
951
952    *** Message Summary For AERMOD Model Setup ***
953
954    --------- Summary of Total Messages --------
955
956   A Total of            0 Fatal Error Message(s)
957   A Total of            2 Warning Message(s)
958   A Total of            0 Informational Message(s)
959
960
961      ******** FATAL ERROR MESSAGES ********
962                ***  NONE  ***
963
964
965      ********   WARNING MESSAGES   ********
966   ME W186     933       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
      used           0.50
967   ME W187     933       MEOPEN: ADJ_U* Option for Stable Low Winds used in
      AERMET
968
969   ***********************************
970   *** SETUP Finishes Successfully ***
971   ***********************************
972
973  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
974   *** AERMET - VERSION  22112 ***
      ***                                                                  ***
      09:42:44
975
                                  PAGE   1
976   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
977
978                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
979   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - -
980
981   ** Model Options Selected:
982        * Model Uses Regulatory DEFAULT Options
```

```
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for    51 Source(s),
        for Total of    1 Urban Area(s):
  Urban Population =   9663345.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Accepts FLAGPOLE Receptor . Heights.
      * The User Specified a Pollutant Type of: CO

**Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR

**This Run Includes:     51 Source(s);       1 Source Group(s); and      83 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:     51 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  22112

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
         Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and
                                                                Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   187.00 ;  Decay Coef.
=    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission
                  Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.6 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out


**Detailed Error/Message File:   16435 Cons
```

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ	URBAN SOURCE	INIT. SCALAR VARY BY
VOL13	0	0.98204E-02	413678.8	3771047.0	120.8	5.00	7.76	1.40	YES	HRDOW
VOL14	0	0.98204E-02	413644.4	3771048.4	120.4	5.00	7.76	1.40	YES	HRDOW
VOL15	0	0.98204E-02	413609.8	3771050.5	120.3	5.00	7.76	1.40	YES	HRDOW
VOL16	0	0.98204E-02	413630.1	3771220.1	121.6	5.00	7.76	1.40	YES	HRDOW
VOL17	0	0.98204E-02	413630.3	3771186.1	121.3	5.00	7.76	1.40	YES	HRDOW
VOL18	0	0.98204E-02	413633.0	3771151.8	121.2	5.00	7.76	1.40	YES	HRDOW
VOL19	0	0.98204E-02	413629.1	3771118.3	120.9	5.00	7.76	1.40	YES	HRDOW
VOL20	0	0.98204E-02	413625.9	3771084.1	120.7	5.00	7.76	1.40	YES	HRDOW
VOL21	0	0.98204E-02	413596.2	3771220.7	121.3	5.00	7.76	1.40	YES	HRDOW
VOL22	0	0.98204E-02	413596.3	3771186.7	121.2	5.00	7.76	1.40	YES	HRDOW
VOL23	0	0.98204E-02	413599.1	3771152.4	121.0	5.00	7.76	1.40	YES	HRDOW
VOL24	0	0.98204E-02	413595.2	3771118.9	120.8	5.00	7.76	1.40	YES	HRDOW
VOL25	0	0.98204E-02	413592.0	3771084.7	120.7	5.00	7.76	1.40	YES	HRDOW
VOL26	0	0.98204E-02	413562.2	3771224.3	121.2	5.00	7.76	1.40	YES	HRDOW
VOL27	0	0.98204E-02	413562.3	3771190.3	121.0	5.00	7.76	1.40	YES	HRDOW
VOL28	0	0.98204E-02	413565.1	3771156.0	120.8	5.00	7.76	1.40	YES	HRDOW
VOL29	0	0.98204E-02	413561.2	3771122.5	120.7	5.00	7.76	1.40	YES	HRDOW
VOL30	0	0.98204E-02	413558.0	3771088.3	120.8	5.00	7.76	1.40	YES	HRDOW
VOL31	0	0.98204E-02	413528.5	3771224.1	121.0	5.00	7.76	1.40	YES	HRDOW
VOL32	0	0.98204E-02	413528.6	3771190.1	120.8	5.00	7.76	1.40	YES	HRDOW
VOL33	0	0.98204E-02	413531.3	3771155.8	120.6	5.00	7.76	1.40	YES	HRDOW

```
1076    VOL34           0   0.98204E-02  413527.4 3771122.3   120.6     5.00     7.76
        1.40     YES   HRDOW            NO
1077    VOL35           0   0.98204E-02  413524.2 3771088.1   120.8     5.00     7.76
        1.40     YES   HRDOW            NO
1078    VOL36           0   0.98204E-02  413494.9 3771226.9   120.9     5.00     7.76
        1.40     YES   HRDOW            NO
1079    VOL37           0   0.98204E-02  413495.0 3771192.9   120.6     5.00     7.76
        1.40     YES   HRDOW            NO
1080    VOL38           0   0.98204E-02  413497.7 3771158.5   120.5     5.00     7.76
        1.40     YES   HRDOW            NO
1081    VOL39           0   0.98204E-02  413493.9 3771125.0   120.4     5.00     7.76
        1.40     YES   HRDOW            NO
1082    VOL40           0   0.98204E-02  413490.7 3771090.8   120.5     5.00     7.76
        1.40     YES   HRDOW            NO
1083    VOL41           0   0.98204E-02  413461.3 3771229.2   120.8     5.00     7.76
        1.40     YES   HRDOW            NO
1084    VOL42           0   0.98204E-02  413461.5 3771195.2   120.6     5.00     7.76
        1.40     YES   HRDOW            NO
1085    VOL43           0   0.98204E-02  413464.2 3771160.9   120.4     5.00     7.76
        1.40     YES   HRDOW            NO
1086    VOL44           0   0.98204E-02  413460.3 3771127.4   120.3     5.00     7.76
        1.40     YES   HRDOW            NO
1087    VOL45           0   0.98204E-02  413457.1 3771093.2   120.3     5.00     7.76
        1.40     YES   HRDOW            NO
1088    VOL46           0   0.98204E-02  413427.8 3771229.4   120.7     5.00     7.76
        1.40     YES   HRDOW            NO
1089    VOL47           0   0.98204E-02  413427.9 3771195.4   120.5     5.00     7.76
        1.40     YES   HRDOW            NO
1090    VOL48           0   0.98204E-02  413430.6 3771161.1   120.3     5.00     7.76
        1.40     YES   HRDOW            NO
1091    VOL49           0   0.98204E-02  413426.7 3771127.6   120.2     5.00     7.76
        1.40     YES   HRDOW            NO
1092    VOL50           0   0.98204E-02  413423.6 3771093.4   120.0     5.00     7.76
        1.40     YES   HRDOW            NO
1093    VOL51           0   0.98204E-02  413397.4 3771227.5   120.4     5.00     7.76
        1.40     YES   HRDOW            NO
1094    VOL52           0   0.98204E-02  413394.5 3771194.2   120.3     5.00     7.76
        1.40     YES   HRDOW            NO
1095    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1096     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:42:44
1097
                                    PAGE   3
1098    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1099
1100
1101                                                  *** VOLUME SOURCE DATA ***
1102
1103                  NUMBER EMISSION RATE                      BASE    RELEASE    INIT.
                      INIT.   URBAN  EMISSION RATE   AIRCRAFT
1104      SOURCE       PART.  (GRAMS/SEC)     X         Y      ELEV.   HEIGHT      SY
          SZ     SOURCE  SCALAR VARY
1105        ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
            (METERS)              BY
1106    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - -
1107
1108    VOL53           0   0.98204E-02  413397.1 3771160.4   120.2     5.00     7.76
        1.40     YES   HRDOW            NO
1109    VOL54           0   0.98204E-02  413392.3 3771126.1   120.1     5.00     7.76
        1.40     YES   HRDOW            NO
1110    VOL55           0   0.98204E-02  413390.4 3771093.8   119.8     5.00     7.76
        1.40     YES   HRDOW            NO
1111    VOL56           0   0.98204E-02  413576.9 3771062.8   120.7     5.00     7.76
```

```
 1.40     YES   HRDOW            NO
VOL57            0   0.98204E-02  413543.3 3771064.7   120.7     5.00     7.76
 1.40     YES   HRDOW            NO
VOL58            0   0.98204E-02  413510.2 3771066.2   120.7     5.00     7.76
 1.40     YES   HRDOW            NO
VOL59            0   0.98204E-02  413389.1 3771161.2   120.1     5.00     7.76
 1.40     YES   HRDOW            NO
VOL60            0   0.98204E-02  413476.6 3771068.8   120.5     5.00     7.76
 1.40     YES   HRDOW            NO
VOL61            0   0.98204E-02  413443.0 3771069.0   120.1     5.00     7.76
 1.40     YES   HRDOW            NO
VOL62            0   0.98204E-02  413409.7 3771070.3   119.8     5.00     7.76
 1.40     YES   HRDOW            NO
VOL63            0   0.98204E-02  413380.4 3771072.8   119.7     5.00     7.76
 1.40     YES   HRDOW            NO
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                              PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                      *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        VOL13       , VOL14       , VOL15       , VOL16       , VOL17       ,
  VOL18       , VOL19       , VOL20       ,

             VOL21       , VOL22       , VOL23       , VOL24       , VOL25       ,
             VOL26       , VOL27       , VOL28       ,

             VOL29       , VOL30       , VOL31       , VOL32       , VOL33       ,
             VOL34       , VOL35       , VOL36       ,

             VOL37       , VOL38       , VOL39       , VOL40       , VOL41       ,
             VOL42       , VOL43       , VOL44       ,

             VOL45       , VOL46       , VOL47       , VOL48       , VOL49       ,
             VOL50       , VOL51       , VOL52       ,

             VOL53       , VOL54       , VOL55       , VOL56       , VOL57       ,
             VOL58       , VOL59       , VOL60       ,

             VOL61       , VOL62       , VOL63       ,
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 09:42:44

                              PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*


                                      *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP                                 SOURCE IDs
  --------   ---------                                 ----------


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```
1156                9663345.   VOL13       , VOL14       , VOL15       , VOL16       ,
                    VOL17       , VOL18       , VOL19       ,
1157    VOL20       ,
1158
1159                VOL21       , VOL22       , VOL23       , VOL24       , VOL25       ,
                    VOL26       , VOL27       , VOL28       ,
1160
1161                VOL29       , VOL30       , VOL31       , VOL32       , VOL33       ,
                    VOL34       , VOL35       , VOL36       ,
1162
1163                VOL37       , VOL38       , VOL39       , VOL40       , VOL41       ,
                    VOL42       , VOL43       , VOL44       ,
1164
1165                VOL45       , VOL46       , VOL47       , VOL48       , VOL49       ,
                    VOL50       , VOL51       , VOL52       ,
1166
1167                VOL53       , VOL54       , VOL55       , VOL56       , VOL57       ,
                    VOL58       , VOL59       , VOL60       ,
1168
1169                VOL61       , VOL62       , VOL63       ,
1170    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1171     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:42:44
1172
                                    PAGE   6
1173     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1174
1175                       * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                           WEEK (HRDOW) *
1176
1177     SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
1178      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1179    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - -
1180                                                DAY OF WEEK = WEEKDAY
1181       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1182       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1183      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1184                                                DAY OF WEEK = SATURDAY
1185       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1186       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1187      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1188                                                DAY OF WEEK = SUNDAY
1189       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1190       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1191      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1192    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1193     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:42:44
1194
                                    PAGE   7
1195     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

```
1196
1197                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1198
1199    SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1200     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1201    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1202                                                DAY OF WEEK = WEEKDAY
1203       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1204       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1205      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1206                                                DAY OF WEEK = SATURDAY
1207       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1208       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1209      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1210                                                DAY OF WEEK = SUNDAY
1211       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1212       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1213      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1214    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1215     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:42:44
1216
                                    PAGE   8
1217     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1218
1219                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1220
1221    SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
1222     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1223    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1224                                                DAY OF WEEK = WEEKDAY
1225       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1226       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1227      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1228                                                DAY OF WEEK = SATURDAY
1229       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1230       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1231      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1232                                                DAY OF WEEK = SUNDAY
1233       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1234       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
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                              PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
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                              PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - -
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL21 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

09:42:44

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL22 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00

```
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
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                              PAGE  18
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
 09:42:44

                              PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL28 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL29 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

```
1541       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1542       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1543      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1544  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1545   *** AERMET - VERSION  22112 ***
       ***                                                                        ***
       09:42:44
1546
                                  PAGE  23
1547   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1548
1549                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1550
1551   SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
1552    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1553  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1554                                                DAY OF WEEK = WEEKDAY
1555       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1556       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1557      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1558                                                DAY OF WEEK = SATURDAY
1559       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1560       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1561      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1562                                                DAY OF WEEK = SUNDAY
1563       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1564       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1565      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1566  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1567   *** AERMET - VERSION  22112 ***
       ***                                                                        ***
       09:42:44
1568
                                  PAGE  24
1569   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1570
1571                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1572
1573   SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
1574    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1575  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1576                                                DAY OF WEEK = WEEKDAY
1577       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1578       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
```

```
1579      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1580                                                DAY OF WEEK = SATURDAY
1581       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1582       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1583      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1584                                                DAY OF WEEK = SUNDAY
1585       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1586       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1587      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1588  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1589   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:42:44
1590
                                  PAGE  25
1591   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1592
1593                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1594
1595   SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
1596    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1597  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1598                                                DAY OF WEEK = WEEKDAY
1599       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1600       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
1601      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1602                                                DAY OF WEEK = SATURDAY
1603       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1604       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1605      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1606                                                DAY OF WEEK = SUNDAY
1607       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1608       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1609      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1610  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1611   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:42:44
1612
                                  PAGE  26
1613   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1614
1615                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1616
```

```
 SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  27
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
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1655    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:42:44
1656
                                    PAGE  28
1657    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1658
1659                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1660
1661    SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
1662     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1663    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - -
1664                                                  DAY OF WEEK = WEEKDAY
1665       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1666       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1667      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1668                                                  DAY OF WEEK = SATURDAY
1669       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1670       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1671      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1672                                                  DAY OF WEEK = SUNDAY
1673       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1674       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1675      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1676    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1677     *** AERMET - VERSION  22112 ***
         ***                                                                   ***
         09:42:44
1678
                                    PAGE  29
1679     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1680
1681                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1682
1683     SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
1684      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1685    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - -
1686                                                  DAY OF WEEK = WEEKDAY
1687       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1688       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1689      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1690                                                  DAY OF WEEK = SATURDAY
1691       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1692       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1693      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
```

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      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  30
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  31
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
```

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      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  32
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
```

```
                    WEEK (HRDOW) *
1770
1771    SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
1772     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1773    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1774                                                DAY OF WEEK = WEEKDAY
1775       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1776       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1777      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1778                                                DAY OF WEEK = SATURDAY
1779       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1780       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1781      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1782                                                DAY OF WEEK = SUNDAY
1783       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1784       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1785      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1786    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1787     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:42:44
1788
                                    PAGE  34
1789    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1790
1791                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1792
1793    SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
1794     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1795    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1796                                                DAY OF WEEK = WEEKDAY
1797       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1798       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1799      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1800                                                DAY OF WEEK = SATURDAY
1801       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1802       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1803      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1804                                                DAY OF WEEK = SUNDAY
1805       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1806       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1807      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL42 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL43 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14					

```
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  37
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  38
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
```

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1885       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1886       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1887      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1888                                                DAY OF WEEK = SATURDAY
1889       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1890       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1891      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1892                                                DAY OF WEEK = SUNDAY
1893       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1894       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1895      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1896 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1897  *** AERMET - VERSION  22112 ***
      ***                                                                        ***
      09:42:44
1898
                                  PAGE  39
1899  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1900
1901                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1902
1903  SOURCE ID = VOL46        ; SOURCE TYPE = VOLUME   :
1904   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1905  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1906                                                DAY OF WEEK = WEEKDAY
1907       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1908       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1909      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1910                                                DAY OF WEEK = SATURDAY
1911       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1912       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1913      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1914                                                DAY OF WEEK = SUNDAY
1915       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1916       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1917      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1918 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1919  *** AERMET - VERSION  22112 ***
      ***                                                                        ***
      09:42:44
1920
                                  PAGE  40
1921  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1922
1923                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1924
1925    SOURCE ID = VOL47        ; SOURCE TYPE = VOLUME   :
1926     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1927    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1928                                                DAY OF WEEK = WEEKDAY
1929       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1930       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1931      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1932                                                DAY OF WEEK = SATURDAY
1933       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1934       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1935      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1936                                                DAY OF WEEK = SUNDAY
1937       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1938       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1939      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1940    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1941     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:42:44
1942
                                  PAGE  41
1943    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1944
1945                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1946
1947    SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
1948     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1949    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1950                                                DAY OF WEEK = WEEKDAY
1951       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1952       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1953      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1954                                                DAY OF WEEK = SATURDAY
1955       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1956       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1957      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1958                                                DAY OF WEEK = SUNDAY
1959       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1960       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                              PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                              PAGE  43
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

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      .0000E+00    7  .0000E+00    8  .0000E+00
2000   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2001  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2002                                          DAY OF WEEK = SUNDAY
2003   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2004   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2005  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2006  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2007   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:42:44
2008
                                PAGE  44
2009   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2010
2011                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
2012
2013   SOURCE ID = VOL51        ; SOURCE TYPE = VOLUME   :
2014    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2015   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
2016                                          DAY OF WEEK = WEEKDAY
2017   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2018   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .1000E+01   16  .1000E+01
2019  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2020                                          DAY OF WEEK = SATURDAY
2021   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2022   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2023  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2024                                          DAY OF WEEK = SUNDAY
2025   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2026   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2027  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
2028  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2029   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
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2030
                                PAGE  45
2031   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2032
2033                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
2034
2035   SOURCE ID = VOL52        ; SOURCE TYPE = VOLUME   :
2036    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2037   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL53        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:42:44
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL54 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL55 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00

```
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL56        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL57        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL58        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL61 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL62 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															

```
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:42:44

                              PAGE  56
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL63        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  57
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                 (METERS)

     ( 413648.5, 3771123.9,     121.2,     121.2,       2.0);         ( 413644.0,
     3771078.2,     120.7,     120.7,       2.0);
     ( 413676.4, 3771027.7,     120.7,     120.7,       2.0);         ( 413613.2,
     3771030.3,     120.2,     120.2,       2.0);
     ( 413569.0, 3771032.9,     120.2,     120.2,       2.0);         ( 413537.2,
     3771033.5,     120.1,     120.1,       2.0);
     ( 413484.4, 3771036.4,     120.1,     120.1,       2.0);         ( 413456.6,
     3771037.7,     120.0,     120.0,       2.0);
     ( 413405.8, 3771040.0,     119.8,     119.8,       2.0);         ( 413376.0,
```

```
        3771043.2,     119.6,     119.6,       2.0);
2306    ( 413333.4, 3771017.2,     119.6,     119.6,       2.0);         ( 413333.4,
        3771037.3,     119.6,     119.6,       2.0);
2307    ( 413337.5, 3771067.4,     119.9,    1634.0,       2.0);         ( 413343.4,
        3771088.0,     119.9,    1635.7,       2.0);
2308    ( 413343.5, 3771105.3,     120.0,    1635.7,       2.0);         ( 413345.8,
        3771118.8,     120.0,    1635.7,       2.0);
2309    ( 413348.0, 3771143.1,     120.1,    1635.7,       2.0);         ( 413348.7,
        3771160.3,     120.2,    1635.7,       2.0);
2310    ( 413352.6, 3771184.7,     120.3,    1648.2,       2.0);         ( 413353.5,
        3771198.5,     120.3,    1648.2,       2.0);
2311    ( 413353.8, 3771225.5,     120.5,    1648.2,       2.0);         ( 413358.9,
        3771259.0,     120.5,    1648.2,       2.0);
2312    ( 413361.6, 3771282.1,     120.6,    1648.2,       2.0);         ( 413362.1,
        3771296.6,     120.7,    1648.2,       2.0);
2313    ( 413366.2, 3771341.2,     120.8,    1648.2,       2.0);         ( 413416.9,
        3771250.2,     120.8,    1648.2,       2.0);
2314    ( 413567.7, 3771246.1,     121.3,    1648.2,       2.0);         ( 413480.0,
        3771281.7,     121.2,    1648.2,       2.0);
2315    ( 413452.6, 3771272.9,     121.1,    1648.2,       2.0);         ( 413513.6,
        3771244.7,     121.1,    1648.2,       2.0);
2316    ( 413388.2, 3771251.0,     120.3,    1648.2,       2.0);         ( 413682.5,
        3771320.7,     122.2,    1648.2,       2.0);
2317    ( 413651.8, 3771342.1,     121.9,    1648.2,       2.0);         ( 413368.2,
        3771352.5,     120.8,    1648.2,       2.0);
2318    ( 413368.7, 3771372.0,     120.8,    1648.2,       2.0);         ( 413421.4,
        3771372.2,     121.2,    1648.2,       2.0);
2319    ( 413450.7, 3771369.6,     121.3,    1648.2,       2.0);         ( 413502.7,
        3771368.8,     121.5,    1648.2,       2.0);
2320    ( 413531.6, 3771367.5,     121.7,    1648.2,       2.0);         ( 413588.4,
        3771364.6,     121.8,    1648.2,       2.0);
2321    ( 413617.0, 3771362.6,     122.0,    1648.2,       2.0);         ( 413654.2,
        3771385.2,     122.1,    1648.2,       2.0);
2322    ( 413641.6, 3771240.5,     121.7,    1635.7,       2.0);         ( 413598.3,
        3771241.6,     121.5,    1648.2,       2.0);
2323    ( 413658.1, 3771227.2,     121.7,    1635.7,       2.0);         ( 413652.5,
        3771171.9,     121.6,    1635.7,       2.0);
2324    ( 413762.5, 3771326.4,     122.8,    1648.2,       2.0);         ( 413755.3,
        3771297.7,     122.6,    1648.2,       2.0);
2325    ( 413752.2, 3771264.9,     122.4,    1635.7,       2.0);         ( 413751.5,
        3771243.9,     122.3,    1635.7,       2.0);
2326    ( 413749.2, 3771225.7,     122.3,    1635.7,       2.0);         ( 413747.4,
        3771206.7,     122.2,    1635.7,       2.0);
2327    ( 413745.0, 3771187.2,     122.1,    1635.7,       2.0);         ( 413743.4,
        3771169.2,     122.0,    1634.0,       2.0);
2328    ( 413742.3, 3771152.5,     122.0,     122.0,       2.0);         ( 413740.0,
        3771133.6,     121.8,     121.8,       2.0);
2329    ( 413738.3, 3771115.5,     121.7,     121.7,       2.0);         ( 413734.9,
        3771095.5,     121.6,     121.6,       2.0);
2330    ( 413735.1, 3771077.4,     121.5,     121.5,       2.0);         ( 413733.3,
        3771064.3,     121.4,     121.4,       2.0);
2331    ( 413731.5, 3771046.4,     121.3,     121.3,       2.0);         ( 413729.5,
        3771027.6,     121.2,     121.2,       2.0);
2332    ( 413728.1, 3771009.5,     121.0,     121.0,       2.0);         ( 413725.5,
        3770991.7,     120.9,     120.9,       2.0);
2333    ( 413724.5, 3770973.6,     120.8,     120.8,       2.0);         ( 413721.8,
        3770948.1,     120.7,     120.7,       2.0);
2334    ( 413355.1, 3771622.7,     121.1,    1648.2,       2.0);         ( 413235.9,
        3771619.0,     120.6,    1648.2,       2.0);
2335    ( 412848.4, 3771774.9,     118.8,    1648.2,       2.0);         ( 415201.7,
        3771330.5,     133.8,     133.8,       2.0);
2336    ( 413782.5, 3771959.5,     125.9,    1648.2,       2.0);         ( 413664.8,
        3771641.1,     123.2,    1648.2,       2.0);
2337    ( 413674.0, 3770851.1,     119.9,     119.9,       2.0);         ( 413714.1,
        3770847.5,     120.0,     120.0,       2.0);
2338    ( 413663.5, 3770808.8,     119.6,     119.6,       2.0);         ( 413698.8,
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      3770760.1,     119.4,     119.4,       2.0);
2339  ( 413617.2, 3770676.6,     118.4,     118.4,       2.0);         ( 413664.1,
      3770663.2,     117.7,     117.7,       2.0);
2340  ( 413613.3, 3770517.0,     116.0,     118.7,       2.0);         ( 413346.0,
      3770490.8,     115.1,     115.1,       2.0);
2341  ( 413415.9, 3770471.5,     114.6,     114.6,       2.0);         ( 413221.9,
      3770467.4,     116.1,     121.5,       2.0);
2342  ( 413666.0, 3771067.1,     121.0,     121.0,
      2.0);
2343  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2344   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
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2345
                                  PAGE  58
2346   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2347
2348                                          *** METEOROLOGICAL DAYS SELECTED FOR
                                              PROCESSING ***
2349                                                        (1=YES; 0=NO)
2350
2351            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
2352            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
2353            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
2354            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
2355            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
2356            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
2357            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
2358            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
2359
2360                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                    IS INCLUDED IN THE DATA FILE.
2361
2362
2363
2364                                   *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                       CATEGORIES ***
2365                                                  (METERS/SEC)
2366
2367                                                1.54,   3.09,   5.14,   8.23,  10.80,
2368  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2369   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
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2370
                                  PAGE  59
2371   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2372
2373                                       *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                           ***
2374
2375     Surface file:
         AZUS_V11_trimmed.sfc
         Met Version:  22112
2376     Profile file:
         AZUS_V11_trimmed.PFL
2377     Surface format:
```

FREE

Profile format:
FREE

Surface station no.: 3179 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2017 Year: 2017

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
17	01	01	1	01	-11.3	0.154	-9.000	-9.000	-999.	145.	28.6	0.34	0.75	1.00	1.36	97.	10.0	281.4	9.5
17	01	01	1	02	-5.9	0.110	-9.000	-9.000	-999.	88.	20.0	0.29	0.75	1.00	1.05	88.	10.0	281.0	9.5
17	01	01	1	03	-6.6	0.117	-9.000	-9.000	-999.	95.	21.1	0.29	0.75	1.00	1.11	69.	10.0	280.5	9.5
17	01	01	1	04	-6.9	0.119	-9.000	-9.000	-999.	99.	21.7	0.33	0.75	1.00	1.08	132.	10.0	279.8	9.5
17	01	01	1	05	-4.1	0.091	-9.000	-9.000	-999.	66.	16.1	0.17	0.75	1.00	1.00	314.	10.0	279.5	9.5
17	01	01	1	06	-18.0	0.193	-9.000	-9.000	-999.	204.	41.0	0.21	0.75	1.00	1.96	35.	10.0	279.8	9.5
17	01	01	1	07	-10.5	0.147	-9.000	-9.000	-999.	136.	27.0	0.29	0.75	1.00	1.38	80.	10.0	279.6	9.5
17	01	01	1	08	-6.3	0.118	-9.000	-9.000	-999.	97.	22.9	0.29	0.75	0.55	1.12	74.	10.0	279.4	9.5
17	01	01	1	09	25.4	0.209	0.420	0.005	103.	230.	-31.8	0.29	0.75	0.32	1.55	70.	10.0	282.2	9.5
17	01	01	1	10	64.6	0.296	1.020	0.005	581.	386.	-35.4	0.33	0.75	0.25	2.13	126.	10.0	283.6	9.5
17	01	01	1	11	91.0	0.325	1.350	0.005	956.	444.	-33.2	0.33	0.75	0.22	2.32	130.	10.0	284.1	9.5
17	01	01	1	12	87.8	0.248	1.393	0.005	1087.	299.	-15.3	0.32	0.75	0.21	1.62	152.	10.0	285.1	9.5
17	01	01	1	13	103.2	0.182	1.514	0.005	1188.	187.	-5.1	0.33	0.75	0.21	0.97	144.	10.0	286.1	9.5
17	01	01	1	14	74.8	0.225	1.385	0.005	1256.	255.	-13.4	0.23	0.75	0.22	1.61	214.	10.0	286.9	9.5
17	01	01	1	15	50.9	0.150	1.233	0.005	1300.	142.	-5.9	0.07	0.75	0.26	1.37	273.	10.0	286.7	9.5
17	01	01	1	16	1.2	0.122	0.356	0.005	1300.	102.	-130.2	0.23	0.75	0.35	1.08	210.	10.0	286.6	9.5
17	01	01	1	17	-13.1	0.175	-9.000	-9.000	-999.	176.	36.0	0.32	0.75	0.62	1.55	172.	10.0	286.3	9.5
17	01	01	1	18	-13.7	0.171	-9.000	-9.000	-999.	169.	32.2	0.32	0.75	1.00	1.53	179.	10.0	285.8	9.5
17	01	01	1	19	-9.0	0.136	-9.000	-9.000	-999.	121.	24.7	0.23	0.75	1.00	1.38	215.	10.0	285.4	9.5
17	01	01	1	20	-3.7	0.086	-9.000	-9.000	-999.	61.	14.9	0.12	0.75	1.00	1.03	259.	10.0	285.0	9.5
17	01	01	1	21	-1.8	0.070	-9.000	-9.000	-999.	44.	16.4	0.16	0.75	1.00	0.58	349.	10.0	284.9	9.5
17	01	01	1	22	-3.4	0.086	-9.000	-9.000	-999.	61.	16.6	0.29	0.75	1.00	0.78	61.	10.0	284.8	9.5
17	01	01	1	23	-14.0	0.170	-9.000	-9.000	-999.	168.	31.8	0.21	0.75	1.00	1.74	43.	10.0	284.2	9.5
17	01	01	1	24	-21.5	0.220	-9.000	-9.000	-999.	248.	53.3	0.21	0.75	1.00	2.22	43.	10.0	283.9	9.5

First hour of profile data

```
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01    9.5 0 -999.  -99.00   281.4   99.0  -99.00  -99.00
 17 01 01 01   10.0 1   97.    1.36  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                                FOR SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL13       , VOL14       ,
                                    VOL15       , VOL16       , VOL17       ,
                  VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
                  VOL23       , VOL24       , VOL25       ,
                  VOL26       , VOL27       , VOL28       , VOL29       , VOL30       ,
                  VOL31       , VOL32       , VOL33       ,
                  VOL34       , VOL35       , VOL36       , VOL37       , VOL38       ,
                  VOL39       , VOL40       ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF CO       IN
                                       MICROGRAMS/M**3                          **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
      Y-COORD (M)        CONC     (YYMMDDHH)
- - - -
```

```
2451          413651.85   3771342.15       22.54095  (20120316)                413368.16
              3771352.50        17.16445  (18121316)
2452          413368.70   3771372.00       14.79366  (18121316)                413421.43
              3771372.18        21.53947  (21122816)
2453          413450.68   3771369.65       25.19877  (21122816)                413502.68
              3771368.75        26.47057  (21122816)
2454          413531.57   3771367.49       26.35921  (21122816)                413588.44
              3771364.60        24.64696  (21122816)
2455          413616.97   3771362.61       21.84775  (21122816)                413654.17
              3771385.18        16.67951  (20120316)
2456          413641.58   3771240.54       80.23550  (20012116)                413598.27
              3771241.58        77.61858  (20012116)
2457          413658.14   3771227.23       74.74212  (18111916)                413652.53
              3771171.92        75.67028  (17010315)
2458          413762.55   3771326.43       21.71129  (20012116)                413755.32
              3771297.72        24.47216  (20012116)
2459          413752.25   3771264.86       27.78601  (18111916)                413751.53
              3771243.92        32.34405  (18111916)
2460          413749.19   3771225.68       35.07045  (18111916)                413747.38
              3771206.72        36.20485  (18111916)
2461          413745.03   3771187.22       36.25295  (18111916)                413743.41
              3771169.17        35.28404  (18111916)
2462          413742.32   3771152.55       34.57750  (21110116)                413739.98
              3771133.59        34.05531  (21110116)
2463          413738.35   3771115.54       32.85989  (21110116)                413734.92
              3771095.50        33.71753  (17103016)
2464          413735.10   3771077.44       34.87769  (17103016)                413733.30
              3771064.26        37.21147  (17103016)
2465          413731.49   3771046.38       43.65970  (17103016)                413729.50
              3771027.61        45.56687  (17103016)
2466          413728.06   3771009.55       36.97216  (17103016)                413725.53
              3770991.67        26.81500  (17103016)
2467          413724.45   3770973.62       20.71643  (18122716)                413721.78
              3770948.07        17.51738  (17112116)
2468          413355.15   3771622.70        5.40105  (20121416)                413235.89
              3771619.04         4.25865  (18121316)
2469          412848.39   3771774.93        1.71180  (18120416)                415201.66
              3771330.49         1.91080  (21120916)
2470          413782.51   3771959.51        1.91611  (21122815)                413664.85
              3771641.09         6.41613  (21122816)
2471          413674.05   3770851.12       11.21571  (20102209)                413714.09
              3770847.47         9.46829  (17112116)
2472          413663.50   3770808.78        9.77116  (20102209)                413698.79
              3770760.11         7.15496  (20102209)
2473          413617.17   3770676.59        6.08957  (20102209)                413664.14
              3770663.20         5.73165  (20102209)
2474          413613.35   3770516.97        3.40650  (20102209)                413345.98
              3770490.83         4.02497  (20122815)
2475  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2476   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:42:44
2477
                                    PAGE  61
2478   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2479
2480                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                                    FOR SOURCE GROUP:  ALL      ***
2481                                    INCLUDING SOURCE(S):     VOL13       , VOL14       ,
                                    VOL15       , VOL16       , VOL17       ,
2482                  VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
                      VOL23       , VOL24       , VOL25       ,
2483                  VOL26       , VOL27       , VOL28       , VOL29       , VOL30       ,
                      VOL31       , VOL32       , VOL33       ,
2484                  VOL34       , VOL35       , VOL36       , VOL37       , VOL38       ,
```

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                VOL39       , VOL40       ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF CO       IN
                                       MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
     Y-COORD (M)        CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       413415.90   3770471.49        3.76497  (19122616)                413221.86
       3770467.45        3.91694  (21123016)
       413666.01   3771067.07       63.27983
       (21122715)

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
 09:42:44

                            PAGE  62
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                            *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION   VALUES
                            FOR SOURCE GROUP:  ALL      ***
                                INCLUDING SOURCE(S):     VOL13       , VOL14       ,
                                VOL15       , VOL16       , VOL17       ,
                VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
                VOL23       , VOL24       , VOL25       ,
                VOL26       , VOL27       , VOL28       , VOL29       , VOL30       ,
                VOL31       , VOL32       , VOL33       ,
                VOL34       , VOL35       , VOL36       , VOL37       , VOL38       ,
                VOL39       , VOL40       ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF CO       IN
                                       MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
     Y-COORD (M)        CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       413648.47   3771123.91       52.13895  (17103016)                413644.02
       3771078.17       57.23180  (17103016)
       413676.40   3771027.68       35.22167  (17103016)                413613.17
       3771030.29       36.95357  (17103016)
       413568.97   3771032.90       34.25424  (17103016)                413537.20
       3771033.51       35.34117  (18050116)
       413484.41   3771036.43       37.16803  (18050116)                413456.63
       3771037.66       37.36446  (18050116)
       413405.83   3771039.96       37.14415  (18050116)                413376.05
       3771043.18       38.16160  (21123016)
       413333.39   3771017.24       20.07072  (21123016)                413333.39
       3771037.35       20.27238  (21123016)
       413337.53   3771067.43       22.79776  (20040916)                413343.36
       3771087.99       27.10294  (20040916)
       413343.52   3771105.34       26.55691  (20040916)                413345.82
       3771118.84       27.01657  (20040916)
       413347.97   3771143.09       28.39804  (20040916)                413348.74
       3771160.28       28.27318  (20040916)
       413352.57   3771184.68       26.12226  (18010916)                413353.49
       3771198.50       24.33128  (19120616)
       413353.80   3771225.51       21.17374  (20120816)                413358.87
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3771258.96 17.36600 (20120816)
413361.63 3771282.14 13.42857 (20120816) 413362.09
3771296.56 11.33571 (20120816)
413366.23 3771341.23 7.06951 (20120816) 413416.88
3771250.22 30.67362 (21122816)
413567.74 3771246.07 35.02262 (20012116) 413479.96
3771281.68 19.74928 (21122816)
413452.64 3771272.93 22.45953 (21122816) 413513.57
3771244.69 37.02181 (20012116)
413388.18 3771250.98 26.27637 (20120816) 413682.54
3771320.66 8.51221 (20121816)
413651.85 3771342.15 7.17565 (21100716) 413368.16
3771352.50 6.36531 (19101116)
413368.70 3771372.00 5.45155 (19103016) 413421.43
3771372.18 6.78385 (21122816)
413450.68 3771369.65 7.78960 (21122816) 413502.68
3771368.75 8.30815 (21122816)
413531.57 3771367.49 8.29411 (21122816) 413588.44
3771364.60 7.75342 (21122816)
413616.97 3771362.61 7.06070 (21122816) 413654.17
3771385.18 5.23512 (21100716)
413641.58 3771240.54 32.09544 (20012116) 413598.27
3771241.58 36.36976 (20012116)
413658.14 3771227.23 30.67401 (20121816) 413652.53
3771171.92 45.13240 (17103016)
413762.55 3771326.43 6.65954 (20121816) 413755.32
3771297.72 8.20871 (20121816)
413752.25 3771264.86 9.75429 (20121816) 413751.53
3771243.92 10.36139 (17122116)
413749.19 3771225.68 11.83215 (17122116) 413747.38
3771206.72 12.87825 (17122116)
413745.03 3771187.22 13.52934 (17122116) 413743.41
3771169.17 13.71243 (21051716)
413742.32 3771152.55 14.48747 (21051716) 413739.98
3771133.59 16.09692 (17103016)
413738.35 3771115.54 17.22743 (17103016) 413734.92
3771095.50 18.55461 (17103016)
413735.10 3771077.44 19.30512 (17103016) 413733.30
3771064.26 20.49167 (17103016)
413731.49 3771046.38 22.08684 (17103016) 413729.50
3771027.61 21.40975 (17103016)
413728.06 3771009.55 17.65236 (17103016) 413725.53
3770991.67 13.56535 (17103016)
413724.45 3770973.62 10.24125 (17103016) 413721.78
3770948.07 7.05865 (17103016)
413355.15 3771622.70 1.52357 (20121416) 413235.89
3771619.04 1.51538 (19103016)
412848.39 3771774.93 0.57109 (20011716) 415201.66
3771330.49 0.41866 (21120916)
413782.51 3771959.51 0.65667 (21122816) 413664.85
3771641.09 1.92847 (21122816)
413674.05 3770851.12 3.20798 (17112116) 413714.09
3770847.47 3.12078 (17112116)
413663.50 3770808.78 2.35530 (17112116) 413698.79
3770760.11 1.81279 (17112116)
413617.17 3770676.59 1.90627 (20020316) 413664.14
3770663.20 1.34507 (20020316)
413613.35 3770516.97 1.13353 (20020316) 413345.98
3770490.83 1.60123 (20020316)

```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION   VALUES
                              FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL13       , VOL14       ,
                                  VOL15       , VOL16       , VOL17       ,
                 VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
                 VOL23       , VOL24       , VOL25       ,
                 VOL26       , VOL27       , VOL28       , VOL29       , VOL30       ,
                 VOL31       , VOL32       , VOL33       ,
                 VOL34       , VOL35       , VOL36       , VOL37       , VOL38       ,
                 VOL39       , VOL40       ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF CO       IN
                                       MICROGRAMS/M**3                          **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
      Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        413415.90   3770471.49        1.59253  (20020316)               413221.86
        3770467.45        1.83379  (21123016)
        413666.01   3771067.07       44.65022
        (17103016)

FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
 09:42:44

                              PAGE  64
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                          *** THE SUMMARY OF HIGHEST  1-HR RESULTS
                                          ***


                                    ** CONC OF CO       IN
                                    MICROGRAMS/M**3                          **


                                                          DATE

                                                         NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR,
YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      82.41066  ON 21110116: AT (  413648.47,
3771123.91,   121.18,   121.18,    2.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
 09:42:44
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF CO IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	NETWORK RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	57.23180	ON 17103016: AT (413644.02, 3771078.17, 120.70, 120.70, 2.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25
*** AERMET - VERSION 22112 ***
*** ***
09:42:44

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 56 Warning Message(s)
A Total of 474 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 41 Calm Hours Identified

A Total of 433 Missing Hours Identified (0.99 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
ME W186 933 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 933 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
CN W733 1168 AVER: 8-hr avg, < 6 hours of data, calms policy used. 2017021816
CN W733 10360 AVER: 8-hr avg, < 6 hours of data, calms policy used. 2018030816
CN W733 12400 AVER: 8-hr avg, < 6 hours of data, calms policy used. 2018060116

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2642    CN W733   22832         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2019081008
2643    CN W733   22840         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2019081016
2644    CN W733   25416         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2019112524
2645    CN W733   25424         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2019112608
2646    CN W733   25432         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2019112616
2647    CN W733   25440         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2019112624
2648    CN W733   25448         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2019112708
2649    CN W733   25456         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2019112716
2650    CN W733   26280         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2019123124
2651    CN W733   26288         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020010108
2652    CN W733   26304         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020010124
2653    CN W733   26312         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020010208
2654    CN W733   28024         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020031316
2655    CN W733   28048         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020031416
2656    CN W733   28072         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020031516
2657    CN W733   28096         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020031616
2658    CN W733   28504         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020040216
2659    CN W733   28528         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020040316
2660    CN W733   28624         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020040716
2661    CN W733   28936         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020042016
2662    CN W733   30496         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020062416
2663    CN W733   33008         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020100708
2664    CN W733   33016         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020100716
2665    CN W733   33088         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020101016
2666    CN W733   33880         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020111216
2667    CN W733   34024         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020111816
2668    CN W733   34072         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020112016
2669    CN W733   34096         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020112116
2670    CN W733   34120         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020112216
2671    CN W733   34144         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020112316
2672    CN W733   34168         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020112416
2673    CN W733   34192         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020112516
2674    CN W733   34672         AVER: 8-hr avg, < 6 hours of data, calms policy used.
        2020121516
```

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 CN W733   34816         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2020122116
 CN W733   35272         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021010916
 CN W733   35296         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021011016
 CN W733   35320         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021011116
 CN W733   35344         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021011216
 CN W733   35608         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021012316
 CN W733   35632         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021012416
 CN W733   35656         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021012516
 CN W733   36384         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021022424
 CN W733   36392         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021022508
 CN W733   36808         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021031416
 CN W733   37192         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021033016
 CN W733   37288         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021040316
 CN W733   38744         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021060308
 CN W733   38752         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021060316
 CN W733   40912         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021090116
 CN W733   41800         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021100816
 CN W733   41824         AVER: 8-hr avg, < 6 hours of data, calms policy used.
2021100916

    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 5/15/2025
** File: C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons NOX\16435 Cons NOX.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 9663345 Los_Angeles_County
   POLLUTID NOX
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16435 Cons NOX.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL13        VOLUME     413678.759  3771046.996      120.760
   LOCATION VOL14        VOLUME     413644.379  3771048.419      120.440
   LOCATION VOL15        VOLUME     413609.792  3771050.453      120.340
   LOCATION VOL16        VOLUME     413630.138  3771220.132      121.570
   LOCATION VOL17        VOLUME     413630.260  3771186.129      121.320
   LOCATION VOL18        VOLUME     413632.986  3771151.772      121.170
   LOCATION VOL19        VOLUME     413629.104  3771118.263      120.940
   LOCATION VOL20        VOLUME     413625.918  3771084.065      120.660
   LOCATION VOL21        VOLUME     413596.212  3771220.733      121.340
   LOCATION VOL22        VOLUME     413596.335  3771186.730      121.160
   LOCATION VOL23        VOLUME     413599.061  3771152.374      121.000
   LOCATION VOL24        VOLUME     413595.179  3771118.864      120.760
   LOCATION VOL25        VOLUME     413591.993  3771084.666      120.730
   LOCATION VOL26        VOLUME     413562.226  3771224.344      121.200
   LOCATION VOL27        VOLUME     413562.349  3771190.341      120.990
   LOCATION VOL28        VOLUME     413565.075  3771155.985      120.810
   LOCATION VOL29        VOLUME     413561.193  3771122.475      120.730
   LOCATION VOL30        VOLUME     413558.007  3771088.277      120.770
   LOCATION VOL31        VOLUME     413528.453  3771224.132      121.010
   LOCATION VOL32        VOLUME     413528.576  3771190.129      120.780
   LOCATION VOL33        VOLUME     413531.301  3771155.772      120.650
   LOCATION VOL34        VOLUME     413527.420  3771122.263      120.560
   LOCATION VOL35        VOLUME     413524.234  3771088.065      120.770
   LOCATION VOL36        VOLUME     413494.892  3771226.893      120.870
   LOCATION VOL37        VOLUME     413495.015  3771192.890      120.630
   LOCATION VOL38        VOLUME     413497.741  3771158.533      120.460
   LOCATION VOL39        VOLUME     413493.859  3771125.024      120.410
   LOCATION VOL40        VOLUME     413490.673  3771090.826      120.550
   LOCATION VOL41        VOLUME     413461.331  3771229.230      120.830
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     LOCATION VOL42        VOLUME     413461.454  3771195.226      120.620
     LOCATION VOL43        VOLUME     413464.180  3771160.870      120.410
     LOCATION VOL44        VOLUME     413460.298  3771127.361      120.290
     LOCATION VOL45        VOLUME     413457.112  3771093.162      120.290
     LOCATION VOL46        VOLUME     413427.770  3771229.442      120.700
     LOCATION VOL47        VOLUME     413427.893  3771195.439      120.500
     LOCATION VOL48        VOLUME     413430.619  3771161.082      120.340
     LOCATION VOL49        VOLUME     413426.737  3771127.573      120.190
     LOCATION VOL50        VOLUME     413423.551  3771093.375      120.040
     LOCATION VOL51        VOLUME     413397.396  3771227.531      120.420
     LOCATION VOL52        VOLUME     413394.545  3771194.164      120.300
     LOCATION VOL53        VOLUME     413397.058  3771160.445      120.180
     LOCATION VOL54        VOLUME     413392.327  3771126.086      120.090
     LOCATION VOL55        VOLUME     413390.415  3771093.800      119.780
     LOCATION VOL56        VOLUME     413576.851  3771062.824      120.680
     LOCATION VOL57        VOLUME     413543.290  3771064.735      120.680
     LOCATION VOL58        VOLUME     413510.154  3771066.222      120.700
     LOCATION VOL59        VOLUME     413389.080  3771161.170      120.140
     LOCATION VOL60        VOLUME     413476.594  3771068.771      120.480
     LOCATION VOL61        VOLUME     413443.033  3771068.984      120.130
     LOCATION VOL62        VOLUME     413409.684  3771070.258      119.840
     LOCATION VOL63        VOLUME     413380.371  3771072.807      119.720
** Source Parameters **
     SRCPARAM VOL13        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL14        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL15        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL16        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL17        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL18        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL19        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL20        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL21        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL22        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL23        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL24        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL25        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL26        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL27        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL28        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL29        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL30        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL31        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL32        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL33        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL34        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL35        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL36        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL37        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL38        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL39        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL40        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL41        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL42        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL43        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL44        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL45        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL46        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL47        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL48        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL49        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL50        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL51        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL52        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL53        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL54        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL55        0.0050337388     5.000     7.760     1.400
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   SRCPARAM VOL56        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL57        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL58        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL59        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL60        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL61        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL62        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL63        0.0050337388     5.000     7.760     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "16435 Cons NOX.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
```

```
**
**
ME STARTING
   SURFFILE AZUS_V11_trimmed.sfc
   PROFFILE AZUS_V11_trimmed.PFL
   SURFDATA 3179 2017
   UAIRDATA 3190 2017
   SITEDATA 60370002 2017
   PROFBASE 187.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "16435 CONS NOX.AD\01H1GALL.PLT" 31
   SUMMFILE "16435 Cons NOX.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**
```

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** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 5/15/2025
** File: C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons NOX\16435 Cons NOX.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 9663345 Los_Angeles_County
   POLLUTID NOX
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16435 Cons NOX.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL13        VOLUME     413678.759  3771046.996      120.760
   LOCATION VOL14        VOLUME     413644.379  3771048.419      120.440
   LOCATION VOL15        VOLUME     413609.792  3771050.453      120.340
   LOCATION VOL16        VOLUME     413630.138  3771220.132      121.570
   LOCATION VOL17        VOLUME     413630.260  3771186.129      121.320
   LOCATION VOL18        VOLUME     413632.986  3771151.772      121.170
   LOCATION VOL19        VOLUME     413629.104  3771118.263      120.940
   LOCATION VOL20        VOLUME     413625.918  3771084.065      120.660
   LOCATION VOL21        VOLUME     413596.212  3771220.733      121.340
   LOCATION VOL22        VOLUME     413596.335  3771186.730      121.160
   LOCATION VOL23        VOLUME     413599.061  3771152.374      121.000
   LOCATION VOL24        VOLUME     413595.179  3771118.864      120.760
   LOCATION VOL25        VOLUME     413591.993  3771084.666      120.730
   LOCATION VOL26        VOLUME     413562.226  3771224.344      121.200
   LOCATION VOL27        VOLUME     413562.349  3771190.341      120.990
   LOCATION VOL28        VOLUME     413565.075  3771155.985      120.810
   LOCATION VOL29        VOLUME     413561.193  3771122.475      120.730
   LOCATION VOL30        VOLUME     413558.007  3771088.277      120.770
   LOCATION VOL31        VOLUME     413528.453  3771224.132      121.010
   LOCATION VOL32        VOLUME     413528.576  3771190.129      120.780
   LOCATION VOL33        VOLUME     413531.301  3771155.772      120.650
   LOCATION VOL34        VOLUME     413527.420  3771122.263      120.560
   LOCATION VOL35        VOLUME     413524.234  3771088.065      120.770
   LOCATION VOL36        VOLUME     413494.892  3771226.893      120.870
   LOCATION VOL37        VOLUME     413495.015  3771192.890      120.630
   LOCATION VOL38        VOLUME     413497.741  3771158.533      120.460
   LOCATION VOL39        VOLUME     413493.859  3771125.024      120.410
   LOCATION VOL40        VOLUME     413490.673  3771090.826      120.550
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     LOCATION VOL41        VOLUME     413461.331  3771229.230      120.830
     LOCATION VOL42        VOLUME     413461.454  3771195.226      120.620
     LOCATION VOL43        VOLUME     413464.180  3771160.870      120.410
     LOCATION VOL44        VOLUME     413460.298  3771127.361      120.290
     LOCATION VOL45        VOLUME     413457.112  3771093.162      120.290
     LOCATION VOL46        VOLUME     413427.770  3771229.442      120.700
     LOCATION VOL47        VOLUME     413427.893  3771195.439      120.500
     LOCATION VOL48        VOLUME     413430.619  3771161.082      120.340
     LOCATION VOL49        VOLUME     413426.737  3771127.573      120.190
     LOCATION VOL50        VOLUME     413423.551  3771093.375      120.040
     LOCATION VOL51        VOLUME     413397.396  3771227.531      120.420
     LOCATION VOL52        VOLUME     413394.545  3771194.164      120.300
     LOCATION VOL53        VOLUME     413397.058  3771160.445      120.180
     LOCATION VOL54        VOLUME     413392.327  3771126.086      120.090
     LOCATION VOL55        VOLUME     413390.415  3771093.800      119.780
     LOCATION VOL56        VOLUME     413576.851  3771062.824      120.680
     LOCATION VOL57        VOLUME     413543.290  3771064.735      120.680
     LOCATION VOL58        VOLUME     413510.154  3771066.222      120.700
     LOCATION VOL59        VOLUME     413389.080  3771161.170      120.140
     LOCATION VOL60        VOLUME     413476.594  3771068.771      120.480
     LOCATION VOL61        VOLUME     413443.033  3771068.984      120.130
     LOCATION VOL62        VOLUME     413409.684  3771070.258      119.840
     LOCATION VOL63        VOLUME     413380.371  3771072.807      119.720
** Source Parameters **
     SRCPARAM VOL13        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL14        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL15        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL16        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL17        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL18        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL19        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL20        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL21        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL22        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL23        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL24        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL25        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL26        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL27        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL28        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL29        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL30        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL31        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL32        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL33        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL34        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL35        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL36        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL37        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL38        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL39        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL40        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL41        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL42        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL43        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL44        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL45        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL46        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL47        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL48        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL49        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL50        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL51        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL52        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL53        0.0050337388     5.000     7.760     1.400
     SRCPARAM VOL54        0.0050337388     5.000     7.760     1.400
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   SRCPARAM VOL55        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL56        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL57        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL58        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL59        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL60        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL61        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL62        0.0050337388     5.000     7.760     1.400
   SRCPARAM VOL63        0.0050337388     5.000     7.760     1.400
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
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   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "16435 Cons NOX.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
```

```
924   ****************************************
925   **
926   **
927   ME STARTING
928      SURFFILE AZUS_V11_trimmed.sfc
929      PROFFILE AZUS_V11_trimmed.PFL
930      SURFDATA 3179 2017
931      UAIRDATA 3190 2017
932      SITEDATA 60370002 2017
933      PROFBASE 187.0 METERS
934   ME FINISHED
935   **
936   ****************************************
937   ** AERMOD Output Pathway
938   ****************************************
939   **
940   **
941   OU STARTING
942      RECTABLE ALLAVE 1ST
943      RECTABLE 1 1ST
944   ** Auto-Generated Plotfiles
945      PLOTFILE 1 ALL 1ST "16435 CONS NOX.AD\01H1GALL.PLT" 31
946      SUMMFILE "16435 Cons NOX.sum"
947   OU FINISHED
948
949
950     *** Message Summary For AERMOD Model Setup ***
951
952     --------- Summary of Total Messages --------
953
954    A Total of            0 Fatal Error Message(s)
955    A Total of            2 Warning Message(s)
956    A Total of            0 Informational Message(s)
957
958
959       ******** FATAL ERROR MESSAGES ********
960                  ***  NONE  ***
961
962
963       ********   WARNING MESSAGES   ********
964    ME W186     933       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
       used           0.50
965    ME W187     933       MEOPEN: ADJ_U* Option for Stable Low Winds used in
       AERMET
966
967    *********************************
968    *** SETUP Finishes Successfully ***
969    *********************************
970
971   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
972    *** AERMET - VERSION  22112 ***
       ***                                                                  ***
       09:48:10
973
                                  PAGE   1
974    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
975
976                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
977    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
978
979    ** Model Options Selected:
980         * Model Uses Regulatory DEFAULT Options
981         * Model Is Setup For Calculation of Average CONCentration Values.
982         * NO GAS DEPOSITION Data Provided.
```

```
983         * NO PARTICLE DEPOSITION Data Provided.
984         * Model Uses NO DRY DEPLETION. DDPLETE  =  F
985         * Model Uses NO WET DEPLETION. WETDPLT  =  F
986         * Stack-tip Downwash.
987         * Model Accounts for ELEVated Terrain Effects.
988         * Use Calms Processing Routine.
989         * Use Missing Data Processing Routine.
990         * No Exponential Decay.
991         * Model Uses URBAN Dispersion Algorithm for the SBL for    51 Source(s),
992           for Total of    1 Urban Area(s):
993      Urban Population =   9663345.0 ;  Urban Roughness Length =  1.000 m
994         * Urban Roughness Length of 1.0 Meter Used.
995         * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
996         * CCVR_Sub - Meteorological data includes CCVR substitutions
997         * TEMP_Sub - Meteorological data includes TEMP substitutions
998         * Model Accepts FLAGPOLE Receptor . Heights.
999         * The User Specified a Pollutant Type of: NOX
1000
1001    **Model Calculates  1 Short Term Average(s) of:   1-HR
1002
1003    **This Run Includes:     51 Source(s);       1 Source Group(s); and      83 Receptor(s)
1004
1005                   with:      0 POINT(s), including
1006                              0 POINTCAP(s) and      0 POINTHOR(s)
1007                    and:     51 VOLUME source(s)
1008                    and:      0 AREA type source(s)
1009                    and:      0 LINE source(s)
1010                    and:      0 RLINE/RLINEXT source(s)
1011                    and:      0 OPENPIT source(s)
1012                    and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
1013                    and:      0 SWPOINT source(s)
1014
1015
1016    **Model Set To Continue RUNning After the Setup Testing.
1017
1018    **The AERMET Input Meteorological Data Version Date:  22112
1019
1020    **Output Options Selected:
1021            Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
                Keyword)
1022            Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
1023            Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)
1024
1025    **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
1026                                                                    m for Missing Hours
1027                                                                    b for Both Calm and
                                                                        Missing Hours
1028
1029    **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   187.00 ;  Decay Coef.
        =    0.000     ;  Rot. Angle =     0.0
1030                     Emission Units = GRAMS/SEC                                ;  Emission
                         Rate Unit Factor =   0.10000E+07
1031                     Output Units   = MICROGRAMS/M**3
1032
1033    **Approximate Storage Requirements of Model =      3.6 MB of RAM.
1034
1035    **Input Runstream File:
        aermod.inp

1036    **Output Print File:
        aermod.out

1037
1038    **Detailed Error/Message File:   16435 Cons
        NOX.err
1039    **File for Summary of Results:   16435 Cons
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ (METERS)	SOURCE SCALAR VARY BY
VOL13	0	0.50337E-02	413678.8	3771047.0	120.8	5.00	7.76	1.40	YES HRDOW
VOL14	0	0.50337E-02	413644.4	3771048.4	120.4	5.00	7.76	1.40	YES HRDOW
VOL15	0	0.50337E-02	413609.8	3771050.5	120.3	5.00	7.76	1.40	YES HRDOW
VOL16	0	0.50337E-02	413630.1	3771220.1	121.6	5.00	7.76	1.40	YES HRDOW
VOL17	0	0.50337E-02	413630.3	3771186.1	121.3	5.00	7.76	1.40	YES HRDOW
VOL18	0	0.50337E-02	413633.0	3771151.8	121.2	5.00	7.76	1.40	YES HRDOW
VOL19	0	0.50337E-02	413629.1	3771118.3	120.9	5.00	7.76	1.40	YES HRDOW
VOL20	0	0.50337E-02	413625.9	3771084.1	120.7	5.00	7.76	1.40	YES HRDOW
VOL21	0	0.50337E-02	413596.2	3771220.7	121.3	5.00	7.76	1.40	YES HRDOW
VOL22	0	0.50337E-02	413596.3	3771186.7	121.2	5.00	7.76	1.40	YES HRDOW
VOL23	0	0.50337E-02	413599.1	3771152.4	121.0	5.00	7.76	1.40	YES HRDOW
VOL24	0	0.50337E-02	413595.2	3771118.9	120.8	5.00	7.76	1.40	YES HRDOW
VOL25	0	0.50337E-02	413592.0	3771084.7	120.7	5.00	7.76	1.40	YES HRDOW
VOL26	0	0.50337E-02	413562.2	3771224.3	121.2	5.00	7.76	1.40	YES HRDOW
VOL27	0	0.50337E-02	413562.3	3771190.3	121.0	5.00	7.76	1.40	YES HRDOW
VOL28	0	0.50337E-02	413565.1	3771156.0	120.8	5.00	7.76	1.40	YES HRDOW
VOL29	0	0.50337E-02	413561.2	3771122.5	120.7	5.00	7.76	1.40	YES HRDOW
VOL30	0	0.50337E-02	413558.0	3771088.3	120.8	5.00	7.76	1.40	YES HRDOW
VOL31	0	0.50337E-02	413528.5	3771224.1	121.0	5.00	7.76	1.40	YES HRDOW
VOL32	0	0.50337E-02	413528.6	3771190.1	120.8	5.00	7.76	1.40	YES HRDOW
VOL33	0	0.50337E-02	413531.3	3771155.8	120.6	5.00	7.76	1.40	YES HRDOW
VOL34	0	0.50337E-02	413527.4	3771122.3	120.6	5.00	7.76	1.40	YES HRDOW

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1075    VOL35            0   0.50337E-02  413524.2 3771088.1   120.8     5.00     7.76
        1.40     YES   HRDOW            NO
1076    VOL36            0   0.50337E-02  413494.9 3771226.9   120.9     5.00     7.76
        1.40     YES   HRDOW            NO
1077    VOL37            0   0.50337E-02  413495.0 3771192.9   120.6     5.00     7.76
        1.40     YES   HRDOW            NO
1078    VOL38            0   0.50337E-02  413497.7 3771158.5   120.5     5.00     7.76
        1.40     YES   HRDOW            NO
1079    VOL39            0   0.50337E-02  413493.9 3771125.0   120.4     5.00     7.76
        1.40     YES   HRDOW            NO
1080    VOL40            0   0.50337E-02  413490.7 3771090.8   120.5     5.00     7.76
        1.40     YES   HRDOW            NO
1081    VOL41            0   0.50337E-02  413461.3 3771229.2   120.8     5.00     7.76
        1.40     YES   HRDOW            NO
1082    VOL42            0   0.50337E-02  413461.5 3771195.2   120.6     5.00     7.76
        1.40     YES   HRDOW            NO
1083    VOL43            0   0.50337E-02  413464.2 3771160.9   120.4     5.00     7.76
        1.40     YES   HRDOW            NO
1084    VOL44            0   0.50337E-02  413460.3 3771127.4   120.3     5.00     7.76
        1.40     YES   HRDOW            NO
1085    VOL45            0   0.50337E-02  413457.1 3771093.2   120.3     5.00     7.76
        1.40     YES   HRDOW            NO
1086    VOL46            0   0.50337E-02  413427.8 3771229.4   120.7     5.00     7.76
        1.40     YES   HRDOW            NO
1087    VOL47            0   0.50337E-02  413427.9 3771195.4   120.5     5.00     7.76
        1.40     YES   HRDOW            NO
1088    VOL48            0   0.50337E-02  413430.6 3771161.1   120.3     5.00     7.76
        1.40     YES   HRDOW            NO
1089    VOL49            0   0.50337E-02  413426.7 3771127.6   120.2     5.00     7.76
        1.40     YES   HRDOW            NO
1090    VOL50            0   0.50337E-02  413423.6 3771093.4   120.0     5.00     7.76
        1.40     YES   HRDOW            NO
1091    VOL51            0   0.50337E-02  413397.4 3771227.5   120.4     5.00     7.76
        1.40     YES   HRDOW            NO
1092    VOL52            0   0.50337E-02  413394.5 3771194.2   120.3     5.00     7.76
        1.40     YES   HRDOW            NO
1093    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1094     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:48:10
1095
                                    PAGE   3
1096    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1097
1098
1099                                                  *** VOLUME SOURCE DATA ***
1100
1101                 NUMBER EMISSION RATE                      BASE    RELEASE    INIT.
                     INIT.   URBAN  EMISSION RATE   AIRCRAFT
1102       SOURCE     PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
           SZ     SOURCE  SCALAR VARY
1103         ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
             (METERS)              BY
1104    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - -
1105
1106    VOL53            0   0.50337E-02  413397.1 3771160.4   120.2     5.00     7.76
        1.40     YES   HRDOW            NO
1107    VOL54            0   0.50337E-02  413392.3 3771126.1   120.1     5.00     7.76
        1.40     YES   HRDOW            NO
1108    VOL55            0   0.50337E-02  413390.4 3771093.8   119.8     5.00     7.76
        1.40     YES   HRDOW            NO
1109    VOL56            0   0.50337E-02  413576.9 3771062.8   120.7     5.00     7.76
        1.40     YES   HRDOW            NO
1110    VOL57            0   0.50337E-02  413543.3 3771064.7   120.7     5.00     7.76
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      1.40     YES   HRDOW            NO
1111  VOL58            0   0.50337E-02  413510.2 3771066.2   120.7     5.00     7.76
      1.40     YES   HRDOW            NO
1112  VOL59            0   0.50337E-02  413389.1 3771161.2   120.1     5.00     7.76
      1.40     YES   HRDOW            NO
1113  VOL60            0   0.50337E-02  413476.6 3771068.8   120.5     5.00     7.76
      1.40     YES   HRDOW            NO
1114  VOL61            0   0.50337E-02  413443.0 3771069.0   120.1     5.00     7.76
      1.40     YES   HRDOW            NO
1115  VOL62            0   0.50337E-02  413409.7 3771070.3   119.8     5.00     7.76
      1.40     YES   HRDOW            NO
1116  VOL63            0   0.50337E-02  413380.4 3771072.8   119.7     5.00     7.76
      1.40     YES   HRDOW            NO
1117  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1118   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:48:10
1119
                                PAGE   4
1120   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1121
1122
1123                                        *** SOURCE IDs DEFINING SOURCE GROUPS ***
1124
1125   SRCGROUP ID                                          SOURCE IDs
1126   -----------                                          ----------
1127
1128
1129    ALL        VOL13       , VOL14       , VOL15       , VOL16       , VOL17       ,
       VOL18       , VOL19       , VOL20       ,
1130
1131               VOL21       , VOL22       , VOL23       , VOL24       , VOL25       ,
               VOL26       , VOL27       , VOL28       ,
1132
1133               VOL29       , VOL30       , VOL31       , VOL32       , VOL33       ,
               VOL34       , VOL35       , VOL36       ,
1134
1135               VOL37       , VOL38       , VOL39       , VOL40       , VOL41       ,
               VOL42       , VOL43       , VOL44       ,
1136
1137               VOL45       , VOL46       , VOL47       , VOL48       , VOL49       ,
               VOL50       , VOL51       , VOL52       ,
1138
1139               VOL53       , VOL54       , VOL55       , VOL56       , VOL57       ,
               VOL58       , VOL59       , VOL60       ,
1140
1141               VOL61       , VOL62       , VOL63       ,
1142  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1143   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:48:10
1144
                                PAGE   5
1145   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1146
1147
1148                                      *** SOURCE IDs DEFINED AS URBAN SOURCES ***
1149
1150    URBAN ID   URBAN POP                                 SOURCE IDs
1151    --------   ---------                                 ----------
1152
1153
1154                9663345.   VOL13       , VOL14       , VOL15       , VOL16       ,
                   VOL17       , VOL18       , VOL19       ,
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 VOL20      ,

            VOL21      , VOL22      , VOL23      , VOL24      , VOL25      ,
            VOL26      , VOL27      , VOL28      ,

            VOL29      , VOL30      , VOL31      , VOL32      , VOL33      ,
            VOL34      , VOL35      , VOL36      ,

            VOL37      , VOL38      , VOL39      , VOL40      , VOL41      ,
            VOL42      , VOL43      , VOL44      ,

            VOL45      , VOL46      , VOL47      , VOL48      , VOL49      ,
            VOL50      , VOL51      , VOL52      ,

            VOL53      , VOL54      , VOL55      , VOL56      , VOL57      ,
            VOL58      , VOL59      , VOL60      ,

            VOL61      , VOL62      , VOL63      ,
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 09:48:10

                            PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 09:48:10

                            PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
```

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                    WEEK (HRDOW) *
1196
1197    SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1198     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1199    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1200                                                DAY OF WEEK = WEEKDAY
1201       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1202       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1203      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1204                                                DAY OF WEEK = SATURDAY
1205       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1206       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1207      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1208                                                DAY OF WEEK = SUNDAY
1209       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1210       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1211      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1212    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1213     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:48:10
1214
                                   PAGE   8
1215     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1216
1217                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1218
1219    SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
1220     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1221    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1222                                                DAY OF WEEK = WEEKDAY
1223       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1224       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1225      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1226                                                DAY OF WEEK = SATURDAY
1227       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1228       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1229      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1230                                                DAY OF WEEK = SUNDAY
1231       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1232       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1233      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL16 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL17 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14					

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      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                                PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                                PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
```

```
1311       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1312       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1313      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1314                                                DAY OF WEEK = SATURDAY
1315       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1316       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1317      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1318                                                DAY OF WEEK = SUNDAY
1319       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1320       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1321      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1322 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1323  *** AERMET - VERSION  22112 ***
      ***                                                                        ***
      09:48:10
1324
                                  PAGE  13
1325  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1326
1327                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1328
1329  SOURCE ID = VOL20        ; SOURCE TYPE = VOLUME   :
1330   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1331  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1332                                                DAY OF WEEK = WEEKDAY
1333       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1334       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1335      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1336                                                DAY OF WEEK = SATURDAY
1337       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1338       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1339      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1340                                                DAY OF WEEK = SUNDAY
1341       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1342       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1343      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1344 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1345  *** AERMET - VERSION  22112 ***
      ***                                                                        ***
      09:48:10
1346
                                  PAGE  14
1347  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1348
1349                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1350
1351    SOURCE ID = VOL21        ; SOURCE TYPE = VOLUME   :
1352     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1353    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1354                                                DAY OF WEEK = WEEKDAY
1355       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1356       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1357      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1358                                                DAY OF WEEK = SATURDAY
1359       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1360       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1361      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1362                                                DAY OF WEEK = SUNDAY
1363       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1364       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1365      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1366    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1367     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:48:10
1368
                                    PAGE  15
1369     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1370
1371                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1372
1373    SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
1374     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1375    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1376                                                DAY OF WEEK = WEEKDAY
1377       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1378       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1379      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1380                                                DAY OF WEEK = SATURDAY
1381       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1382       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1383      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1384                                                DAY OF WEEK = SUNDAY
1385       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1386       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
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1387      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1388   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1389       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           09:48:10
1390
                                    PAGE  16
1391       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1392
1393                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                            WEEK (HRDOW) *
1394
1395       SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
1396        HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
           SCALAR   HOUR   SCALAR   HOUR   SCALAR
1397       - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
           - - - - - - - - - - - - - - - - - - - -
1398                                                  DAY OF WEEK = WEEKDAY
1399          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
1400          9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
              .1000E+01   15  .1000E+01   16  .1000E+01
1401        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
1402                                                  DAY OF WEEK = SATURDAY
1403          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
1404          9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
              .0000E+00   15  .0000E+00   16  .0000E+00
1405        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
1406                                                  DAY OF WEEK = SUNDAY
1407          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
1408          9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
              .0000E+00   15  .0000E+00   16  .0000E+00
1409        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
1410   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1411       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           09:48:10
1412
                                    PAGE  17
1413       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1414
1415                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                            WEEK (HRDOW) *
1416
1417       SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
1418        HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
           SCALAR   HOUR   SCALAR   HOUR   SCALAR
1419       - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
           - - - - - - - - - - - - - - - - - - - -
1420                                                  DAY OF WEEK = WEEKDAY
1421          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
1422          9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
              .1000E+01   15  .1000E+01   16  .1000E+01
1423        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
1424                                                  DAY OF WEEK = SATURDAY
1425          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
1426   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1427  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1428                                          DAY OF WEEK = SUNDAY
1429   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1430   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1431  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1432 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1433  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:48:10
1434
                                PAGE  18
1435  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1436
1437                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1438
1439  SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1440   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1441  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1442                                          DAY OF WEEK = WEEKDAY
1443   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1444   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .1000E+01   16  .1000E+01
1445  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1446                                          DAY OF WEEK = SATURDAY
1447   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1448   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1449  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1450                                          DAY OF WEEK = SUNDAY
1451   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1452   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1453  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1454 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1455  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:48:10
1456
                                PAGE  19
1457  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1458
1459                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1460
1461  SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1462   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1463  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:48:10

                            PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:48:10
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL28 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

09:48:10

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL29 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00

```
1540       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1541      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1542   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1543    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:48:10
1544
                                  PAGE  23
1545    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1546
1547                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1548
1549    SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
1550     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1551    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1552                                                DAY OF WEEK = WEEKDAY
1553       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1554       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1555      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1556                                                DAY OF WEEK = SATURDAY
1557       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1558       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1559      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1560                                                DAY OF WEEK = SUNDAY
1561       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1562       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1563      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1564   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1565    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:48:10
1566
                                  PAGE  24
1567    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1568
1569                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1570
1571    SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
1572     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1573    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1574                                                DAY OF WEEK = WEEKDAY
1575       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1576       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1577      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
 09:48:10

                              PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
 09:48:10

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL35 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL36 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

```
1693       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1694       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1695      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1696   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1697    *** AERMET - VERSION  22112 ***
        ***                                                                        ***
        09:48:10
1698
                                    PAGE  30
1699    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1700
1701                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1702
1703    SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
1704     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1705   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1706                                                  DAY OF WEEK = WEEKDAY
1707       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1708       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1709      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1710                                                  DAY OF WEEK = SATURDAY
1711       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1712       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1713      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1714                                                  DAY OF WEEK = SUNDAY
1715       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1716       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1717      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1718   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1719    *** AERMET - VERSION  22112 ***
        ***                                                                        ***
        09:48:10
1720
                                    PAGE  31
1721    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1722
1723                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1724
1725    SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
1726     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1727   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1728                                                  DAY OF WEEK = WEEKDAY
1729       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1730       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
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1731      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1732                                                DAY OF WEEK = SATURDAY
1733       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1734       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1735      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1736                                                DAY OF WEEK = SUNDAY
1737       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1738       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1739      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1740  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1741   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:48:10
1742
                                  PAGE  32
1743   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1744
1745                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1746
1747   SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
1748    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1749  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1750                                                DAY OF WEEK = WEEKDAY
1751       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1752       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
1753      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1754                                                DAY OF WEEK = SATURDAY
1755       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1756       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1757      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1758                                                DAY OF WEEK = SUNDAY
1759       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1760       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1761      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1762  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1763   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:48:10
1764
                                  PAGE  33
1765   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1766
1767                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1768
```

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 SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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                            PAGE  34
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
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1807    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:48:10
1808
                                    PAGE  35
1809    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1810
1811                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1812
1813    SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
1814     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1815    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1816                                                  DAY OF WEEK = WEEKDAY
1817       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1818       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1819      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1820                                                  DAY OF WEEK = SATURDAY
1821       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1822       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1823      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1824                                                  DAY OF WEEK = SUNDAY
1825       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1826       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1827      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1828    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1829     *** AERMET - VERSION  22112 ***
         ***                                                                   ***
         09:48:10
1830
                                    PAGE  36
1831    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1832
1833                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1834
1835    SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
1836     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1837    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1838                                                  DAY OF WEEK = WEEKDAY
1839       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1840       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1841      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1842                                                  DAY OF WEEK = SATURDAY
1843       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1844       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1845      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
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      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:48:10

                              PAGE  37
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:48:10

                              PAGE  38
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
```

```
1884       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1885      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1886                                              DAY OF WEEK = SATURDAY
1887       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1888       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1889      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1890                                              DAY OF WEEK = SUNDAY
1891       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1892       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1893      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1894   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1895    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:48:10
1896
                                  PAGE  39
1897    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1898
1899                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1900
1901    SOURCE ID = VOL46        ; SOURCE TYPE = VOLUME   :
1902     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1903   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1904                                              DAY OF WEEK = WEEKDAY
1905       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1906       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1907      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1908                                              DAY OF WEEK = SATURDAY
1909       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1910       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1911      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1912                                              DAY OF WEEK = SUNDAY
1913       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1914       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1915      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1916   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1917    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:48:10
1918
                                  PAGE  40
1919    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1920
1921                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
```

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                    WEEK (HRDOW) *
1922
1923    SOURCE ID = VOL47        ; SOURCE TYPE = VOLUME   :
1924     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1925    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1926                                                DAY OF WEEK = WEEKDAY
1927       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1928       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1929      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1930                                                DAY OF WEEK = SATURDAY
1931       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1932       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1933      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1934                                                DAY OF WEEK = SUNDAY
1935       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1936       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1937      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1938    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1939     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:48:10
1940
                                  PAGE  41
1941    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1942
1943                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1944
1945    SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
1946     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1947    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1948                                                DAY OF WEEK = WEEKDAY
1949       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1950       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1951      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1952                                                DAY OF WEEK = SATURDAY
1953       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1954       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1955      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1956                                                DAY OF WEEK = SUNDAY
1957       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1958       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1959      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL49 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL50 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14					

```
      .0000E+00   15  .0000E+00   16  .0000E+00
1999    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2000                                            DAY OF WEEK = SUNDAY
2001     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2002     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2003    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2004 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2005  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:48:10
2006
                                PAGE  44
2007  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2008
2009                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2010
2011  SOURCE ID = VOL51        ; SOURCE TYPE = VOLUME   :
2012   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2013  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
2014                                            DAY OF WEEK = WEEKDAY
2015     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2016     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
2017    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2018                                            DAY OF WEEK = SATURDAY
2019     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2020     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2021    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2022                                            DAY OF WEEK = SUNDAY
2023     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2024     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2025    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2026 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2027  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:48:10
2028
                                PAGE  45
2029  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2030
2031                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2032
2033  SOURCE ID = VOL52        ; SOURCE TYPE = VOLUME   :
2034   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
2035  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
2036                                            DAY OF WEEK = WEEKDAY
```

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      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:48:10

                                PAGE  46
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL53        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:48:10

                                PAGE  47
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

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2074
2075                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
2076
2077    SOURCE ID = VOL54        ; SOURCE TYPE = VOLUME   :
2078     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2079    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2080                                                DAY OF WEEK = WEEKDAY
2081       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2082       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2083      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2084                                                DAY OF WEEK = SATURDAY
2085       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2086       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2087      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2088                                                DAY OF WEEK = SUNDAY
2089       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2090       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2091      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2092    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
2093     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:48:10
2094
                                    PAGE  48
2095     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2096
2097                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
2098
2099    SOURCE ID = VOL55        ; SOURCE TYPE = VOLUME   :
2100     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2101    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2102                                                DAY OF WEEK = WEEKDAY
2103       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2104       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2105      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2106                                                DAY OF WEEK = SATURDAY
2107       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2108       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2109      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2110                                                DAY OF WEEK = SUNDAY
2111       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2112       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
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2113      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2114   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
2115    *** AERMET - VERSION  22112 ***
          ***                                                                    ***
          09:48:10
2116
                                    PAGE  49
2117    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2118
2119                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
2120
2121    SOURCE ID = VOL56        ; SOURCE TYPE = VOLUME   :
2122     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
          SCALAR   HOUR   SCALAR   HOUR   SCALAR
2123    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
2124                                                DAY OF WEEK = WEEKDAY
2125      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2126      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
2127      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2128                                                DAY OF WEEK = SATURDAY
2129      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2130      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2131      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2132                                                DAY OF WEEK = SUNDAY
2133      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2134      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2135      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2136   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
2137    *** AERMET - VERSION  22112 ***
          ***                                                                    ***
          09:48:10
2138
                                    PAGE  50
2139    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2140
2141                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
2142
2143    SOURCE ID = VOL57        ; SOURCE TYPE = VOLUME   :
2144     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
          SCALAR   HOUR   SCALAR   HOUR   SCALAR
2145    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
2146                                                DAY OF WEEK = WEEKDAY
2147      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2148      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
2149      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2150                                                DAY OF WEEK = SATURDAY
2151      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
2152   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2153  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2154                                          DAY OF WEEK = SUNDAY
2155   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2156   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2157  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2158 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2159  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:48:10
2160
                                PAGE  51
2161  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2162
2163                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2164
2165  SOURCE ID = VOL58        ; SOURCE TYPE = VOLUME   :
2166   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
2167  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
2168                                          DAY OF WEEK = WEEKDAY
2169   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2170   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .1000E+01   16  .1000E+01
2171  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2172                                          DAY OF WEEK = SATURDAY
2173   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2174   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2175  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2176                                          DAY OF WEEK = SUNDAY
2177   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
2178   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
2179  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2180 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2181  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:48:10
2182
                                PAGE  52
2183  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2184
2185                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2186
2187  SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
2188   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
2189  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
     - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
        9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
        .1000E+01   15  .1000E+01   16  .1000E+01
       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:48:10

                              PAGE  53
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
        9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
        .1000E+01   15  .1000E+01   16  .1000E+01
       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:48:10
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL61 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

09:48:10

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL62 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00

```
2266       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2267      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2268   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
2269    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:48:10
2270
                                    PAGE  56
2271    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2272
2273                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
2274
2275    SOURCE ID = VOL63        ; SOURCE TYPE = VOLUME   :
2276     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2277    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2278                                                DAY OF WEEK = WEEKDAY
2279       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2280       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2281      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2282                                                DAY OF WEEK = SATURDAY
2283       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2284       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2285      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2286                                                DAY OF WEEK = SUNDAY
2287       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2288       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2289      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2290   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
2291    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:48:10
2292
                                    PAGE  57
2293    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2294
2295                                          *** DISCRETE CARTESIAN RECEPTORS ***
2296                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
2297                                                  (METERS)
2298
2299          ( 413648.5, 3771123.9,     121.2,     121.2,       2.0);         ( 413644.0,
              3771078.2,     120.7,     120.7,       2.0);
2300          ( 413676.4, 3771027.7,     120.7,     120.7,       2.0);         ( 413613.2,
              3771030.3,     120.2,     120.2,       2.0);
2301          ( 413569.0, 3771032.9,     120.2,     120.2,       2.0);         ( 413537.2,
              3771033.5,     120.1,     120.1,       2.0);
2302          ( 413484.4, 3771036.4,     120.1,     120.1,       2.0);         ( 413456.6,
              3771037.7,     120.0,     120.0,       2.0);
2303          ( 413405.8, 3771040.0,     119.8,     119.8,       2.0);         ( 413376.0,
              3771043.2,     119.6,     119.6,       2.0);
2304          ( 413333.4, 3771017.2,     119.6,     119.6,       2.0);         ( 413333.4,
```

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        3771037.3,     119.6,     119.6,       2.0);
2305    ( 413337.5, 3771067.4,     119.9,    1634.0,       2.0);         ( 413343.4,
        3771088.0,     119.9,    1635.7,       2.0);
2306    ( 413343.5, 3771105.3,     120.0,    1635.7,       2.0);         ( 413345.8,
        3771118.8,     120.0,    1635.7,       2.0);
2307    ( 413348.0, 3771143.1,     120.1,    1635.7,       2.0);         ( 413348.7,
        3771160.3,     120.2,    1635.7,       2.0);
2308    ( 413352.6, 3771184.7,     120.3,    1648.2,       2.0);         ( 413353.5,
        3771198.5,     120.3,    1648.2,       2.0);
2309    ( 413353.8, 3771225.5,     120.5,    1648.2,       2.0);         ( 413358.9,
        3771259.0,     120.5,    1648.2,       2.0);
2310    ( 413361.6, 3771282.1,     120.6,    1648.2,       2.0);         ( 413362.1,
        3771296.6,     120.7,    1648.2,       2.0);
2311    ( 413366.2, 3771341.2,     120.8,    1648.2,       2.0);         ( 413416.9,
        3771250.2,     120.8,    1648.2,       2.0);
2312    ( 413567.7, 3771246.1,     121.3,    1648.2,       2.0);         ( 413480.0,
        3771281.7,     121.2,    1648.2,       2.0);
2313    ( 413452.6, 3771272.9,     121.1,    1648.2,       2.0);         ( 413513.6,
        3771244.7,     121.1,    1648.2,       2.0);
2314    ( 413388.2, 3771251.0,     120.3,    1648.2,       2.0);         ( 413682.5,
        3771320.7,     122.2,    1648.2,       2.0);
2315    ( 413651.8, 3771342.1,     121.9,    1648.2,       2.0);         ( 413368.2,
        3771352.5,     120.8,    1648.2,       2.0);
2316    ( 413368.7, 3771372.0,     120.8,    1648.2,       2.0);         ( 413421.4,
        3771372.2,     121.2,    1648.2,       2.0);
2317    ( 413450.7, 3771369.6,     121.3,    1648.2,       2.0);         ( 413502.7,
        3771368.8,     121.5,    1648.2,       2.0);
2318    ( 413531.6, 3771367.5,     121.7,    1648.2,       2.0);         ( 413588.4,
        3771364.6,     121.8,    1648.2,       2.0);
2319    ( 413617.0, 3771362.6,     122.0,    1648.2,       2.0);         ( 413654.2,
        3771385.2,     122.1,    1648.2,       2.0);
2320    ( 413641.6, 3771240.5,     121.7,    1635.7,       2.0);         ( 413598.3,
        3771241.6,     121.5,    1648.2,       2.0);
2321    ( 413658.1, 3771227.2,     121.7,    1635.7,       2.0);         ( 413652.5,
        3771171.9,     121.6,    1635.7,       2.0);
2322    ( 413762.5, 3771326.4,     122.8,    1648.2,       2.0);         ( 413755.3,
        3771297.7,     122.6,    1648.2,       2.0);
2323    ( 413752.2, 3771264.9,     122.4,    1635.7,       2.0);         ( 413751.5,
        3771243.9,     122.3,    1635.7,       2.0);
2324    ( 413749.2, 3771225.7,     122.3,    1635.7,       2.0);         ( 413747.4,
        3771206.7,     122.2,    1635.7,       2.0);
2325    ( 413745.0, 3771187.2,     122.1,    1635.7,       2.0);         ( 413743.4,
        3771169.2,     122.0,    1634.0,       2.0);
2326    ( 413742.3, 3771152.5,     122.0,     122.0,       2.0);         ( 413740.0,
        3771133.6,     121.8,     121.8,       2.0);
2327    ( 413738.3, 3771115.5,     121.7,     121.7,       2.0);         ( 413734.9,
        3771095.5,     121.6,     121.6,       2.0);
2328    ( 413735.1, 3771077.4,     121.5,     121.5,       2.0);         ( 413733.3,
        3771064.3,     121.4,     121.4,       2.0);
2329    ( 413731.5, 3771046.4,     121.3,     121.3,       2.0);         ( 413729.5,
        3771027.6,     121.2,     121.2,       2.0);
2330    ( 413728.1, 3771009.5,     121.0,     121.0,       2.0);         ( 413725.5,
        3770991.7,     120.9,     120.9,       2.0);
2331    ( 413724.5, 3770973.6,     120.8,     120.8,       2.0);         ( 413721.8,
        3770948.1,     120.7,     120.7,       2.0);
2332    ( 413355.1, 3771622.7,     121.1,    1648.2,       2.0);         ( 413235.9,
        3771619.0,     120.6,    1648.2,       2.0);
2333    ( 412848.4, 3771774.9,     118.8,    1648.2,       2.0);         ( 415201.7,
        3771330.5,     133.8,     133.8,       2.0);
2334    ( 413782.5, 3771959.5,     125.9,    1648.2,       2.0);         ( 413664.8,
        3771641.1,     123.2,    1648.2,       2.0);
2335    ( 413674.0, 3770851.1,     119.9,     119.9,       2.0);         ( 413714.1,
        3770847.5,     120.0,     120.0,       2.0);
2336    ( 413663.5, 3770808.8,     119.6,     119.6,       2.0);         ( 413698.8,
        3770760.1,     119.4,     119.4,       2.0);
2337    ( 413617.2, 3770676.6,     118.4,     118.4,       2.0);         ( 413664.1,
```

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      3770663.2,     117.7,     117.7,       2.0);
2338  ( 413613.3, 3770517.0,     116.0,     118.7,       2.0);         ( 413346.0,
      3770490.8,     115.1,     115.1,       2.0);
2339  ( 413415.9, 3770471.5,     114.6,     114.6,       2.0);         ( 413221.9,
      3770467.4,     116.1,     121.5,       2.0);
2340  ( 413666.0, 3771067.1,     121.0,     121.0,
      2.0);
2341  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2342   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:48:10
2343
                                  PAGE  58
2344   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2345
2346                                          *** METEOROLOGICAL DAYS SELECTED FOR
                                               PROCESSING ***
2347                                                          (1=YES; 0=NO)
2348
2349             1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2350             1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2351             1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2352             1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2353             1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2354             1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2355             1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2356             1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
2357
2358                 NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                     IS INCLUDED IN THE DATA FILE.
2359
2360
2361
2362                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                        CATEGORIES ***
2363                                                    (METERS/SEC)
2364
2365                                                 1.54,   3.09,   5.14,   8.23,  10.80,
2366  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2367   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:48:10
2368
                                  PAGE  59
2369   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2370
2371                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
                                        ***
2372
2373     Surface file:
         AZUS_V11_trimmed.sfc
         Met Version:  22112
2374     Profile file:
         AZUS_V11_trimmed.PFL
2375     Surface format:
         FREE
```

```
  Profile format:
  FREE

  Surface station no.:     3179                  Upper air station no.:     3190
                Name: UNKNOWN                                    Name:
                UNKNOWN
                Year:   2017                                     Year:   2017

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
 REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
 17 01 01   1 01  -11.3  0.154 -9.000 -9.000 -999.  145.     28.6  0.34   0.75   1.00
 1.36   97.   10.0  281.4    9.5
 17 01 01   1 02   -5.9  0.110 -9.000 -9.000 -999.   88.     20.0  0.29   0.75   1.00
 1.05   88.   10.0  281.0    9.5
 17 01 01   1 03   -6.6  0.117 -9.000 -9.000 -999.   95.     21.1  0.29   0.75   1.00
 1.11   69.   10.0  280.5    9.5
 17 01 01   1 04   -6.9  0.119 -9.000 -9.000 -999.   99.     21.7  0.33   0.75   1.00
 1.08  132.   10.0  279.8    9.5
 17 01 01   1 05   -4.1  0.091 -9.000 -9.000 -999.   66.     16.1  0.17   0.75   1.00
 1.00  314.   10.0  279.5    9.5
 17 01 01   1 06  -18.0  0.193 -9.000 -9.000 -999.  204.     41.0  0.21   0.75   1.00
 1.96   35.   10.0  279.8    9.5
 17 01 01   1 07  -10.5  0.147 -9.000 -9.000 -999.  136.     27.0  0.29   0.75   1.00
 1.38   80.   10.0  279.6    9.5
 17 01 01   1 08   -6.3  0.118 -9.000 -9.000 -999.   97.     22.9  0.29   0.75   0.55
 1.12   74.   10.0  279.4    9.5
 17 01 01   1 09   25.4  0.209  0.420  0.005  103.  230.    -31.8  0.29   0.75   0.32
 1.55   70.   10.0  282.2    9.5
 17 01 01   1 10   64.6  0.296  1.020  0.005  581.  386.    -35.4  0.33   0.75   0.25
 2.13  126.   10.0  283.6    9.5
 17 01 01   1 11   91.0  0.325  1.350  0.005  956.  444.    -33.2  0.33   0.75   0.22
 2.32  130.   10.0  284.1    9.5
 17 01 01   1 12   87.8  0.248  1.393  0.005 1087.  299.    -15.3  0.32   0.75   0.21
 1.62  152.   10.0  285.1    9.5
 17 01 01   1 13  103.2  0.182  1.514  0.005 1188.  187.     -5.1  0.33   0.75   0.21
 0.97  144.   10.0  286.1    9.5
 17 01 01   1 14   74.8  0.225  1.385  0.005 1256.  255.    -13.4  0.23   0.75   0.22
 1.61  214.   10.0  286.9    9.5
 17 01 01   1 15   50.9  0.150  1.233  0.005 1300.  142.     -5.9  0.07   0.75   0.26
 1.37  273.   10.0  286.7    9.5
 17 01 01   1 16    1.2  0.122  0.356  0.005 1300.  102.   -130.2  0.23   0.75   0.35
 1.08  210.   10.0  286.6    9.5
 17 01 01   1 17  -13.1  0.175 -9.000 -9.000 -999.  176.     36.0  0.32   0.75   0.62
 1.55  172.   10.0  286.3    9.5
 17 01 01   1 18  -13.7  0.171 -9.000 -9.000 -999.  169.     32.2  0.32   0.75   1.00
 1.53  179.   10.0  285.8    9.5
 17 01 01   1 19   -9.0  0.136 -9.000 -9.000 -999.  121.     24.7  0.23   0.75   1.00
 1.38  215.   10.0  285.4    9.5
 17 01 01   1 20   -3.7  0.086 -9.000 -9.000 -999.   61.     14.9  0.12   0.75   1.00
 1.03  259.   10.0  285.0    9.5
 17 01 01   1 21   -1.8  0.070 -9.000 -9.000 -999.   44.     16.4  0.16   0.75   1.00
 0.58  349.   10.0  284.9    9.5
 17 01 01   1 22   -3.4  0.086 -9.000 -9.000 -999.   61.     16.6  0.29   0.75   1.00
 0.78   61.   10.0  284.8    9.5
 17 01 01   1 23  -14.0  0.170 -9.000 -9.000 -999.  168.     31.8  0.21   0.75   1.00
 1.74   43.   10.0  284.2    9.5
 17 01 01   1 24  -21.5  0.220 -9.000 -9.000 -999.  248.     53.3  0.21   0.75   1.00
 2.22   43.   10.0  283.9    9.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01    9.5 0 -999.  -99.00   281.4   99.0  -99.00  -99.00
```

```
 17 01 01 01   10.0 1   97.    1.36  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 09:48:10

                              PAGE  60
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                              FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL13       , VOL14       ,
                                  VOL15       , VOL16       , VOL17       ,
                 VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
                 VOL23       , VOL24       , VOL25       ,
                 VOL26       , VOL27       , VOL28       , VOL29       , VOL30       ,
                 VOL31       , VOL32       , VOL33       ,
                 VOL34       , VOL35       , VOL36       , VOL37       , VOL38       ,
                 VOL39       , VOL40       ,  . . .      ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                     ** CONC OF NOX      IN
                                     MICROGRAMS/M**3                          **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)             X-COORD (M)
      Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
        413648.47   3771123.91       42.24194  (21110116)               413644.02
        3771078.17       41.05092  (21122715)
        413676.40   3771027.68       28.61567  (17103016)               413613.17
        3771030.29       31.82267  (20102209)
        413568.97   3771032.90       30.15338  (17120416)               413537.20
        3771033.51       31.98981  (17120416)
        413484.41   3771036.43       32.41560  (17120416)               413456.63
        3771037.66       32.04795  (17120416)
        413405.83   3771039.96       33.10920  (17120416)               413376.05
        3771043.18       33.09747  (21121315)
        413333.39   3771017.24       17.10672  (21122915)               413333.39
        3771037.35       19.23900  (21122915)
        413337.53   3771067.43       26.03906  (18010916)               413343.36
        3771087.99       33.53830  (18010916)
        413343.52   3771105.34       31.58635  (18010916)               413345.82
        3771118.84       31.45492  (18010916)
        413347.97   3771143.09       34.01548  (18010916)               413348.74
        3771160.28       37.25310  (19120616)
        413352.57   3771184.68       36.30340  (19120616)               413353.49
        3771198.50       33.73464  (19120616)
        413353.80   3771225.51       30.04465  (19120616)               413358.87
        3771258.96       18.10891  (19020510)
        413361.63   3771282.14       15.47724  (18121316)               413362.09
        3771296.56       13.73207  (18121316)
        413366.23   3771341.23        9.60723  (18121316)               413416.88
        3771250.22       30.82250  (21122816)
        413567.74   3771246.07       38.73705  (20012116)               413479.96
        3771281.68       24.45228  (21122816)
        413452.64   3771272.93       26.65684  (21122816)               413513.57
        3771244.69       38.78030  (20012116)
        413388.18   3771250.98       25.68782  (19020510)               413682.54
        3771320.66       14.54919  (20012116)
        413651.85   3771342.15       11.55401  (20120316)               413368.16
        3771352.50        8.79813  (18121316)
```

```
2450          413368.70   3771372.00        7.58291  (18121316)                413421.43
              3771372.18        11.04067  (21122816)
2451          413450.68   3771369.65       12.91635  (21122816)                413502.68
              3771368.75        13.56825  (21122816)
2452          413531.57   3771367.49       13.51117  (21122816)                413588.44
              3771364.60        12.63350  (21122816)
2453          413616.97   3771362.61       11.19869  (21122816)                413654.17
              3771385.18         8.54956  (20120316)
2454          413641.58   3771240.54       41.12700  (20012116)                413598.27
              3771241.58        39.78563  (20012116)
2455          413658.14   3771227.23       38.31121  (18111916)                413652.53
              3771171.92        38.78696  (17010315)
2456          413762.55   3771326.43       11.12874  (20012116)                413755.32
              3771297.72        12.54391  (20012116)
2457          413752.25   3771264.86       14.24252  (18111916)                413751.53
              3771243.92        16.57887  (18111916)
2458          413749.19   3771225.68       17.97636  (18111916)                413747.38
              3771206.72        18.55783  (18111916)
2459          413745.03   3771187.22       18.58249  (18111916)                413743.41
              3771169.17        18.08584  (18111916)
2460          413742.32   3771152.55       17.72369  (21110116)                413739.98
              3771133.59        17.45603  (21110116)
2461          413738.35   3771115.54       16.84328  (21110116)                413734.92
              3771095.50        17.28289  (17103016)
2462          413735.10   3771077.44       17.87756  (17103016)                413733.30
              3771064.26        19.07380  (17103016)
2463          413731.49   3771046.38       22.37903  (17103016)                413729.50
              3771027.61        23.35660  (17103016)
2464          413728.06   3771009.55       18.95114  (17103016)                413725.53
              3770991.67        13.74479  (17103016)
2465          413724.45   3770973.62       10.61880  (18122716)                413721.78
              3770948.07         8.97903  (17112116)
2466          413355.15   3771622.70        2.76846  (20121416)                413235.89
              3771619.04         2.18289  (18121316)
2467          412848.39   3771774.93        0.87743  (18120416)                415201.66
              3771330.49         0.97944  (21120916)
2468          413782.51   3771959.51        0.98216  (21122815)                413664.85
              3771641.09         3.28877  (21122816)
2469          413674.05   3770851.12        5.74893  (20102209)                413714.09
              3770847.47         4.85325  (17112116)
2470          413663.50   3770808.78        5.00849  (20102209)                413698.79
              3770760.11         3.66748  (20102209)
2471          413617.17   3770676.59        3.12138  (20102209)                413664.14
              3770663.20         2.93792  (20102209)
2472          413613.35   3770516.97        1.74610  (20102209)                413345.98
              3770490.83         2.06311  (20122815)
2473  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2474   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:48:10
2475
                                  PAGE  61
2476   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2477
2478                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES
                                  FOR SOURCE GROUP:  ALL      ***
2479                                  INCLUDING SOURCE(S):     VOL13       , VOL14       ,
                                      VOL15       , VOL16       , VOL17       ,
2480                  VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
                      VOL23       , VOL24       , VOL25       ,
2481                  VOL26       , VOL27       , VOL28       , VOL29       , VOL30       ,
                      VOL31       , VOL32       , VOL33       ,
2482                  VOL34       , VOL35       , VOL36       , VOL37       , VOL38       ,
                      VOL39       , VOL40       ,  . . .      ,
2483
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2484 *** DISCRETE CARTESIAN RECEPTOR POINTS ***
2485
2486 ** CONC OF NOX IN
MICROGRAMS/M**3 **
2487
2488 X-COORD (M) Y-COORD (M) CONC (YYMMDDHH) X-COORD (M)
Y-COORD (M) CONC (YYMMDDHH)
2489 - - -

```
A Total of           41 Calm Hours Identified

A Total of          433 Missing Hours Identified (  0.99 Percent)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186     933       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
used           0.50
ME W187     933       MEOPEN: ADJ_U* Option for Stable Low Winds used in
AERMET

   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 5/15/2025
** File: C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons PM10\16435 Cons PM10.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 9663345 Los_Angeles_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16435 Cons PM10.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL13        VOLUME     413678.759  3771046.996      120.760
   LOCATION VOL14        VOLUME     413644.379  3771048.419      120.440
   LOCATION VOL15        VOLUME     413609.792  3771050.453      120.340
   LOCATION VOL16        VOLUME     413630.138  3771220.132      121.570
   LOCATION VOL17        VOLUME     413630.260  3771186.129      121.320
   LOCATION VOL18        VOLUME     413632.986  3771151.772      121.170
   LOCATION VOL19        VOLUME     413629.104  3771118.263      120.940
   LOCATION VOL20        VOLUME     413625.918  3771084.065      120.660
   LOCATION VOL21        VOLUME     413596.212  3771220.733      121.340
   LOCATION VOL22        VOLUME     413596.335  3771186.730      121.160
   LOCATION VOL23        VOLUME     413599.061  3771152.374      121.000
   LOCATION VOL24        VOLUME     413595.179  3771118.864      120.760
   LOCATION VOL25        VOLUME     413591.993  3771084.666      120.730
   LOCATION VOL26        VOLUME     413562.226  3771224.344      121.200
   LOCATION VOL27        VOLUME     413562.349  3771190.341      120.990
   LOCATION VOL28        VOLUME     413565.075  3771155.985      120.810
   LOCATION VOL29        VOLUME     413561.193  3771122.475      120.730
   LOCATION VOL30        VOLUME     413558.007  3771088.277      120.770
   LOCATION VOL31        VOLUME     413528.453  3771224.132      121.010
   LOCATION VOL32        VOLUME     413528.576  3771190.129      120.780
   LOCATION VOL33        VOLUME     413531.301  3771155.772      120.650
   LOCATION VOL34        VOLUME     413527.420  3771122.263      120.560
   LOCATION VOL35        VOLUME     413524.234  3771088.065      120.770
   LOCATION VOL36        VOLUME     413494.892  3771226.893      120.870
   LOCATION VOL37        VOLUME     413495.015  3771192.890      120.630
   LOCATION VOL38        VOLUME     413497.741  3771158.533      120.460
   LOCATION VOL39        VOLUME     413493.859  3771125.024      120.410
   LOCATION VOL40        VOLUME     413490.673  3771090.826      120.550
   LOCATION VOL41        VOLUME     413461.331  3771229.230      120.830
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     LOCATION VOL42        VOLUME     413461.454  3771195.226      120.620
     LOCATION VOL43        VOLUME     413464.180  3771160.870      120.410
     LOCATION VOL44        VOLUME     413460.298  3771127.361      120.290
     LOCATION VOL45        VOLUME     413457.112  3771093.162      120.290
     LOCATION VOL46        VOLUME     413427.770  3771229.442      120.700
     LOCATION VOL47        VOLUME     413427.893  3771195.439      120.500
     LOCATION VOL48        VOLUME     413430.619  3771161.082      120.340
     LOCATION VOL49        VOLUME     413426.737  3771127.573      120.190
     LOCATION VOL50        VOLUME     413423.551  3771093.375      120.040
     LOCATION VOL51        VOLUME     413397.396  3771227.531      120.420
     LOCATION VOL52        VOLUME     413394.545  3771194.164      120.300
     LOCATION VOL53        VOLUME     413397.058  3771160.445      120.180
     LOCATION VOL54        VOLUME     413392.327  3771126.086      120.090
     LOCATION VOL55        VOLUME     413390.415  3771093.800      119.780
     LOCATION VOL56        VOLUME     413576.851  3771062.824      120.680
     LOCATION VOL57        VOLUME     413543.290  3771064.735      120.680
     LOCATION VOL58        VOLUME     413510.154  3771066.222      120.700
     LOCATION VOL59        VOLUME     413389.080  3771161.170      120.140
     LOCATION VOL60        VOLUME     413476.594  3771068.771      120.480
     LOCATION VOL61        VOLUME     413443.033  3771068.984      120.130
     LOCATION VOL62        VOLUME     413409.684  3771070.258      119.840
     LOCATION VOL63        VOLUME     413380.371  3771072.807      119.720
     LOCATION PAREA1       AREAPOLY   413382.882  3771246.953      120.300
** Source Parameters **
     SRCPARAM VOL13        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL14        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL15        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL16        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL17        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL18        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL19        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL20        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL21        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL22        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL23        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL24        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL25        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL26        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL27        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL28        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL29        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL30        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL31        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL32        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL33        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL34        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL35        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL36        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL37        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL38        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL39        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL40        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL41        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL42        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL43        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL44        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL45        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL46        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL47        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL48        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL49        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL50        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL51        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL52        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL53        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL54        0.00003397     5.000     7.760     1.400
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   SRCPARAM VOL55        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL56        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL57        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL58        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL59        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL60        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL61        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL62        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL63        0.00003397     5.000     7.760     1.400
   SRCPARAM PAREA1       7.3158E-07     0.000        11     1.000
   AREAVERT PAREA1       413382.882 3771246.953 413657.114 3771232.739
   AREAVERT PAREA1       413641.786 3771065.525 413676.901 3771063.016
   AREAVERT PAREA1       413693.622 3771063.016 413690.557 3771027.344
   AREAVERT PAREA1       413595.802 3771033.754 413595.802 3771046.295
   AREAVERT PAREA1       413363.373 3771058.279 413363.094 3771071.377
   AREAVERT PAREA1       413366.996 3771078.066
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
```

```
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
```

```
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16435 Cons PM10.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE AZUS_V11_trimmed.sfc
   PROFFILE AZUS_V11_trimmed.PFL
   SURFDATA 3179 2017
   UAIRDATA 3190 2017
   SITEDATA 60370002 2017
   PROFBASE 187.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16435 CONS PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "16435 Cons PM10.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**

```

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** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 5/15/2025
** File: C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons PM10\16435 Cons PM10.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 9663345 Los_Angeles_County
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16435 Cons PM10.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL13        VOLUME     413678.759  3771046.996      120.760
   LOCATION VOL14        VOLUME     413644.379  3771048.419      120.440
   LOCATION VOL15        VOLUME     413609.792  3771050.453      120.340
   LOCATION VOL16        VOLUME     413630.138  3771220.132      121.570
   LOCATION VOL17        VOLUME     413630.260  3771186.129      121.320
   LOCATION VOL18        VOLUME     413632.986  3771151.772      121.170
   LOCATION VOL19        VOLUME     413629.104  3771118.263      120.940
   LOCATION VOL20        VOLUME     413625.918  3771084.065      120.660
   LOCATION VOL21        VOLUME     413596.212  3771220.733      121.340
   LOCATION VOL22        VOLUME     413596.335  3771186.730      121.160
   LOCATION VOL23        VOLUME     413599.061  3771152.374      121.000
   LOCATION VOL24        VOLUME     413595.179  3771118.864      120.760
   LOCATION VOL25        VOLUME     413591.993  3771084.666      120.730
   LOCATION VOL26        VOLUME     413562.226  3771224.344      121.200
   LOCATION VOL27        VOLUME     413562.349  3771190.341      120.990
   LOCATION VOL28        VOLUME     413565.075  3771155.985      120.810
   LOCATION VOL29        VOLUME     413561.193  3771122.475      120.730
   LOCATION VOL30        VOLUME     413558.007  3771088.277      120.770
   LOCATION VOL31        VOLUME     413528.453  3771224.132      121.010
   LOCATION VOL32        VOLUME     413528.576  3771190.129      120.780
   LOCATION VOL33        VOLUME     413531.301  3771155.772      120.650
   LOCATION VOL34        VOLUME     413527.420  3771122.263      120.560
   LOCATION VOL35        VOLUME     413524.234  3771088.065      120.770
   LOCATION VOL36        VOLUME     413494.892  3771226.893      120.870
   LOCATION VOL37        VOLUME     413495.015  3771192.890      120.630
   LOCATION VOL38        VOLUME     413497.741  3771158.533      120.460
   LOCATION VOL39        VOLUME     413493.859  3771125.024      120.410
   LOCATION VOL40        VOLUME     413490.673  3771090.826      120.550
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     LOCATION VOL41        VOLUME     413461.331  3771229.230      120.830
     LOCATION VOL42        VOLUME     413461.454  3771195.226      120.620
     LOCATION VOL43        VOLUME     413464.180  3771160.870      120.410
     LOCATION VOL44        VOLUME     413460.298  3771127.361      120.290
     LOCATION VOL45        VOLUME     413457.112  3771093.162      120.290
     LOCATION VOL46        VOLUME     413427.770  3771229.442      120.700
     LOCATION VOL47        VOLUME     413427.893  3771195.439      120.500
     LOCATION VOL48        VOLUME     413430.619  3771161.082      120.340
     LOCATION VOL49        VOLUME     413426.737  3771127.573      120.190
     LOCATION VOL50        VOLUME     413423.551  3771093.375      120.040
     LOCATION VOL51        VOLUME     413397.396  3771227.531      120.420
     LOCATION VOL52        VOLUME     413394.545  3771194.164      120.300
     LOCATION VOL53        VOLUME     413397.058  3771160.445      120.180
     LOCATION VOL54        VOLUME     413392.327  3771126.086      120.090
     LOCATION VOL55        VOLUME     413390.415  3771093.800      119.780
     LOCATION VOL56        VOLUME     413576.851  3771062.824      120.680
     LOCATION VOL57        VOLUME     413543.290  3771064.735      120.680
     LOCATION VOL58        VOLUME     413510.154  3771066.222      120.700
     LOCATION VOL59        VOLUME     413389.080  3771161.170      120.140
     LOCATION VOL60        VOLUME     413476.594  3771068.771      120.480
     LOCATION VOL61        VOLUME     413443.033  3771068.984      120.130
     LOCATION VOL62        VOLUME     413409.684  3771070.258      119.840
     LOCATION VOL63        VOLUME     413380.371  3771072.807      119.720
     LOCATION PAREA1       AREAPOLY   413382.882  3771246.953      120.300
** Source Parameters **
     SRCPARAM VOL13        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL14        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL15        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL16        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL17        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL18        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL19        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL20        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL21        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL22        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL23        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL24        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL25        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL26        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL27        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL28        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL29        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL30        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL31        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL32        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL33        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL34        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL35        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL36        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL37        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL38        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL39        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL40        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL41        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL42        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL43        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL44        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL45        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL46        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL47        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL48        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL49        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL50        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL51        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL52        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL53        0.00003397     5.000     7.760     1.400
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   SRCPARAM VOL54        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL55        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL56        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL57        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL58        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL59        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL60        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL61        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL62        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL63        0.00003397     5.000     7.760     1.400
   SRCPARAM PAREA1       7.3158E-07     0.000        11     1.000
   AREAVERT PAREA1       413382.882 3771246.953 413657.114 3771232.739
   AREAVERT PAREA1       413641.786 3771065.525 413676.901 3771063.016
   AREAVERT PAREA1       413693.622 3771063.016 413690.557 3771027.344
   AREAVERT PAREA1       413595.802 3771033.754 413595.802 3771046.295
   AREAVERT PAREA1       413363.373 3771058.279 413363.094 3771071.377
   AREAVERT PAREA1       413366.996 3771078.066
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
```

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   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16435 Cons PM10.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE AZUS_V11_trimmed.sfc
   PROFFILE AZUS_V11_trimmed.PFL
   SURFDATA 3179 2017
   UAIRDATA 3190 2017
   SITEDATA 60370002 2017
   PROFBASE 187.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16435 CONS PM10.AD\24H1GALL.PLT" 31
   SUMMFILE "16435 Cons PM10.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     956       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     956       MEOPEN: ADJ_U* Option for Stable Low Winds used in
```

```
      AERMET
 989
 990  **********************************
 991  *** SETUP Finishes Successfully ***
 992  **********************************
 993
 994  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
 995   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:58:05
 996
                                PAGE   1
 997  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
 998
 999                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
1000  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - -
1001
1002  ** Model Options Selected:
1003       * Model Uses Regulatory DEFAULT Options
1004       * Model Is Setup For Calculation of Average CONCentration Values.
1005       * NO GAS DEPOSITION Data Provided.
1006       * NO PARTICLE DEPOSITION Data Provided.
1007       * Model Uses NO DRY DEPLETION. DDPLETE  =  F
1008       * Model Uses NO WET DEPLETION. WETDPLT  =  F
1009       * Stack-tip Downwash.
1010       * Model Accounts for ELEVated Terrain Effects.
1011       * Use Calms Processing Routine.
1012       * Use Missing Data Processing Routine.
1013       * No Exponential Decay.
1014       * Model Uses URBAN Dispersion Algorithm for the SBL for    52 Source(s),
1015         for Total of    1 Urban Area(s):
1016     Urban Population =   9663345.0 ;  Urban Roughness Length =  1.000 m
1017       * Urban Roughness Length of 1.0 Meter Used.
1018       * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
1019       * CCVR_Sub - Meteorological data includes CCVR substitutions
1020       * TEMP_Sub - Meteorological data includes TEMP substitutions
1021       * Model Accepts FLAGPOLE Receptor . Heights.
1022       * The User Specified a Pollutant Type of: PM_10
1023
1024  **Model Calculates  1 Short Term Average(s) of:  24-HR
1025
1026  **This Run Includes:     52 Source(s);       1 Source Group(s); and      83 Receptor(s)
1027
1028                  with:      0 POINT(s), including
1029                             0 POINTCAP(s) and      0 POINTHOR(s)
1030                   and:     51 VOLUME source(s)
1031                   and:      1 AREA type source(s)
1032                   and:      0 LINE source(s)
1033                   and:      0 RLINE/RLINEXT source(s)
1034                   and:      0 OPENPIT source(s)
1035                   and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
1036                   and:      0 SWPOINT source(s)
1037
1038
1039  **Model Set To Continue RUNning After the Setup Testing.
1040
1041  **The AERMET Input Meteorological Data Version Date:  22112
1042
1043  **Output Options Selected:
1044           Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
              Keyword)
1045           Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
1046           Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)
1047
```

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =   187.00 ; Decay Coef. =   0.000   ; Rot. Angle =   0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor =   0.10000E+07
Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =   3.6 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16435 Cons PM10.err
**File for Summary of Results: 16435 Cons PM10.sum

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	URBAN SOURCE	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ (METERS)	AIRCRAFT VARY BY
		X	Y					
VOL13	0	0.33970E-04	413678.8 3771047.0	120.8	5.00	7.76	1.40	YES HRDOW NO
VOL14	0	0.33970E-04	413644.4 3771048.4	120.4	5.00	7.76	1.40	YES HRDOW NO
VOL15	0	0.33970E-04	413609.8 3771050.5	120.3	5.00	7.76	1.40	YES HRDOW NO
VOL16	0	0.33970E-04	413630.1 3771220.1	121.6	5.00	7.76	1.40	YES HRDOW NO
VOL17	0	0.33970E-04	413630.3 3771186.1	121.3	5.00	7.76	1.40	YES HRDOW NO
VOL18	0	0.33970E-04	413633.0 3771151.8	121.2	5.00	7.76	1.40	YES HRDOW NO
VOL19	0	0.33970E-04	413629.1 3771118.3	120.9	5.00	7.76	1.40	YES HRDOW NO
VOL20	0	0.33970E-04	413625.9 3771084.1	120.7	5.00	7.76	1.40	YES HRDOW NO
VOL21	0	0.33970E-04	413596.2 3771220.7	121.3	5.00	7.76	1.40	YES HRDOW NO
VOL22	0	0.33970E-04	413596.3 3771186.7	121.2	5.00	7.76	1.40	YES HRDOW NO
VOL23	0	0.33970E-04	413599.1 3771152.4	121.0	5.00	7.76		

```
      1.40     YES   HRDOW            NO
1087  VOL24          0   0.33970E-04  413595.2 3771118.9   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1088  VOL25          0   0.33970E-04  413592.0 3771084.7   120.7     5.00     7.76
      1.40     YES   HRDOW            NO
1089  VOL26          0   0.33970E-04  413562.2 3771224.3   121.2     5.00     7.76
      1.40     YES   HRDOW            NO
1090  VOL27          0   0.33970E-04  413562.3 3771190.3   121.0     5.00     7.76
      1.40     YES   HRDOW            NO
1091  VOL28          0   0.33970E-04  413565.1 3771156.0   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1092  VOL29          0   0.33970E-04  413561.2 3771122.5   120.7     5.00     7.76
      1.40     YES   HRDOW            NO
1093  VOL30          0   0.33970E-04  413558.0 3771088.3   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1094  VOL31          0   0.33970E-04  413528.5 3771224.1   121.0     5.00     7.76
      1.40     YES   HRDOW            NO
1095  VOL32          0   0.33970E-04  413528.6 3771190.1   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1096  VOL33          0   0.33970E-04  413531.3 3771155.8   120.6     5.00     7.76
      1.40     YES   HRDOW            NO
1097  VOL34          0   0.33970E-04  413527.4 3771122.3   120.6     5.00     7.76
      1.40     YES   HRDOW            NO
1098  VOL35          0   0.33970E-04  413524.2 3771088.1   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1099  VOL36          0   0.33970E-04  413494.9 3771226.9   120.9     5.00     7.76
      1.40     YES   HRDOW            NO
1100  VOL37          0   0.33970E-04  413495.0 3771192.9   120.6     5.00     7.76
      1.40     YES   HRDOW            NO
1101  VOL38          0   0.33970E-04  413497.7 3771158.5   120.5     5.00     7.76
      1.40     YES   HRDOW            NO
1102  VOL39          0   0.33970E-04  413493.9 3771125.0   120.4     5.00     7.76
      1.40     YES   HRDOW            NO
1103  VOL40          0   0.33970E-04  413490.7 3771090.8   120.5     5.00     7.76
      1.40     YES   HRDOW            NO
1104  VOL41          0   0.33970E-04  413461.3 3771229.2   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1105  VOL42          0   0.33970E-04  413461.5 3771195.2   120.6     5.00     7.76
      1.40     YES   HRDOW            NO
1106  VOL43          0   0.33970E-04  413464.2 3771160.9   120.4     5.00     7.76
      1.40     YES   HRDOW            NO
1107  VOL44          0   0.33970E-04  413460.3 3771127.4   120.3     5.00     7.76
      1.40     YES   HRDOW            NO
1108  VOL45          0   0.33970E-04  413457.1 3771093.2   120.3     5.00     7.76
      1.40     YES   HRDOW            NO
1109  VOL46          0   0.33970E-04  413427.8 3771229.4   120.7     5.00     7.76
      1.40     YES   HRDOW            NO
1110  VOL47          0   0.33970E-04  413427.9 3771195.4   120.5     5.00     7.76
      1.40     YES   HRDOW            NO
1111  VOL48          0   0.33970E-04  413430.6 3771161.1   120.3     5.00     7.76
      1.40     YES   HRDOW            NO
1112  VOL49          0   0.33970E-04  413426.7 3771127.6   120.2     5.00     7.76
      1.40     YES   HRDOW            NO
1113  VOL50          0   0.33970E-04  413423.6 3771093.4   120.0     5.00     7.76
      1.40     YES   HRDOW            NO
1114  VOL51          0   0.33970E-04  413397.4 3771227.5   120.4     5.00     7.76
      1.40     YES   HRDOW            NO
1115  VOL52          0   0.33970E-04  413394.5 3771194.2   120.3     5.00     7.76
      1.40     YES   HRDOW            NO
1116  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1117   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:58:05
1118
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. SOURCE CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	URBAN SOURCE	SCALAR VARY BY
VOL53	0	0.33970E-04	413397.1	3771160.4	120.2	5.00	7.76	1.40	YES	HRDOW	NO
VOL54	0	0.33970E-04	413392.3	3771126.1	120.1	5.00	7.76	1.40	YES	HRDOW	NO
VOL55	0	0.33970E-04	413390.4	3771093.8	119.8	5.00	7.76	1.40	YES	HRDOW	NO
VOL56	0	0.33970E-04	413576.9	3771062.8	120.7	5.00	7.76	1.40	YES	HRDOW	NO
VOL57	0	0.33970E-04	413543.3	3771064.7	120.7	5.00	7.76	1.40	YES	HRDOW	NO
VOL58	0	0.33970E-04	413510.2	3771066.2	120.7	5.00	7.76	1.40	YES	HRDOW	NO
VOL59	0	0.33970E-04	413389.1	3771161.2	120.1	5.00	7.76	1.40	YES	HRDOW	NO
VOL60	0	0.33970E-04	413476.6	3771068.8	120.5	5.00	7.76	1.40	YES	HRDOW	NO
VOL61	0	0.33970E-04	413443.0	3771069.0	120.1	5.00	7.76	1.40	YES	HRDOW	NO
VOL62	0	0.33970E-04	413409.7	3771070.3	119.8	5.00	7.76	1.40	YES	HRDOW	NO
VOL63	0	0.33970E-04	413380.4	3771072.8	119.7	5.00	7.76	1.40	YES	HRDOW	NO

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. SOURCE CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	URBAN SOURCE	SCALAR VARY BY
PAREA1	0	0.73158E-06	413382.9	3771247.0	120.3	0.00	11	1.00	YES	HRDOW	NO

```
1157   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1158
1159
1160                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***
1161
1162    SRCGROUP ID                                          SOURCE IDs
1163    -----------                                          ----------
1164
1165
1166     ALL        VOL13       , VOL14       , VOL15       , VOL16       , VOL17       ,
        VOL18       , VOL19       , VOL20       ,
1167
1168                VOL21       , VOL22       , VOL23       , VOL24       , VOL25       ,
                   VOL26       , VOL27       , VOL28       ,
1169
1170               VOL29       , VOL30       , VOL31       , VOL32       , VOL33       ,
                   VOL34       , VOL35       , VOL36       ,
1171
1172               VOL37       , VOL38       , VOL39       , VOL40       , VOL41       ,
                   VOL42       , VOL43       , VOL44       ,
1173
1174               VOL45       , VOL46       , VOL47       , VOL48       , VOL49       ,
                   VOL50       , VOL51       , VOL52       ,
1175
1176               VOL53       , VOL54       , VOL55       , VOL56       , VOL57       ,
                   VOL58       , VOL59       , VOL60       ,
1177
1178               VOL61       , VOL62       , VOL63       , PAREA1      ,
1179   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1180    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:58:05
1181
                                  PAGE   6
1182    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1183
1184
1185                                          *** SOURCE IDs DEFINED AS URBAN SOURCES ***
1186
1187     URBAN ID   URBAN POP                                 SOURCE IDs
1188     --------   ---------                                 ----------
1189
1190
1191                9663345.   VOL13       , VOL14       , VOL15       , VOL16       ,
                   VOL17       , VOL18       , VOL19       ,
1192    VOL20       ,
1193
1194               VOL21       , VOL22       , VOL23       , VOL24       , VOL25       ,
                   VOL26       , VOL27       , VOL28       ,
1195
1196               VOL29       , VOL30       , VOL31       , VOL32       , VOL33       ,
                   VOL34       , VOL35       , VOL36       ,
1197
1198               VOL37       , VOL38       , VOL39       , VOL40       , VOL41       ,
                   VOL42       , VOL43       , VOL44       ,
1199
1200               VOL45       , VOL46       , VOL47       , VOL48       , VOL49       ,
                   VOL50       , VOL51       , VOL52       ,
1201
1202               VOL53       , VOL54       , VOL55       , VOL56       , VOL57       ,
                   VOL58       , VOL59       , VOL60       ,
1203
1204               VOL61       , VOL62       , VOL63       , PAREA1      ,
1205   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
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1206    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:58:05
1207
                                    PAGE   7
1208    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1209
1210                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1211
1212    SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
1213     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1214    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1215                                                  DAY OF WEEK = WEEKDAY
1216       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1217       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1218      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1219                                                  DAY OF WEEK = SATURDAY
1220       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1221       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1222      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1223                                                  DAY OF WEEK = SUNDAY
1224       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1225       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1226      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1227    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1228     *** AERMET - VERSION  22112 ***
         ***                                                                   ***
         09:58:05
1229
                                    PAGE   8
1230    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1231
1232                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1233
1234    SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1235     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1236    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1237                                                  DAY OF WEEK = WEEKDAY
1238       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1239       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1240      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1241                                                  DAY OF WEEK = SATURDAY
1242       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1243       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1244      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
```

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      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
     .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
     .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:58:05

                              PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
     .0000E+00    7  .0000E+00    8  .0000E+00
```

```
1283       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1284      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1285                                                DAY OF WEEK = SATURDAY
1286       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1287       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1288      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1289                                                DAY OF WEEK = SUNDAY
1290       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1291       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1292      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1293  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1294       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           09:58:05
1295
                                    PAGE  11
1296       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1297
1298                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                             WEEK (HRDOW) *
1299
1300       SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
1301        HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
           SCALAR   HOUR   SCALAR   HOUR   SCALAR
1302      - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1303                                                DAY OF WEEK = WEEKDAY
1304       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1305       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1306      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1307                                                DAY OF WEEK = SATURDAY
1308       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1309       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1310      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1311                                                DAY OF WEEK = SUNDAY
1312       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1313       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1314      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1315  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1316       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           09:58:05
1317
                                    PAGE  12
1318       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1319
1320                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
```

```
                    WEEK (HRDOW) *
1321
1322    SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
1323     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1324    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1325                                                DAY OF WEEK = WEEKDAY
1326       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1327       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1328      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1329                                                DAY OF WEEK = SATURDAY
1330       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1331       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1332      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1333                                                DAY OF WEEK = SUNDAY
1334       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1335       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1336      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1337    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1338     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:58:05
1339
                                   PAGE  13
1340    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1341
1342                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1343
1344    SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
1345     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1346    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1347                                                DAY OF WEEK = WEEKDAY
1348       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1349       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1350      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1351                                                DAY OF WEEK = SATURDAY
1352       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1353       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1354      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1355                                                DAY OF WEEK = SUNDAY
1356       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1357       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1358      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL20 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL21 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14					

```
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:58:05

                                PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:58:05

                                PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
```

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1436       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1437       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1438      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1439                                                DAY OF WEEK = SATURDAY
1440       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1441       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1442      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1443                                                DAY OF WEEK = SUNDAY
1444       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1445       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1446      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1447  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1448   *** AERMET - VERSION  22112 ***
       ***                                                                          ***
       09:58:05
1449
                                  PAGE  18
1450   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1451
1452                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1453
1454   SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
1455    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1456   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1457                                                DAY OF WEEK = WEEKDAY
1458       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1459       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1460      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1461                                                DAY OF WEEK = SATURDAY
1462       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1463       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1464      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1465                                                DAY OF WEEK = SUNDAY
1466       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1467       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1468      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1469  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1470   *** AERMET - VERSION  22112 ***
       ***                                                                          ***
       09:58:05
1471
                                  PAGE  19
1472   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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1473
1474                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1475
1476    SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1477     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1478    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1479                                                DAY OF WEEK = WEEKDAY
1480       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1481       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1482      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1483                                                DAY OF WEEK = SATURDAY
1484       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1485       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1486      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1487                                                DAY OF WEEK = SUNDAY
1488       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1489       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1490      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1491    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1492     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:58:05
1493
                                    PAGE  20
1494     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1495
1496                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1497
1498    SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1499     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1500    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1501                                                DAY OF WEEK = WEEKDAY
1502       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1503       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1504      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1505                                                DAY OF WEEK = SATURDAY
1506       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1507       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1508      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1509                                                DAY OF WEEK = SUNDAY
1510       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1511       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
```

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   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 09:58:05

                              PAGE  21
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 09:58:05

                              PAGE  22
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
1551   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1552  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1553                                          DAY OF WEEK = SUNDAY
1554   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1555   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1556  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1557 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1558  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:58:05
1559
                                PAGE  23
1560  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1561
1562                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1563
1564  SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
1565   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1566  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1567                                          DAY OF WEEK = WEEKDAY
1568   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1569   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
1570  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1571                                          DAY OF WEEK = SATURDAY
1572   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1573   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1574  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1575                                          DAY OF WEEK = SUNDAY
1576   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
1577   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
1578  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
1579 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1580  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:58:05
1581
                                PAGE  24
1582  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1583
1584                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1585
1586  SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
1587   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1588  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
    - - - - - - - - - - - - - - - - - - - - -
1589                                                DAY OF WEEK = WEEKDAY
1590       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1591       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1592      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1593                                                DAY OF WEEK = SATURDAY
1594       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1595       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1596      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1597                                                DAY OF WEEK = SUNDAY
1598       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1599       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1600      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1601   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
    Norte\16435 Cons\1643 ***        05/15/25
1602    *** AERMET - VERSION  22112 ***
        ***                                                                        ***
        09:58:05
1603
                                  PAGE  25
1604    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1605
1606                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1607
1608    SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
1609     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1610    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
    - - - - - - - - - - - - - - - - - - - - -
1611                                                DAY OF WEEK = WEEKDAY
1612       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1613       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1614      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1615                                                DAY OF WEEK = SATURDAY
1616       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1617       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1618      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1619                                                DAY OF WEEK = SUNDAY
1620       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1621       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1622      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1623   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
    Norte\16435 Cons\1643 ***        05/15/25
1624    *** AERMET - VERSION  22112 ***
        ***                                                                        ***
        09:58:05
1625
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL32 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

09:58:05

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL33 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00

```
1665       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1666      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1667   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1668    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:58:05
1669
                                    PAGE  28
1670    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1671
1672                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1673
1674    SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
1675     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1676    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1677                                                DAY OF WEEK = WEEKDAY
1678       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1679       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1680      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1681                                                DAY OF WEEK = SATURDAY
1682       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1683       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1684      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1685                                                DAY OF WEEK = SUNDAY
1686       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1687       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1688      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1689   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1690    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:58:05
1691
                                    PAGE  29
1692    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1693
1694                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1695
1696    SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
1697     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1698    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1699                                                DAY OF WEEK = WEEKDAY
1700       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1701       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1702      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
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                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
 09:58:05

                              PAGE  30
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                        ***
 09:58:05

                              PAGE  31
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL39 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL40 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

```
1818       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1819       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1820      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1821   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1822    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:58:05
1823
                                    PAGE  35
1824    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1825
1826                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1827
1828    SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
1829     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1830    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1831                                                DAY OF WEEK = WEEKDAY
1832       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1833       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1834      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1835                                                DAY OF WEEK = SATURDAY
1836       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1837       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1838      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1839                                                DAY OF WEEK = SUNDAY
1840       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1841       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1842      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1843   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1844    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        09:58:05
1845
                                    PAGE  36
1846    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1847
1848                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1849
1850    SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
1851     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1852    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1853                                                DAY OF WEEK = WEEKDAY
1854       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1855       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
```

```
1856      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1857                                                DAY OF WEEK = SATURDAY
1858       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1859       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1860      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1861                                                DAY OF WEEK = SUNDAY
1862       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1863       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1864      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1865  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1866   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:58:05
1867
                                  PAGE  37
1868   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1869
1870                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1871
1872   SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
1873    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1874  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1875                                                DAY OF WEEK = WEEKDAY
1876       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1877       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
1878      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1879                                                DAY OF WEEK = SATURDAY
1880       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1881       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1882      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1883                                                DAY OF WEEK = SUNDAY
1884       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1885       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1886      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1887  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1888   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       09:58:05
1889
                                  PAGE  38
1890   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1891
1892                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1893
```

```
 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 09:58:05

                            PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL46   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL47   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  43
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
```

```
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
```

```
                    WEEK (HRDOW) *
2047
2048    SOURCE ID = VOL51        ; SOURCE TYPE = VOLUME   :
2049     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2050    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2051                                                DAY OF WEEK = WEEKDAY
2052       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2053       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2054      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2055                                                DAY OF WEEK = SATURDAY
2056       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2057       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2058      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2059                                                DAY OF WEEK = SUNDAY
2060       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2061       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2062      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2063    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
2064     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:58:05
2065
                                  PAGE  46
2066     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2067
2068                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
2069
2070    SOURCE ID = VOL52        ; SOURCE TYPE = VOLUME   :
2071     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2072    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2073                                                DAY OF WEEK = WEEKDAY
2074       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2075       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2076      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2077                                                DAY OF WEEK = SATURDAY
2078       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2079       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2080      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2081                                                DAY OF WEEK = SUNDAY
2082       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2083       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2084      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL53 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR						

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.0000E+00	8	.0000E+00								
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
15	.0000E+00	16	.0000E+00								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.0000E+00	8	.0000E+00								
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
15	.0000E+00	16	.0000E+00								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
23	.0000E+00	24	.0000E+00								

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL54 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR						

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.0000E+00	8	.0000E+00								
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01
15	.1000E+01	16	.1000E+01								
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00
23	.0000E+00	24	.0000E+00								

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00
7	.0000E+00	8	.0000E+00								
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	

```
        .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL55        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
        .1000E+01   15  .1000E+01   16  .1000E+01
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SATURDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
                                            DAY OF WEEK = SUNDAY
       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
        .0000E+00    7  .0000E+00    8  .0000E+00
       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
        .0000E+00   15  .0000E+00   16  .0000E+00
      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
        .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL56        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                            DAY OF WEEK = WEEKDAY
```

```
2162       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2163       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2164      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2165                                                DAY OF WEEK = SATURDAY
2166       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2167       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2168      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2169                                                DAY OF WEEK = SUNDAY
2170       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2171       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2172      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2173  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2174       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           09:58:05
2175
                                      PAGE  51
2176       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2177
2178                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                             WEEK (HRDOW) *
2179
2180       SOURCE ID = VOL57        ; SOURCE TYPE = VOLUME   :
2181        HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
           SCALAR   HOUR   SCALAR   HOUR   SCALAR
2182       - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
           - - - - - - - - - - - - - - - - - - - - - - - -
2183                                                DAY OF WEEK = WEEKDAY
2184       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2185       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2186      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2187                                                DAY OF WEEK = SATURDAY
2188       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2189       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2190      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2191                                                DAY OF WEEK = SUNDAY
2192       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2193       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2194      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2195  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
2196       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           09:58:05
2197
                                      PAGE  52
2198       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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2199
2200                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2201
2202    SOURCE ID = VOL58        ; SOURCE TYPE = VOLUME   :
2203     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2204    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2205                                                DAY OF WEEK = WEEKDAY
2206       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2207       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2208      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2209                                                DAY OF WEEK = SATURDAY
2210       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2211       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2212      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2213                                                DAY OF WEEK = SUNDAY
2214       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2215       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2216      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2217    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
2218     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         09:58:05
2219
                                    PAGE  53
2220     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2221
2222                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2223
2224    SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
2225     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2226    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2227                                                DAY OF WEEK = WEEKDAY
2228       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2229       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2230      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2231                                                DAY OF WEEK = SATURDAY
2232       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2233       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2234      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2235                                                DAY OF WEEK = SUNDAY
2236       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2237       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
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2238      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2239   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
2240       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           09:58:05
2241
                                    PAGE  54
2242       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2243
2244                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                             WEEK (HRDOW) *
2245
2246       SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
2247        HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
           SCALAR   HOUR   SCALAR   HOUR   SCALAR
2248       - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
           - - - - - - - - - - - - - - - - - - - -
2249                                                  DAY OF WEEK = WEEKDAY
2250          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
2251          9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
              .1000E+01   15  .1000E+01   16  .1000E+01
2252        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
2253                                                  DAY OF WEEK = SATURDAY
2254          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
2255          9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
              .0000E+00   15  .0000E+00   16  .0000E+00
2256        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
2257                                                  DAY OF WEEK = SUNDAY
2258          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
2259          9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
              .0000E+00   15  .0000E+00   16  .0000E+00
2260        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
2261   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
2262       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           09:58:05
2263
                                    PAGE  55
2264       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2265
2266                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                             WEEK (HRDOW) *
2267
2268       SOURCE ID = VOL61        ; SOURCE TYPE = VOLUME   :
2269        HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
           SCALAR   HOUR   SCALAR   HOUR   SCALAR
2270       - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
           - - - - - - - - - - - - - - - - - - - -
2271                                                  DAY OF WEEK = WEEKDAY
2272          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
              .0000E+00    7  .0000E+00    8  .0000E+00
2273          9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
              .1000E+01   15  .1000E+01   16  .1000E+01
2274        17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
            .0000E+00   23  .0000E+00   24  .0000E+00
2275                                                  DAY OF WEEK = SATURDAY
2276          1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
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      .0000E+00    7  .0000E+00    8  .0000E+00
2277   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2278  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2279                                          DAY OF WEEK = SUNDAY
2280   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2281   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2282  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2283 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2284  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:58:05
2285
                                PAGE  56
2286  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2287
2288                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2289
2290  SOURCE ID = VOL62        ; SOURCE TYPE = VOLUME   :
2291   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
2292  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
2293                                          DAY OF WEEK = WEEKDAY
2294   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2295   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
2296  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2297                                          DAY OF WEEK = SATURDAY
2298   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2299   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2300  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2301                                          DAY OF WEEK = SUNDAY
2302   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2303   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2304  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2305 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2306  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:58:05
2307
                                PAGE  57
2308  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2309
2310                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2311
2312  SOURCE ID = VOL63        ; SOURCE TYPE = VOLUME   :
2313   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
2314  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

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- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:58:05

                            PAGE  58
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                  WEEK (HRDOW) *

 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
   .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
   .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
   .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 09:58:05
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(413648.5, 3771123.9, 121.2, 121.2, 2.0); (413644.0, 3771078.2, 120.7, 120.7, 2.0);
(413676.4, 3771027.7, 120.7, 120.7, 2.0); (413613.2, 3771030.3, 120.2, 120.2, 2.0);
(413569.0, 3771032.9, 120.2, 120.2, 2.0); (413537.2, 3771033.5, 120.1, 120.1, 2.0);
(413484.4, 3771036.4, 120.1, 120.1, 2.0); (413456.6, 3771037.7, 120.0, 120.0, 2.0);
(413405.8, 3771040.0, 119.8, 119.8, 2.0); (413376.0, 3771043.2, 119.6, 119.6, 2.0);
(413333.4, 3771017.2, 119.6, 119.6, 2.0); (413333.4, 3771037.3, 119.6, 119.6, 2.0);
(413337.5, 3771067.4, 119.9, 1634.0, 2.0); (413343.4, 3771088.0, 119.9, 1635.7, 2.0);
(413343.5, 3771105.3, 120.0, 1635.7, 2.0); (413345.8, 3771118.8, 120.0, 1635.7, 2.0);
(413348.0, 3771143.1, 120.1, 1635.7, 2.0); (413348.7, 3771160.3, 120.2, 1635.7, 2.0);
(413352.6, 3771184.7, 120.3, 1648.2, 2.0); (413353.5, 3771198.5, 120.3, 1648.2, 2.0);
(413353.8, 3771225.5, 120.5, 1648.2, 2.0); (413358.9, 3771259.0, 120.5, 1648.2, 2.0);
(413361.6, 3771282.1, 120.6, 1648.2, 2.0); (413362.1, 3771296.6, 120.7, 1648.2, 2.0);
(413366.2, 3771341.2, 120.8, 1648.2, 2.0); (413416.9, 3771250.2, 120.8, 1648.2, 2.0);
(413567.7, 3771246.1, 121.3, 1648.2, 2.0); (413480.0, 3771281.7, 121.2, 1648.2, 2.0);
(413452.6, 3771272.9, 121.1, 1648.2, 2.0); (413513.6, 3771244.7, 121.1, 1648.2, 2.0);
(413388.2, 3771251.0, 120.3, 1648.2, 2.0); (413682.5, 3771320.7, 122.2, 1648.2, 2.0);
(413651.8, 3771342.1, 121.9, 1648.2, 2.0); (413368.2, 3771352.5, 120.8, 1648.2, 2.0);
(413368.7, 3771372.0, 120.8, 1648.2, 2.0); (413421.4, 3771372.2, 121.2, 1648.2, 2.0);
(413450.7, 3771369.6, 121.3, 1648.2, 2.0); (413502.7, 3771368.8, 121.5, 1648.2, 2.0);
(413531.6, 3771367.5, 121.7, 1648.2, 2.0); (413588.4, 3771364.6, 121.8, 1648.2, 2.0);
(413617.0, 3771362.6, 122.0, 1648.2, 2.0); (413654.2, 3771385.2, 122.1, 1648.2, 2.0);
(413641.6, 3771240.5, 121.7, 1635.7, 2.0); (413598.3, 3771241.6, 121.5, 1648.2, 2.0);
(413658.1, 3771227.2, 121.7, 1635.7, 2.0); (413652.5, 3771171.9, 121.6, 1635.7, 2.0);
(413762.5, 3771326.4, 122.8, 1648.2, 2.0); (413755.3, 3771297.7, 122.6, 1648.2, 2.0);
(413752.2, 3771264.9, 122.4, 1635.7, 2.0); (413751.5, 3771243.9, 122.3, 1635.7, 2.0);
(413749.2, 3771225.7, 122.3, 1635.7, 2.0); (413747.4, 3771206.7, 122.2, 1635.7, 2.0);
(413745.0, 3771187.2, 122.1, 1635.7, 2.0); (413743.4, 3771169.2, 122.0, 1634.0, 2.0);
(413742.3, 3771152.5, 122.0, 122.0, 2.0); (413740.0, 3771133.6, 121.8, 121.8, 2.0);
(413738.3, 3771115.5, 121.7, 121.7, 2.0); (413734.9, 3771095.5, 121.6, 121.6, 2.0);
(413735.1, 3771077.4, 121.5, 121.5, 2.0); (413733.3,

```
     3771064.3,     121.4,     121.4,       2.0);
2388 (  413731.5, 3771046.4,     121.3,     121.3,       2.0);         (  413729.5,
     3771027.6,     121.2,     121.2,       2.0);
2389 (  413728.1, 3771009.5,     121.0,     121.0,       2.0);         (  413725.5,
     3770991.7,     120.9,     120.9,       2.0);
2390 (  413724.5, 3770973.6,     120.8,     120.8,       2.0);         (  413721.8,
     3770948.1,     120.7,     120.7,       2.0);
2391 (  413355.1, 3771622.7,     121.1,    1648.2,       2.0);         (  413235.9,
     3771619.0,     120.6,    1648.2,       2.0);
2392 (  412848.4, 3771774.9,     118.8,    1648.2,       2.0);         (  415201.7,
     3771330.5,     133.8,     133.8,       2.0);
2393 (  413782.5, 3771959.5,     125.9,    1648.2,       2.0);         (  413664.8,
     3771641.1,     123.2,    1648.2,       2.0);
2394 (  413674.0, 3770851.1,     119.9,     119.9,       2.0);         (  413714.1,
     3770847.5,     120.0,     120.0,       2.0);
2395 (  413663.5, 3770808.8,     119.6,     119.6,       2.0);         (  413698.8,
     3770760.1,     119.4,     119.4,       2.0);
2396 (  413617.2, 3770676.6,     118.4,     118.4,       2.0);         (  413664.1,
     3770663.2,     117.7,     117.7,       2.0);
2397 (  413613.3, 3770517.0,     116.0,     118.7,       2.0);         (  413346.0,
     3770490.8,     115.1,     115.1,       2.0);
2398 (  413415.9, 3770471.5,     114.6,     114.6,       2.0);         (  413221.9,
     3770467.4,     116.1,     121.5,       2.0);
2399 (  413666.0, 3771067.1,     121.0,     121.0,
     2.0);
2400 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2401  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      09:58:05
2402
                                PAGE  60
2403  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2404
2405                                          *** METEOROLOGICAL DAYS SELECTED FOR
                                              PROCESSING ***
2406                                                    (1=YES; 0=NO)
2407
2408            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2409            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2410            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2411            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2412            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2413            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2414            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2415            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
2416
2417                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                    IS INCLUDED IN THE DATA FILE.
2418
2419
2420
2421                                     *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                         CATEGORIES ***
2422                                                  (METERS/SEC)
2423
2424                                                1.54,   3.09,   5.14,   8.23,  10.80,
2425 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
***

  Surface file:
  AZUS_V11_trimmed.sfc
  Met Version: 22112
  Profile file:
  AZUS_V11_trimmed.PFL
  Surface format:
  FREE

  Profile format:
  FREE

  Surface station no.:   3179   Upper air station no.:   3190
                Name: UNKNOWN   Name:
                UNKNOWN
                Year: 2017   Year: 2017

 First 24 hours of scalar data
 YR MO DY JDY HR   H0   U*   W* DT/DZ ZICNV ZIMCH M-O LEN   Z0 BOWEN ALBEDO
 REF WS   WD   HT REF TA   HT
- - - -

```
 1.53  179.   10.0  285.8    9.5
 17 01 01   1 19   -9.0  0.136 -9.000 -9.000 -999.  121.     24.7  0.23   0.75   1.00
 1.38  215.   10.0  285.4    9.5
 17 01 01   1 20   -3.7  0.086 -9.000 -9.000 -999.   61.     14.9  0.12   0.75   1.00
 1.03  259.   10.0  285.0    9.5
 17 01 01   1 21   -1.8  0.070 -9.000 -9.000 -999.   44.     16.4  0.16   0.75   1.00
 0.58  349.   10.0  284.9    9.5
 17 01 01   1 22   -3.4  0.086 -9.000 -9.000 -999.   61.     16.6  0.29   0.75   1.00
 0.78   61.   10.0  284.8    9.5
 17 01 01   1 23  -14.0  0.170 -9.000 -9.000 -999.  168.     31.8  0.21   0.75   1.00
 1.74   43.   10.0  284.2    9.5
 17 01 01   1 24  -21.5  0.220 -9.000 -9.000 -999.  248.     53.3  0.21   0.75   1.00
 2.22   43.   10.0  283.9    9.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01    9.5 0 -999.  -99.00   281.4   99.0  -99.00  -99.00
 17 01 01 01   10.0 1   97.    1.36  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 09:58:05

                                PAGE  62
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES
                                FOR SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL13       , VOL14       ,
                                    VOL15       , VOL16       , VOL17       ,
                VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
                VOL23       , VOL24       , VOL25       ,
                VOL26       , VOL27       , VOL28       , VOL29       , VOL30       ,
                VOL31       , VOL32       , VOL33       ,
                VOL34       , VOL35       , VOL36       , VOL37       , VOL38       ,
                VOL39       , VOL40       ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF PM_10    IN
                                       MICROGRAMS/M**3                          **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)             X-COORD (M)
      Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - -

        413648.47   3771123.91       2.82350  (17103024)               413644.02
        3771078.17       2.96937  (17103024)
        413676.40   3771027.68       2.11263  (17103024)               413613.17
        3771030.29       1.79315  (18050124)
        413568.97   3771032.90       1.50018  (18050124)               413537.20
        3771033.51       1.54697  (18050124)
        413484.41   3771036.43       1.62580  (18050124)               413456.63
        3771037.66       1.63295  (18050124)
        413405.83   3771039.96       1.59117  (18050124)               413376.05
        3771043.18       1.49676  (18050124)
        413333.39   3771017.24       0.72011  (21123024)               413333.39
        3771037.35       0.82229  (19052324)
        413337.53   3771067.43       1.00705  (19022024)               413343.36
        3771087.99       1.24870  (19120424)
        413343.52   3771105.34       1.27328  (19120424)               413345.82
        3771118.84       1.32610  (19120424)
```

```
2500          413347.97   3771143.09        1.32309  (19120424)                413348.74
              3771160.28         1.27595  (19120424)
2501          413352.57   3771184.68        1.24599  (19120424)                413353.49
              3771198.50         1.16487  (19120424)
2502          413353.80   3771225.51        0.96352  (21012724)                413358.87
              3771258.96         0.85488  (20011724)
2503          413361.63   3771282.14        0.66578  (20011724)                413362.09
              3771296.56         0.55633  (20011724)
2504          413366.23   3771341.23        0.33235  (20011724)                413416.88
              3771250.22         1.82447  (18122524)
2505          413567.74   3771246.07        1.69137  (21100724)                413479.96
              3771281.68         0.75974  (18122524)
2506          413452.64   3771272.93        0.91522  (18122524)                413513.57
              3771244.69         1.92739  (20011024)
2507          413388.18   3771250.98        1.59455  (19020724)                413682.54
              3771320.66         0.40213  (21100724)
2508          413651.85   3771342.15        0.37007  (21100724)                413368.16
              3771352.50         0.29331  (20011724)
2509          413368.70   3771372.00        0.24544  (18120324)                413421.43
              3771372.18         0.23567  (18120324)
2510          413450.68   3771369.65        0.25470  (21122824)                413502.68
              3771368.75         0.27864  (21021624)
2511          413531.57   3771367.49        0.28472  (20011024)                413588.44
              3771364.60         0.29660  (21100724)
2512          413616.97   3771362.61        0.31191  (21100724)                413654.17
              3771385.18         0.26379  (21100724)
2513          413641.58   3771240.54        1.64806  (21100724)                413598.27
              3771241.58         1.84327  (20011024)
2514          413658.14   3771227.23        1.87055  (20012124)                413652.53
              3771171.92         2.54968  (17103024)
2515          413762.55   3771326.43        0.29494  (18112224)                413755.32
              3771297.72         0.35371  (17120124)
2516          413752.25   3771264.86        0.44648  (17120124)                413751.53
              3771243.92         0.48801  (17012724)
2517          413749.19   3771225.68        0.55639  (21120924)                413747.38
              3771206.72         0.64106  (21120924)
2518          413745.03   3771187.22        0.68667  (21120924)                413743.41
              3771169.17         0.69621  (21120924)
2519          413742.32   3771152.55        0.68722  (21120924)                413739.98
              3771133.59         0.71840  (17103024)
2520          413738.35   3771115.54        0.75991  (17103024)                413734.92
              3771095.50         0.80359  (17103024)
2521          413735.10   3771077.44        0.83566  (17103024)                413733.30
              3771064.26         0.90860  (17103024)
2522          413731.49   3771046.38        1.02158  (17103024)                413729.50
              3771027.61         0.98992  (17103024)
2523          413728.06   3771009.55        0.75979  (17103024)                413725.53
              3770991.67         0.52619  (21041324)
2524          413724.45   3770973.62        0.39512  (21041324)                413721.78
              3770948.07         0.26188  (21041324)
2525          413355.15   3771622.70        0.06522  (20121424)                413235.89
              3771619.04         0.06261  (19103024)
2526          412848.39   3771774.93        0.03394  (20011724)                415201.66
              3771330.49         0.01655  (19121624)
2527          413782.51   3771959.51        0.02376  (21122824)                413664.85
              3771641.09         0.07657  (21122824)
2528          413674.05   3770851.12        0.09489  (17112124)                413714.09
              3770847.47         0.10118  (17112124)
2529          413663.50   3770808.78        0.06800  (20020324)                413698.79
              3770760.11         0.05236  (17112124)
2530          413617.17   3770676.59        0.05913  (20020324)                413664.14
              3770663.20         0.04012  (19022124)
2531          413613.35   3770516.97        0.03400  (20020324)                413345.98
              3770490.83         0.06088  (20020324)
2532  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
```

*** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: ALL   ***
INCLUDING SOURCE(S):   VOL13   , VOL14   , VOL15   , VOL16   , VOL17   ,
VOL18   , VOL19   , VOL20   , VOL21   , VOL22   ,
VOL23   , VOL24   , VOL25   ,
VOL26   , VOL27   , VOL28   , VOL29   , VOL30   ,
VOL31   , VOL32   , VOL33   ,
VOL34   , VOL35   , VOL36   , VOL37   , VOL38   ,
VOL39   , VOL40   , . . .   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3   **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
413415.90	3770471.49	0.05957	(20020324)	413221.86	3770467.45	0.06049	(21123024)
413666.01	3771067.07	1.93609	(17103024)				

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3   **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	2.96937	ON 17103024: AT (413644.02, 3771078.17, 120.70, 120.70, 2.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 43 Warning Message(s)
A Total of 474 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 41 Calm Hours Identified

A Total of 433 Missing Hours Identified (0.99 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
ME W186 956 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 956 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
CN W732 1176 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2017021824
CN W732 10368 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2018030824
CN W732 12408 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2018060124
CN W732 22848 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2019081024
CN W732 25440 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2019112624
CN W732 25464 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2019112724
CN W732 26304 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020010124
CN W732 28032 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020031324
CN W732 28056 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020031424
CN W732 28080 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020031524
CN W732 28104 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020031624
CN W732 28512 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020040224
CN W732 28536 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020040324
CN W732 28632 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020040724
CN W732 28944 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020042024
CN W732 33024 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020100724
CN W732 33096 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020101024

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 CN W732   33888         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020111224
 CN W732   34032         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020111824
 CN W732   34080         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112024
 CN W732   34104         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112124
 CN W732   34128         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112224
 CN W732   34152         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112324
 CN W732   34176         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112424
 CN W732   34200         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112524
 CN W732   34680         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020121524
 CN W732   34824         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020122124
 CN W732   35280         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021010924
 CN W732   35304         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021011024
 CN W732   35328         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021011124
 CN W732   35352         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021011224
 CN W732   35616         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021012324
 CN W732   35640         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021012424
 CN W732   35664         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021012524
 CN W732   36816         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021031424
 CN W732   37200         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021033024
 CN W732   37296         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021040324
 CN W732   38760         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021060324
 CN W732   40920         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021090124
 CN W732   41808         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021100824
 CN W732   41832         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021100924

    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************


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**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 5/15/2025
** File: C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons PM25\16435 Cons PM25.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 9663345 Los_Angeles_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16435 Cons PM25.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL13        VOLUME     413678.759  3771046.996      120.760
   LOCATION VOL14        VOLUME     413644.379  3771048.419      120.440
   LOCATION VOL15        VOLUME     413609.792  3771050.453      120.340
   LOCATION VOL16        VOLUME     413630.138  3771220.132      121.570
   LOCATION VOL17        VOLUME     413630.260  3771186.129      121.320
   LOCATION VOL18        VOLUME     413632.986  3771151.772      121.170
   LOCATION VOL19        VOLUME     413629.104  3771118.263      120.940
   LOCATION VOL20        VOLUME     413625.918  3771084.065      120.660
   LOCATION VOL21        VOLUME     413596.212  3771220.733      121.340
   LOCATION VOL22        VOLUME     413596.335  3771186.730      121.160
   LOCATION VOL23        VOLUME     413599.061  3771152.374      121.000
   LOCATION VOL24        VOLUME     413595.179  3771118.864      120.760
   LOCATION VOL25        VOLUME     413591.993  3771084.666      120.730
   LOCATION VOL26        VOLUME     413562.226  3771224.344      121.200
   LOCATION VOL27        VOLUME     413562.349  3771190.341      120.990
   LOCATION VOL28        VOLUME     413565.075  3771155.985      120.810
   LOCATION VOL29        VOLUME     413561.193  3771122.475      120.730
   LOCATION VOL30        VOLUME     413558.007  3771088.277      120.770
   LOCATION VOL31        VOLUME     413528.453  3771224.132      121.010
   LOCATION VOL32        VOLUME     413528.576  3771190.129      120.780
   LOCATION VOL33        VOLUME     413531.301  3771155.772      120.650
   LOCATION VOL34        VOLUME     413527.420  3771122.263      120.560
   LOCATION VOL35        VOLUME     413524.234  3771088.065      120.770
   LOCATION VOL36        VOLUME     413494.892  3771226.893      120.870
   LOCATION VOL37        VOLUME     413495.015  3771192.890      120.630
   LOCATION VOL38        VOLUME     413497.741  3771158.533      120.460
   LOCATION VOL39        VOLUME     413493.859  3771125.024      120.410
   LOCATION VOL40        VOLUME     413490.673  3771090.826      120.550
   LOCATION VOL41        VOLUME     413461.331  3771229.230      120.830
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     LOCATION VOL42        VOLUME     413461.454  3771195.226      120.620
     LOCATION VOL43        VOLUME     413464.180  3771160.870      120.410
     LOCATION VOL44        VOLUME     413460.298  3771127.361      120.290
     LOCATION VOL45        VOLUME     413457.112  3771093.162      120.290
     LOCATION VOL46        VOLUME     413427.770  3771229.442      120.700
     LOCATION VOL47        VOLUME     413427.893  3771195.439      120.500
     LOCATION VOL48        VOLUME     413430.619  3771161.082      120.340
     LOCATION VOL49        VOLUME     413426.737  3771127.573      120.190
     LOCATION VOL50        VOLUME     413423.551  3771093.375      120.040
     LOCATION VOL51        VOLUME     413397.396  3771227.531      120.420
     LOCATION VOL52        VOLUME     413394.545  3771194.164      120.300
     LOCATION VOL53        VOLUME     413397.058  3771160.445      120.180
     LOCATION VOL54        VOLUME     413392.327  3771126.086      120.090
     LOCATION VOL55        VOLUME     413390.415  3771093.800      119.780
     LOCATION VOL56        VOLUME     413576.851  3771062.824      120.680
     LOCATION VOL57        VOLUME     413543.290  3771064.735      120.680
     LOCATION VOL58        VOLUME     413510.154  3771066.222      120.700
     LOCATION VOL59        VOLUME     413389.080  3771161.170      120.140
     LOCATION VOL60        VOLUME     413476.594  3771068.771      120.480
     LOCATION VOL61        VOLUME     413443.033  3771068.984      120.130
     LOCATION VOL62        VOLUME     413409.684  3771070.258      119.840
     LOCATION VOL63        VOLUME     413380.371  3771072.807      119.720
     LOCATION PAREA1       AREAPOLY   413382.882  3771246.953      120.300
** Source Parameters **
     SRCPARAM VOL13        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL14        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL15        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL16        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL17        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL18        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL19        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL20        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL21        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL22        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL23        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL24        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL25        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL26        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL27        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL28        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL29        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL30        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL31        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL32        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL33        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL34        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL35        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL36        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL37        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL38        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL39        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL40        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL41        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL42        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL43        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL44        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL45        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL46        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL47        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL48        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL49        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL50        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL51        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL52        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL53        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL54        0.00003397     5.000     7.760     1.400
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   SRCPARAM VOL55        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL56        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL57        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL58        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL59        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL60        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL61        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL62        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL63        0.00003397     5.000     7.760     1.400
   SRCPARAM PAREA1       2.7759E-07     0.000        11     1.000
   AREAVERT PAREA1       413382.882 3771246.953 413657.114 3771232.739
   AREAVERT PAREA1       413641.786 3771065.525 413676.901 3771063.016
   AREAVERT PAREA1       413693.622 3771063.016 413690.557 3771027.344
   AREAVERT PAREA1       413595.802 3771033.754 413595.802 3771046.295
   AREAVERT PAREA1       413363.373 3771058.279 413363.094 3771071.377
   AREAVERT PAREA1       413366.996 3771078.066
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
```

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   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
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   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
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   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
```

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   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16435 Cons PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE AZUS_V11_trimmed.sfc
   PROFFILE AZUS_V11_trimmed.PFL
   SURFDATA 3179 2017
   UAIRDATA 3190 2017
   SITEDATA 60370002 2017
   PROFBASE 187.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16435 CONS PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "16435 Cons PM25.sum"
OU FINISHED
**
**************************************
** Project Parameters
**************************************
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    North American Datum 1983
** DTMRGN   CONUS
** UNITS    m
** ZONE     11
** ZONEINX  0
**

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** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 5/15/2025
** File: C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons PM25\16435 Cons PM25.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 9663345 Los_Angeles_County
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL "16435 Cons PM25.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL13        VOLUME     413678.759  3771046.996      120.760
   LOCATION VOL14        VOLUME     413644.379  3771048.419      120.440
   LOCATION VOL15        VOLUME     413609.792  3771050.453      120.340
   LOCATION VOL16        VOLUME     413630.138  3771220.132      121.570
   LOCATION VOL17        VOLUME     413630.260  3771186.129      121.320
   LOCATION VOL18        VOLUME     413632.986  3771151.772      121.170
   LOCATION VOL19        VOLUME     413629.104  3771118.263      120.940
   LOCATION VOL20        VOLUME     413625.918  3771084.065      120.660
   LOCATION VOL21        VOLUME     413596.212  3771220.733      121.340
   LOCATION VOL22        VOLUME     413596.335  3771186.730      121.160
   LOCATION VOL23        VOLUME     413599.061  3771152.374      121.000
   LOCATION VOL24        VOLUME     413595.179  3771118.864      120.760
   LOCATION VOL25        VOLUME     413591.993  3771084.666      120.730
   LOCATION VOL26        VOLUME     413562.226  3771224.344      121.200
   LOCATION VOL27        VOLUME     413562.349  3771190.341      120.990
   LOCATION VOL28        VOLUME     413565.075  3771155.985      120.810
   LOCATION VOL29        VOLUME     413561.193  3771122.475      120.730
   LOCATION VOL30        VOLUME     413558.007  3771088.277      120.770
   LOCATION VOL31        VOLUME     413528.453  3771224.132      121.010
   LOCATION VOL32        VOLUME     413528.576  3771190.129      120.780
   LOCATION VOL33        VOLUME     413531.301  3771155.772      120.650
   LOCATION VOL34        VOLUME     413527.420  3771122.263      120.560
   LOCATION VOL35        VOLUME     413524.234  3771088.065      120.770
   LOCATION VOL36        VOLUME     413494.892  3771226.893      120.870
   LOCATION VOL37        VOLUME     413495.015  3771192.890      120.630
   LOCATION VOL38        VOLUME     413497.741  3771158.533      120.460
   LOCATION VOL39        VOLUME     413493.859  3771125.024      120.410
   LOCATION VOL40        VOLUME     413490.673  3771090.826      120.550
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     LOCATION VOL41        VOLUME     413461.331  3771229.230      120.830
     LOCATION VOL42        VOLUME     413461.454  3771195.226      120.620
     LOCATION VOL43        VOLUME     413464.180  3771160.870      120.410
     LOCATION VOL44        VOLUME     413460.298  3771127.361      120.290
     LOCATION VOL45        VOLUME     413457.112  3771093.162      120.290
     LOCATION VOL46        VOLUME     413427.770  3771229.442      120.700
     LOCATION VOL47        VOLUME     413427.893  3771195.439      120.500
     LOCATION VOL48        VOLUME     413430.619  3771161.082      120.340
     LOCATION VOL49        VOLUME     413426.737  3771127.573      120.190
     LOCATION VOL50        VOLUME     413423.551  3771093.375      120.040
     LOCATION VOL51        VOLUME     413397.396  3771227.531      120.420
     LOCATION VOL52        VOLUME     413394.545  3771194.164      120.300
     LOCATION VOL53        VOLUME     413397.058  3771160.445      120.180
     LOCATION VOL54        VOLUME     413392.327  3771126.086      120.090
     LOCATION VOL55        VOLUME     413390.415  3771093.800      119.780
     LOCATION VOL56        VOLUME     413576.851  3771062.824      120.680
     LOCATION VOL57        VOLUME     413543.290  3771064.735      120.680
     LOCATION VOL58        VOLUME     413510.154  3771066.222      120.700
     LOCATION VOL59        VOLUME     413389.080  3771161.170      120.140
     LOCATION VOL60        VOLUME     413476.594  3771068.771      120.480
     LOCATION VOL61        VOLUME     413443.033  3771068.984      120.130
     LOCATION VOL62        VOLUME     413409.684  3771070.258      119.840
     LOCATION VOL63        VOLUME     413380.371  3771072.807      119.720
     LOCATION PAREA1       AREAPOLY   413382.882  3771246.953      120.300
** Source Parameters **
     SRCPARAM VOL13        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL14        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL15        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL16        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL17        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL18        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL19        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL20        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL21        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL22        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL23        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL24        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL25        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL26        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL27        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL28        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL29        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL30        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL31        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL32        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL33        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL34        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL35        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL36        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL37        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL38        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL39        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL40        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL41        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL42        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL43        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL44        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL45        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL46        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL47        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL48        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL49        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL50        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL51        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL52        0.00003397     5.000     7.760     1.400
     SRCPARAM VOL53        0.00003397     5.000     7.760     1.400
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   SRCPARAM VOL54        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL55        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL56        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL57        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL58        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL59        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL60        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL61        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL62        0.00003397     5.000     7.760     1.400
   SRCPARAM VOL63        0.00003397     5.000     7.760     1.400
   SRCPARAM PAREA1       2.7759E-07     0.000        11     1.000
   AREAVERT PAREA1       413382.882 3771246.953 413657.114 3771232.739
   AREAVERT PAREA1       413641.786 3771065.525 413676.901 3771063.016
   AREAVERT PAREA1       413693.622 3771063.016 413690.557 3771027.344
   AREAVERT PAREA1       413595.802 3771033.754 413595.802 3771046.295
   AREAVERT PAREA1       413363.373 3771058.279 413363.094 3771071.377
   AREAVERT PAREA1       413366.996 3771078.066
   URBANSRC ALL

** Variable Emissions Type: "By Hour / Day (HRDOW)"
** Variable Emission Scenario: "Scenario 1"
** WeekDays:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL13        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL13        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL14        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL14        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL15        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL15        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL16        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL16        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL17        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL17        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL18        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL18        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL19        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL19        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL20        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL20        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL21        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL21        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL22        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL22        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL23        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL23        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL24        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL24        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL25        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL25        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL26        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL26        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL27        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL27        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL28        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL28        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL29        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL29        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL30        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL30        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL31        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL31        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL32        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL32        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL33        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL33        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL34        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL34        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL35        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL35        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL36        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL36        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL37        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL37        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL38        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL38        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL39        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL39        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
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   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL51        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL51        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL52        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL52        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL53        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL53        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL54        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL54        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL55        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL55        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL56        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL56        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL57        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL57        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL58        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL58        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL59        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL59        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
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** WeekDays:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL60        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL60        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL61        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL61        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL62        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL62        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT VOL63        HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL63        HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW 1.0 1.0 1.0 1.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
```

```
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED "16435 Cons PM25.rou"
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE AZUS_V11_trimmed.sfc
   PROFFILE AZUS_V11_trimmed.PFL
   SURFDATA 3179 2017
   UAIRDATA 3190 2017
   SITEDATA 60370002 2017
   PROFBASE 187.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 ALL 1ST "16435 CONS PM25.AD\24H1GALL.PLT" 31
   SUMMFILE "16435 Cons PM25.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     956       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold
 used           0.50
 ME W187     956       MEOPEN: ADJ_U* Option for Stable Low Winds used in
```

```
      AERMET
 989
 990  **********************************
 991  *** SETUP Finishes Successfully ***
 992  **********************************
 993
 994  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
 995   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       10:01:03
 996
                                  PAGE   1
 997  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
 998
 999                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
1000  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - -
1001
1002  ** Model Options Selected:
1003       * Model Uses Regulatory DEFAULT Options
1004       * Model Is Setup For Calculation of Average CONCentration Values.
1005       * NO GAS DEPOSITION Data Provided.
1006       * NO PARTICLE DEPOSITION Data Provided.
1007       * Model Uses NO DRY DEPLETION. DDPLETE  =  F
1008       * Model Uses NO WET DEPLETION. WETDPLT  =  F
1009       * Stack-tip Downwash.
1010       * Model Accounts for ELEVated Terrain Effects.
1011       * Use Calms Processing Routine.
1012       * Use Missing Data Processing Routine.
1013       * No Exponential Decay.
1014       * Model Uses URBAN Dispersion Algorithm for the SBL for    52 Source(s),
1015         for Total of    1 Urban Area(s):
1016     Urban Population =   9663345.0 ;  Urban Roughness Length =  1.000 m
1017       * Urban Roughness Length of 1.0 Meter Used.
1018       * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
1019       * CCVR_Sub - Meteorological data includes CCVR substitutions
1020       * TEMP_Sub - Meteorological data includes TEMP substitutions
1021       * Model Accepts FLAGPOLE Receptor . Heights.
1022       * The User Specified a Pollutant Type of: PM_2.5
1023
1024  **Model Calculates  1 Short Term Average(s) of:  24-HR
1025
1026  **This Run Includes:     52 Source(s);       1 Source Group(s); and      83 Receptor(s)
1027
1028                  with:      0 POINT(s), including
1029                             0 POINTCAP(s) and      0 POINTHOR(s)
1030                   and:     51 VOLUME source(s)
1031                   and:      1 AREA type source(s)
1032                   and:      0 LINE source(s)
1033                   and:      0 RLINE/RLINEXT source(s)
1034                   and:      0 OPENPIT source(s)
1035                   and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
1036                   and:      0 SWPOINT source(s)
1037
1038
1039  **Model Set To Continue RUNning After the Setup Testing.
1040
1041  **The AERMET Input Meteorological Data Version Date:  22112
1042
1043  **Output Options Selected:
1044           Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
              Keyword)
1045           Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
1046           Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)
1047
```

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =   187.00 ; Decay Coef. =   0.000   ; Rot. Angle =   0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor =   0.10000E+07
Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =   3.6 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out

**Detailed Error/Message File: 16435 Cons PM25.err
**File for Summary of Results: 16435 Cons PM25.sum

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. CATS.	EMISSION RATE (GRAMS/SEC)	URBAN SOURCE	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	SZ (METERS)	AIRCRAFT VARY BY
VOL13	0	0.33970E-04	413678.8 3771047.0	120.8	5.00	7.76	1.40	YES HRDOW NO
VOL14	0	0.33970E-04	413644.4 3771048.4	120.4	5.00	7.76	1.40	YES HRDOW NO
VOL15	0	0.33970E-04	413609.8 3771050.5	120.3	5.00	7.76	1.40	YES HRDOW NO
VOL16	0	0.33970E-04	413630.1 3771220.1	121.6	5.00	7.76	1.40	YES HRDOW NO
VOL17	0	0.33970E-04	413630.3 3771186.1	121.3	5.00	7.76	1.40	YES HRDOW NO
VOL18	0	0.33970E-04	413633.0 3771151.8	121.2	5.00	7.76	1.40	YES HRDOW NO
VOL19	0	0.33970E-04	413629.1 3771118.3	120.9	5.00	7.76	1.40	YES HRDOW NO
VOL20	0	0.33970E-04	413625.9 3771084.1	120.7	5.00	7.76	1.40	YES HRDOW NO
VOL21	0	0.33970E-04	413596.2 3771220.7	121.3	5.00	7.76	1.40	YES HRDOW NO
VOL22	0	0.33970E-04	413596.3 3771186.7	121.2	5.00	7.76	1.40	YES HRDOW NO
VOL23	0	0.33970E-04	413599.1 3771152.4	121.0	5.00	7.76		

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      1.40     YES   HRDOW            NO
1087  VOL24          0   0.33970E-04  413595.2 3771118.9   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1088  VOL25          0   0.33970E-04  413592.0 3771084.7   120.7     5.00     7.76
      1.40     YES   HRDOW            NO
1089  VOL26          0   0.33970E-04  413562.2 3771224.3   121.2     5.00     7.76
      1.40     YES   HRDOW            NO
1090  VOL27          0   0.33970E-04  413562.3 3771190.3   121.0     5.00     7.76
      1.40     YES   HRDOW            NO
1091  VOL28          0   0.33970E-04  413565.1 3771156.0   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1092  VOL29          0   0.33970E-04  413561.2 3771122.5   120.7     5.00     7.76
      1.40     YES   HRDOW            NO
1093  VOL30          0   0.33970E-04  413558.0 3771088.3   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1094  VOL31          0   0.33970E-04  413528.5 3771224.1   121.0     5.00     7.76
      1.40     YES   HRDOW            NO
1095  VOL32          0   0.33970E-04  413528.6 3771190.1   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1096  VOL33          0   0.33970E-04  413531.3 3771155.8   120.6     5.00     7.76
      1.40     YES   HRDOW            NO
1097  VOL34          0   0.33970E-04  413527.4 3771122.3   120.6     5.00     7.76
      1.40     YES   HRDOW            NO
1098  VOL35          0   0.33970E-04  413524.2 3771088.1   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1099  VOL36          0   0.33970E-04  413494.9 3771226.9   120.9     5.00     7.76
      1.40     YES   HRDOW            NO
1100  VOL37          0   0.33970E-04  413495.0 3771192.9   120.6     5.00     7.76
      1.40     YES   HRDOW            NO
1101  VOL38          0   0.33970E-04  413497.7 3771158.5   120.5     5.00     7.76
      1.40     YES   HRDOW            NO
1102  VOL39          0   0.33970E-04  413493.9 3771125.0   120.4     5.00     7.76
      1.40     YES   HRDOW            NO
1103  VOL40          0   0.33970E-04  413490.7 3771090.8   120.5     5.00     7.76
      1.40     YES   HRDOW            NO
1104  VOL41          0   0.33970E-04  413461.3 3771229.2   120.8     5.00     7.76
      1.40     YES   HRDOW            NO
1105  VOL42          0   0.33970E-04  413461.5 3771195.2   120.6     5.00     7.76
      1.40     YES   HRDOW            NO
1106  VOL43          0   0.33970E-04  413464.2 3771160.9   120.4     5.00     7.76
      1.40     YES   HRDOW            NO
1107  VOL44          0   0.33970E-04  413460.3 3771127.4   120.3     5.00     7.76
      1.40     YES   HRDOW            NO
1108  VOL45          0   0.33970E-04  413457.1 3771093.2   120.3     5.00     7.76
      1.40     YES   HRDOW            NO
1109  VOL46          0   0.33970E-04  413427.8 3771229.4   120.7     5.00     7.76
      1.40     YES   HRDOW            NO
1110  VOL47          0   0.33970E-04  413427.9 3771195.4   120.5     5.00     7.76
      1.40     YES   HRDOW            NO
1111  VOL48          0   0.33970E-04  413430.6 3771161.1   120.3     5.00     7.76
      1.40     YES   HRDOW            NO
1112  VOL49          0   0.33970E-04  413426.7 3771127.6   120.2     5.00     7.76
      1.40     YES   HRDOW            NO
1113  VOL50          0   0.33970E-04  413423.6 3771093.4   120.0     5.00     7.76
      1.40     YES   HRDOW            NO
1114  VOL51          0   0.33970E-04  413397.4 3771227.5   120.4     5.00     7.76
      1.40     YES   HRDOW            NO
1115  VOL52          0   0.33970E-04  413394.5 3771194.2   120.3     5.00     7.76
      1.40     YES   HRDOW            NO
1116  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1117   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       10:01:03
1118
                                    PAGE   3
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. SOURCE CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	URBAN SOURCE	SCALAR VARY BY
VOL53	0	0.33970E-04	413397.1	3771160.4	120.2	5.00	7.76	1.40	YES	HRDOW	NO
VOL54	0	0.33970E-04	413392.3	3771126.1	120.1	5.00	7.76	1.40	YES	HRDOW	NO
VOL55	0	0.33970E-04	413390.4	3771093.8	119.8	5.00	7.76	1.40	YES	HRDOW	NO
VOL56	0	0.33970E-04	413576.9	3771062.8	120.7	5.00	7.76	1.40	YES	HRDOW	NO
VOL57	0	0.33970E-04	413543.3	3771064.7	120.7	5.00	7.76	1.40	YES	HRDOW	NO
VOL58	0	0.33970E-04	413510.2	3771066.2	120.7	5.00	7.76	1.40	YES	HRDOW	NO
VOL59	0	0.33970E-04	413389.1	3771161.2	120.1	5.00	7.76	1.40	YES	HRDOW	NO
VOL60	0	0.33970E-04	413476.6	3771068.8	120.5	5.00	7.76	1.40	YES	HRDOW	NO
VOL61	0	0.33970E-04	413443.0	3771069.0	120.1	5.00	7.76	1.40	YES	HRDOW	NO
VOL62	0	0.33970E-04	413409.7	3771070.3	119.8	5.00	7.76	1.40	YES	HRDOW	NO
VOL63	0	0.33970E-04	413380.4	3771072.8	119.7	5.00	7.76	1.40	YES	HRDOW	NO

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER EMISSION RATE INIT. PART. SOURCE CATS.	EMISSION RATE /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS. (METERS)	URBAN SOURCE	SCALAR VARY BY
PAREA1	0	0.27759E-06	413382.9	3771247.0	120.3	0.00	11	1.00	YES	HRDOW	NO

```
1157   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1158
1159
1160                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***
1161
1162    SRCGROUP ID                                          SOURCE IDs
1163    -----------                                          ----------
1164
1165
1166     ALL        VOL13       , VOL14       , VOL15       , VOL16       , VOL17       ,
        VOL18       , VOL19       , VOL20       ,
1167
1168                VOL21       , VOL22       , VOL23       , VOL24       , VOL25       ,
                   VOL26       , VOL27       , VOL28       ,
1169
1170                VOL29       , VOL30       , VOL31       , VOL32       , VOL33       ,
                   VOL34       , VOL35       , VOL36       ,
1171
1172                VOL37       , VOL38       , VOL39       , VOL40       , VOL41       ,
                   VOL42       , VOL43       , VOL44       ,
1173
1174                VOL45       , VOL46       , VOL47       , VOL48       , VOL49       ,
                   VOL50       , VOL51       , VOL52       ,
1175
1176                VOL53       , VOL54       , VOL55       , VOL56       , VOL57       ,
                   VOL58       , VOL59       , VOL60       ,
1177
1178                VOL61       , VOL62       , VOL63       , PAREA1      ,
1179   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1180    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        10:01:03
1181
                                  PAGE   6
1182   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1183
1184
1185                                          *** SOURCE IDs DEFINED AS URBAN SOURCES ***
1186
1187    URBAN ID   URBAN POP                                 SOURCE IDs
1188    --------   ---------                                 ----------
1189
1190
1191                9663345.   VOL13       , VOL14       , VOL15       , VOL16       ,
                    VOL17       , VOL18       , VOL19       ,
1192    VOL20       ,
1193
1194                VOL21       , VOL22       , VOL23       , VOL24       , VOL25       ,
                   VOL26       , VOL27       , VOL28       ,
1195
1196                VOL29       , VOL30       , VOL31       , VOL32       , VOL33       ,
                   VOL34       , VOL35       , VOL36       ,
1197
1198                VOL37       , VOL38       , VOL39       , VOL40       , VOL41       ,
                   VOL42       , VOL43       , VOL44       ,
1199
1200                VOL45       , VOL46       , VOL47       , VOL48       , VOL49       ,
                   VOL50       , VOL51       , VOL52       ,
1201
1202                VOL53       , VOL54       , VOL55       , VOL56       , VOL57       ,
                   VOL58       , VOL59       , VOL60       ,
1203
1204                VOL61       , VOL62       , VOL63       , PAREA1      ,
1205   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
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1206    *** AERMET - VERSION  22112 ***
        ***                                                                  ***
        10:01:03
1207
                                    PAGE   7
1208    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1209
1210                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1211
1212    SOURCE ID = VOL13        ; SOURCE TYPE = VOLUME   :
1213     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1214    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - - -
1215                                                  DAY OF WEEK = WEEKDAY
1216       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1217       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1218      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1219                                                  DAY OF WEEK = SATURDAY
1220       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1221       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1222      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1223                                                  DAY OF WEEK = SUNDAY
1224       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1225       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1226      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1227    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1228     *** AERMET - VERSION  22112 ***
         ***                                                                 ***
         10:01:03
1229
                                    PAGE   8
1230    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1231
1232                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1233
1234    SOURCE ID = VOL14        ; SOURCE TYPE = VOLUME   :
1235     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1236    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - - -
1237                                                  DAY OF WEEK = WEEKDAY
1238       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1239       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1240      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1241                                                  DAY OF WEEK = SATURDAY
1242       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1243       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1244      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
```

```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
```

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      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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                              PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                              PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
```

```
                    WEEK (HRDOW) *
1321
1322    SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
1323     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1324    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1325                                                DAY OF WEEK = WEEKDAY
1326       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1327       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1328      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1329                                                DAY OF WEEK = SATURDAY
1330       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1331       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1332      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1333                                                DAY OF WEEK = SUNDAY
1334       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1335       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1336      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1337    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
1338     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         10:01:03
1339
                                   PAGE  13
1340    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1341
1342                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1343
1344    SOURCE ID = VOL19        ; SOURCE TYPE = VOLUME   :
1345     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1346    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1347                                                DAY OF WEEK = WEEKDAY
1348       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1349       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1350      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1351                                                DAY OF WEEK = SATURDAY
1352       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1353       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1354      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1355                                                DAY OF WEEK = SUNDAY
1356       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1357       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1358      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL20 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL21 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14					

```
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                              PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
```

```
1436       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1437       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1438      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1439                                                DAY OF WEEK = SATURDAY
1440       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1441       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1442      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1443                                                DAY OF WEEK = SUNDAY
1444       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1445       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1446      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1447 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1448  *** AERMET - VERSION  22112 ***
      ***                                                                          ***
      10:01:03
1449
                                  PAGE  18
1450  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1451
1452                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1453
1454  SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
1455   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1456  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1457                                                DAY OF WEEK = WEEKDAY
1458       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1459       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1460      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1461                                                DAY OF WEEK = SATURDAY
1462       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1463       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1464      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1465                                                DAY OF WEEK = SUNDAY
1466       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1467       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1468      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1469 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1470  *** AERMET - VERSION  22112 ***
      ***                                                                          ***
      10:01:03
1471
                                  PAGE  19
1472  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
```

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1473
1474                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1475
1476     SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
1477      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1478     - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
     - - - - - - - - - - - - - - - - - - - -
1479                                                 DAY OF WEEK = WEEKDAY
1480        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1481        9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1482       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1483                                                 DAY OF WEEK = SATURDAY
1484        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1485        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1486       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1487                                                 DAY OF WEEK = SUNDAY
1488        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1489        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1490       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1491     FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1492      *** AERMET - VERSION  22112 ***
          ***                                                                    ***
          10:01:03
1493
                                    PAGE  20
1494     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1495
1496                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1497
1498     SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
1499      HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1500     - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
     - - - - - - - - - - - - - - - - - - - -
1501                                                 DAY OF WEEK = WEEKDAY
1502        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1503        9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1504       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1505                                                 DAY OF WEEK = SATURDAY
1506        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1507        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1508       17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1509                                                 DAY OF WEEK = SUNDAY
1510        1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1511        9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
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1512      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1513   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1514    *** AERMET - VERSION  22112 ***
        ***                                                                          ***
        10:01:03
1515
                                    PAGE  21
1516    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1517
1518                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1519
1520    SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
1521     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1522    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1523                                                DAY OF WEEK = WEEKDAY
1524       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1525       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
1526      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1527                                                DAY OF WEEK = SATURDAY
1528       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1529       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1530      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1531                                                DAY OF WEEK = SUNDAY
1532       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1533       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1534      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1535   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1536    *** AERMET - VERSION  22112 ***
        ***                                                                          ***
        10:01:03
1537
                                    PAGE  22
1538    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1539
1540                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1541
1542    SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
1543     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1544    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
1545                                                DAY OF WEEK = WEEKDAY
1546       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1547       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
1548      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1549                                                DAY OF WEEK = SATURDAY
1550       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
```

```
      .0000E+00    7  .0000E+00    8  .0000E+00
1551   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1552  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
1553                                          DAY OF WEEK = SUNDAY
1554   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1555   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1556  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
1557 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1558  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      10:01:03
1559
                                PAGE  23
1560  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1561
1562                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1563
1564  SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
1565   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1566  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      - - - - - - - - - - - - - - - - - - - -
1567                                          DAY OF WEEK = WEEKDAY
1568   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1569   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .1000E+01   16  .1000E+01
1570  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
1571                                          DAY OF WEEK = SATURDAY
1572   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1573   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1574  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
1575                                          DAY OF WEEK = SUNDAY
1576   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
1577   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
1578  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
       .0000E+00   23  .0000E+00   24  .0000E+00
1579 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
1580  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      10:01:03
1581
                                PAGE  24
1582  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1583
1584                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
1585
1586  SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
1587   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
1588  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                            PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL32 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

10:01:03

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL33 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00

```
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 10:01:03

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                             DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
                                             DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
```

```
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
  .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
```

```
 SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - -
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL39 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

FF *** AERMOD - VERSION 24142 *** *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del Norte\16435 Cons\1643 *** 05/15/25

*** AERMET - VERSION 22112 ***

*** ***

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL40 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

```
1818       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1819       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1820      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1821   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1822    *** AERMET - VERSION  22112 ***
        ***                                                                        ***
        10:01:03
1823
                                    PAGE  35
1824    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1825
1826                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1827
1828    SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
1829     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1830    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - - -
1831                                                DAY OF WEEK = WEEKDAY
1832       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1833       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
1834      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1835                                                DAY OF WEEK = SATURDAY
1836       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1837       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1838      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1839                                                DAY OF WEEK = SUNDAY
1840       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1841       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
1842      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
1843   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
1844    *** AERMET - VERSION  22112 ***
        ***                                                                        ***
        10:01:03
1845
                                    PAGE  36
1846    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1847
1848                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
1849
1850    SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
1851     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
1852    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - - - - -
1853                                                DAY OF WEEK = WEEKDAY
1854       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
1855       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
```

```
1856      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1857                                                DAY OF WEEK = SATURDAY
1858       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1859       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1860      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1861                                                DAY OF WEEK = SUNDAY
1862       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1863       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1864      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1865  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1866   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       10:01:03
1867
                                  PAGE  37
1868   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1869
1870                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1871
1872   SOURCE ID = VOL43        ; SOURCE TYPE = VOLUME   :
1873    HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
       SCALAR   HOUR   SCALAR   HOUR   SCALAR
1874   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
1875                                                DAY OF WEEK = WEEKDAY
1876       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1877       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
1878      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1879                                                DAY OF WEEK = SATURDAY
1880       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1881       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1882      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1883                                                DAY OF WEEK = SUNDAY
1884       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
1885       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
1886      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
1887  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
1888   *** AERMET - VERSION  22112 ***
       ***                                                                    ***
       10:01:03
1889
                                  PAGE  38
1890   *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
1891
1892                     * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                         WEEK (HRDOW) *
1893
```

```
 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 10:01:03

                            PAGE  39
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
    .1000E+01   15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
    .0000E+00    7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
    .0000E+00   15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
   .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL46   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL47   ; SOURCE TYPE = VOLUME   :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

```
      .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                              PAGE  42
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SUNDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
     9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
    17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
    .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                              PAGE  43
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                              DAY OF WEEK = WEEKDAY
     1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
```

```
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                              PAGE  44
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                              PAGE  45
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
```

```
                    WEEK (HRDOW) *
2047
2048    SOURCE ID = VOL51        ; SOURCE TYPE = VOLUME   :
2049     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2050    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2051                                                DAY OF WEEK = WEEKDAY
2052       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2053       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2054      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2055                                                DAY OF WEEK = SATURDAY
2056       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2057       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2058      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2059                                                DAY OF WEEK = SUNDAY
2060       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2061       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2062      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2063    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
2064     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         10:01:03
2065
                                  PAGE  46
2066     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2067
2068                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
2069
2070    SOURCE ID = VOL52        ; SOURCE TYPE = VOLUME   :
2071     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2072    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2073                                                DAY OF WEEK = WEEKDAY
2074       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2075       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2076      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2077                                                DAY OF WEEK = SATURDAY
2078       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2079       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2080      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2081                                                DAY OF WEEK = SUNDAY
2082       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2083       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2084      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL53 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SUNDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = VOL54 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

DAY OF WEEK = SATURDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14					

```
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                              PAGE  49
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL55        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
                                          DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                              PAGE  50
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = VOL56        ; SOURCE TYPE = VOLUME   :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -
                                          DAY OF WEEK = WEEKDAY
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2162       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2163       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2164      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2165                                                DAY OF WEEK = SATURDAY
2166       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2167       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2168      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2169                                                DAY OF WEEK = SUNDAY
2170       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2171       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2172      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2173 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2174       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           10:01:03
2175
                                      PAGE  51
2176       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2177
2178                         * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                             WEEK (HRDOW) *
2179
2180       SOURCE ID = VOL57        ; SOURCE TYPE = VOLUME   :
2181        HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
           SCALAR   HOUR   SCALAR   HOUR   SCALAR
2182       - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
           - - - - - - - - - - - - - - - - - - - - - -
2183                                                DAY OF WEEK = WEEKDAY
2184       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2185       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2186      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2187                                                DAY OF WEEK = SATURDAY
2188       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2189       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2190      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2191                                                DAY OF WEEK = SUNDAY
2192       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2193       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2194      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
           .0000E+00   23  .0000E+00   24  .0000E+00
2195 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2196       *** AERMET - VERSION  22112 ***
           ***                                                                    ***
           10:01:03
2197
                                      PAGE  52
2198       *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
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2199
2200                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2201
2202    SOURCE ID = VOL58        ; SOURCE TYPE = VOLUME   :
2203     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2204    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2205                                                DAY OF WEEK = WEEKDAY
2206       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2207       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2208      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2209                                                DAY OF WEEK = SATURDAY
2210       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2211       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2212      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2213                                                DAY OF WEEK = SUNDAY
2214       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2215       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2216      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2217    FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
        Norte\16435 Cons\1643 ***        05/15/25
2218     *** AERMET - VERSION  22112 ***
         ***                                                                    ***
         10:01:03
2219
                                  PAGE  53
2220     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2221
2222                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2223
2224    SOURCE ID = VOL59        ; SOURCE TYPE = VOLUME   :
2225     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2226    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2227                                                DAY OF WEEK = WEEKDAY
2228       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2229       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
           .1000E+01   15  .1000E+01   16  .1000E+01
2230      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2231                                                DAY OF WEEK = SATURDAY
2232       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2233       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
2234      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2235                                                DAY OF WEEK = SUNDAY
2236       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
           .0000E+00    7  .0000E+00    8  .0000E+00
2237       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
           .0000E+00   15  .0000E+00   16  .0000E+00
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2238      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2239   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
2240    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        10:01:03
2241
                                   PAGE  54
2242    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2243
2244                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
2245
2246    SOURCE ID = VOL60        ; SOURCE TYPE = VOLUME   :
2247     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2248    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2249                                                DAY OF WEEK = WEEKDAY
2250       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2251       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
2252      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2253                                                DAY OF WEEK = SATURDAY
2254       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2255       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2256      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2257                                                DAY OF WEEK = SUNDAY
2258       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2259       9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
          .0000E+00   15  .0000E+00   16  .0000E+00
2260      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2261   FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
       Norte\16435 Cons\1643 ***        05/15/25
2262    *** AERMET - VERSION  22112 ***
        ***                                                                    ***
        10:01:03
2263
                                   PAGE  55
2264    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2265
2266                      * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                          WEEK (HRDOW) *
2267
2268    SOURCE ID = VOL61        ; SOURCE TYPE = VOLUME   :
2269     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
         SCALAR   HOUR   SCALAR   HOUR   SCALAR
2270    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
        - - - - - - - - - - - - - - - - - - - -
2271                                                DAY OF WEEK = WEEKDAY
2272       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
          .0000E+00    7  .0000E+00    8  .0000E+00
2273       9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
          .1000E+01   15  .1000E+01   16  .1000E+01
2274      17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
          .0000E+00   23  .0000E+00   24  .0000E+00
2275                                                DAY OF WEEK = SATURDAY
2276       1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
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      .0000E+00    7  .0000E+00    8  .0000E+00
2277   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2278  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2279                                          DAY OF WEEK = SUNDAY
2280   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2281   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2282  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2283 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2284  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      10:01:03
2285
                                PAGE  56
2286  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2287
2288                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2289
2290  SOURCE ID = VOL62        ; SOURCE TYPE = VOLUME   :
2291   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
2292  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
     - - - - - - - - - - - - - - - - - - - -
2293                                          DAY OF WEEK = WEEKDAY
2294   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2295   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
      .1000E+01   15  .1000E+01   16  .1000E+01
2296  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2297                                          DAY OF WEEK = SATURDAY
2298   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2299   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2300  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2301                                          DAY OF WEEK = SUNDAY
2302   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
      .0000E+00    7  .0000E+00    8  .0000E+00
2303   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
      .0000E+00   15  .0000E+00   16  .0000E+00
2304  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
      .0000E+00   23  .0000E+00   24  .0000E+00
2305 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2306  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      10:01:03
2307
                                PAGE  57
2308  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2309
2310                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                        WEEK (HRDOW) *
2311
2312  SOURCE ID = VOL63        ; SOURCE TYPE = VOLUME   :
2313   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
      SCALAR   HOUR   SCALAR   HOUR   SCALAR
2314  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
    - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

                                PAGE  58
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                   * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF
                   WEEK (HRDOW) *

 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
  SCALAR   HOUR   SCALAR   HOUR   SCALAR
    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
    - - - - - - - - - - - - - - - - - - - -
                                                DAY OF WEEK = WEEKDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
      9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14
       .1000E+01   15  .1000E+01   16  .1000E+01
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
      1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6
       .0000E+00    7  .0000E+00    8  .0000E+00
      9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14
       .0000E+00   15  .0000E+00   16  .0000E+00
     17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22
     .0000E+00   23  .0000E+00   24  .0000E+00
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                          ***
 10:01:03

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(413648.5, 3771123.9, 121.2, 121.2, 2.0); (413644.0, 3771078.2, 120.7, 120.7, 2.0);
(413676.4, 3771027.7, 120.7, 120.7, 2.0); (413613.2, 3771030.3, 120.2, 120.2, 2.0);
(413569.0, 3771032.9, 120.2, 120.2, 2.0); (413537.2, 3771033.5, 120.1, 120.1, 2.0);
(413484.4, 3771036.4, 120.1, 120.1, 2.0); (413456.6, 3771037.7, 120.0, 120.0, 2.0);
(413405.8, 3771040.0, 119.8, 119.8, 2.0); (413376.0, 3771043.2, 119.6, 119.6, 2.0);
(413333.4, 3771017.2, 119.6, 119.6, 2.0); (413333.4, 3771037.3, 119.6, 119.6, 2.0);
(413337.5, 3771067.4, 119.9, 1634.0, 2.0); (413343.4, 3771088.0, 119.9, 1635.7, 2.0);
(413343.5, 3771105.3, 120.0, 1635.7, 2.0); (413345.8, 3771118.8, 120.0, 1635.7, 2.0);
(413348.0, 3771143.1, 120.1, 1635.7, 2.0); (413348.7, 3771160.3, 120.2, 1635.7, 2.0);
(413352.6, 3771184.7, 120.3, 1648.2, 2.0); (413353.5, 3771198.5, 120.3, 1648.2, 2.0);
(413353.8, 3771225.5, 120.5, 1648.2, 2.0); (413358.9, 3771259.0, 120.5, 1648.2, 2.0);
(413361.6, 3771282.1, 120.6, 1648.2, 2.0); (413362.1, 3771296.6, 120.7, 1648.2, 2.0);
(413366.2, 3771341.2, 120.8, 1648.2, 2.0); (413416.9, 3771250.2, 120.8, 1648.2, 2.0);
(413567.7, 3771246.1, 121.3, 1648.2, 2.0); (413480.0, 3771281.7, 121.2, 1648.2, 2.0);
(413452.6, 3771272.9, 121.1, 1648.2, 2.0); (413513.6, 3771244.7, 121.1, 1648.2, 2.0);
(413388.2, 3771251.0, 120.3, 1648.2, 2.0); (413682.5, 3771320.7, 122.2, 1648.2, 2.0);
(413651.8, 3771342.1, 121.9, 1648.2, 2.0); (413368.2, 3771352.5, 120.8, 1648.2, 2.0);
(413368.7, 3771372.0, 120.8, 1648.2, 2.0); (413421.4, 3771372.2, 121.2, 1648.2, 2.0);
(413450.7, 3771369.6, 121.3, 1648.2, 2.0); (413502.7, 3771368.8, 121.5, 1648.2, 2.0);
(413531.6, 3771367.5, 121.7, 1648.2, 2.0); (413588.4, 3771364.6, 121.8, 1648.2, 2.0);
(413617.0, 3771362.6, 122.0, 1648.2, 2.0); (413654.2, 3771385.2, 122.1, 1648.2, 2.0);
(413641.6, 3771240.5, 121.7, 1635.7, 2.0); (413598.3, 3771241.6, 121.5, 1648.2, 2.0);
(413658.1, 3771227.2, 121.7, 1635.7, 2.0); (413652.5, 3771171.9, 121.6, 1635.7, 2.0);
(413762.5, 3771326.4, 122.8, 1648.2, 2.0); (413755.3, 3771297.7, 122.6, 1648.2, 2.0);
(413752.2, 3771264.9, 122.4, 1635.7, 2.0); (413751.5, 3771243.9, 122.3, 1635.7, 2.0);
(413749.2, 3771225.7, 122.3, 1635.7, 2.0); (413747.4, 3771206.7, 122.2, 1635.7, 2.0);
(413745.0, 3771187.2, 122.1, 1635.7, 2.0); (413743.4, 3771169.2, 122.0, 1634.0, 2.0);
(413742.3, 3771152.5, 122.0, 122.0, 2.0); (413740.0, 3771133.6, 121.8, 121.8, 2.0);
(413738.3, 3771115.5, 121.7, 121.7, 2.0); (413734.9, 3771095.5, 121.6, 121.6, 2.0);
(413735.1, 3771077.4, 121.5, 121.5, 2.0); (413733.3,

```
     3771064.3,     121.4,     121.4,       2.0);
2388 ( 413731.5, 3771046.4,     121.3,     121.3,       2.0);         ( 413729.5,
     3771027.6,     121.2,     121.2,       2.0);
2389 ( 413728.1, 3771009.5,     121.0,     121.0,       2.0);         ( 413725.5,
     3770991.7,     120.9,     120.9,       2.0);
2390 ( 413724.5, 3770973.6,     120.8,     120.8,       2.0);         ( 413721.8,
     3770948.1,     120.7,     120.7,       2.0);
2391 ( 413355.1, 3771622.7,     121.1,    1648.2,       2.0);         ( 413235.9,
     3771619.0,     120.6,    1648.2,       2.0);
2392 ( 412848.4, 3771774.9,     118.8,    1648.2,       2.0);         ( 415201.7,
     3771330.5,     133.8,     133.8,       2.0);
2393 ( 413782.5, 3771959.5,     125.9,    1648.2,       2.0);         ( 413664.8,
     3771641.1,     123.2,    1648.2,       2.0);
2394 ( 413674.0, 3770851.1,     119.9,     119.9,       2.0);         ( 413714.1,
     3770847.5,     120.0,     120.0,       2.0);
2395 ( 413663.5, 3770808.8,     119.6,     119.6,       2.0);         ( 413698.8,
     3770760.1,     119.4,     119.4,       2.0);
2396 ( 413617.2, 3770676.6,     118.4,     118.4,       2.0);         ( 413664.1,
     3770663.2,     117.7,     117.7,       2.0);
2397 ( 413613.3, 3770517.0,     116.0,     118.7,       2.0);         ( 413346.0,
     3770490.8,     115.1,     115.1,       2.0);
2398 ( 413415.9, 3770471.5,     114.6,     114.6,       2.0);         ( 413221.9,
     3770467.4,     116.1,     121.5,       2.0);
2399 ( 413666.0, 3771067.1,     121.0,     121.0,
     2.0);
2400 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
2401  *** AERMET - VERSION  22112 ***
      ***                                                                    ***
      10:01:03
2402
                                PAGE  60
2403  *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*
2404
2405                                          *** METEOROLOGICAL DAYS SELECTED FOR
                                              PROCESSING ***
2406                                                    (1=YES; 0=NO)
2407
2408            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2409            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2410            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2411            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2412            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2413            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2414            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
                1 1 1 1 1   1 1 1 1 1 1 1 1 1 1 1
2415            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
2416
2417                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT
                    IS INCLUDED IN THE DATA FILE.
2418
2419
2420
2421                                     *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
                                         CATEGORIES ***
2422                                                  (METERS/SEC)
2423
2424                                                1.54,   3.09,   5.14,   8.23,  10.80,
2425 FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
     Norte\16435 Cons\1643 ***        05/15/25
```

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA
***

Surface file:
AZUS_V11_trimmed.sfc
Met Version: 22112
Profile file:
AZUS_V11_trimmed.PFL
Surface format:
FREE

Profile format:
FREE

Surface station no.:   3179   Upper air station no.:   3190
Name: UNKNOWN   Name:
UNKNOWN
Year: 2017   Year: 2017

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
17	01	01	1	01	-11.3	0.154	-9.000	-9.000	-999.	145.	28.6	0.34	0.75	1.00	1.36	97.	10.0	281.4	9.5
17	01	01	1	02	-5.9	0.110	-9.000	-9.000	-999.	88.	20.0	0.29	0.75	1.00	1.05	88.	10.0	281.0	9.5
17	01	01	1	03	-6.6	0.117	-9.000	-9.000	-999.	95.	21.1	0.29	0.75	1.00	1.11	69.	10.0	280.5	9.5
17	01	01	1	04	-6.9	0.119	-9.000	-9.000	-999.	99.	21.7	0.33	0.75	1.00	1.08	132.	10.0	279.8	9.5
17	01	01	1	05	-4.1	0.091	-9.000	-9.000	-999.	66.	16.1	0.17	0.75	1.00	1.00	314.	10.0	279.5	9.5
17	01	01	1	06	-18.0	0.193	-9.000	-9.000	-999.	204.	41.0	0.21	0.75	1.00	1.96	35.	10.0	279.8	9.5
17	01	01	1	07	-10.5	0.147	-9.000	-9.000	-999.	136.	27.0	0.29	0.75	1.00	1.38	80.	10.0	279.6	9.5
17	01	01	1	08	-6.3	0.118	-9.000	-9.000	-999.	97.	22.9	0.29	0.75	0.55	1.12	74.	10.0	279.4	9.5
17	01	01	1	09	25.4	0.209	0.420	0.005	103.	230.	-31.8	0.29	0.75	0.32	1.55	70.	10.0	282.2	9.5
17	01	01	1	10	64.6	0.296	1.020	0.005	581.	386.	-35.4	0.33	0.75	0.25	2.13	126.	10.0	283.6	9.5
17	01	01	1	11	91.0	0.325	1.350	0.005	956.	444.	-33.2	0.33	0.75	0.22	2.32	130.	10.0	284.1	9.5
17	01	01	1	12	87.8	0.248	1.393	0.005	1087.	299.	-15.3	0.32	0.75	0.21	1.62	152.	10.0	285.1	9.5
17	01	01	1	13	103.2	0.182	1.514	0.005	1188.	187.	-5.1	0.33	0.75	0.21	0.97	144.	10.0	286.1	9.5
17	01	01	1	14	74.8	0.225	1.385	0.005	1256.	255.	-13.4	0.23	0.75	0.22	1.61	214.	10.0	286.9	9.5
17	01	01	1	15	50.9	0.150	1.233	0.005	1300.	142.	-5.9	0.07	0.75	0.26	1.37	273.	10.0	286.7	9.5
17	01	01	1	16	1.2	0.122	0.356	0.005	1300.	102.	-130.2	0.23	0.75	0.35	1.08	210.	10.0	286.6	9.5
17	01	01	1	17	-13.1	0.175	-9.000	-9.000	-999.	176.	36.0	0.32	0.75	0.62	1.55	172.	10.0	286.3	9.5
17	01	01	1	18	-13.7	0.171	-9.000	-9.000	-999.	169.	32.2	0.32	0.75	1.00

```
 1.53  179.   10.0  285.8    9.5
 17 01 01   1 19   -9.0  0.136 -9.000 -9.000 -999.  121.     24.7  0.23   0.75   1.00
 1.38  215.   10.0  285.4    9.5
 17 01 01   1 20   -3.7  0.086 -9.000 -9.000 -999.   61.     14.9  0.12   0.75   1.00
 1.03  259.   10.0  285.0    9.5
 17 01 01   1 21   -1.8  0.070 -9.000 -9.000 -999.   44.     16.4  0.16   0.75   1.00
 0.58  349.   10.0  284.9    9.5
 17 01 01   1 22   -3.4  0.086 -9.000 -9.000 -999.   61.     16.6  0.29   0.75   1.00
 0.78   61.   10.0  284.8    9.5
 17 01 01   1 23  -14.0  0.170 -9.000 -9.000 -999.  168.     31.8  0.21   0.75   1.00
 1.74   43.   10.0  284.2    9.5
 17 01 01   1 24  -21.5  0.220 -9.000 -9.000 -999.  248.     53.3  0.21   0.75   1.00
 2.22   43.   10.0  283.9    9.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01    9.5 0 -999.  -99.00   281.4   99.0  -99.00  -99.00
 17 01 01 01   10.0 1   97.    1.36  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
Norte\16435 Cons\1643 ***        05/15/25
 *** AERMET - VERSION  22112 ***
 ***                                                                    ***
 10:01:03

                                PAGE  62
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN  ADJ_U*

                                *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES
                                FOR SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):     VOL13       , VOL14       ,
                                    VOL15       , VOL16       , VOL17       ,
               VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
               VOL23       , VOL24       , VOL25       ,
               VOL26       , VOL27       , VOL28       , VOL29       , VOL30       ,
               VOL31       , VOL32       , VOL33       ,
               VOL34       , VOL35       , VOL36       , VOL37       , VOL38       ,
               VOL39       , VOL40       ,  . . .      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF PM_2.5   IN
                                       MICROGRAMS/M**3                          **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)             X-COORD (M)
     Y-COORD (M)        CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -
       413648.47   3771123.91        1.10865  (17103024)               413644.02
       3771078.17        1.16764  (17103024)
       413676.40   3771027.68        0.82682  (17103024)               413613.17
       3771030.29        0.70045  (18050124)
       413568.97   3771032.90        0.59296  (18050124)               413537.20
       3771033.51        0.61227  (18050124)
       413484.41   3771036.43        0.64349  (18050124)               413456.63
       3771037.66        0.64634  (18050124)
       413405.83   3771039.96        0.63033  (18050124)               413376.05
       3771043.18        0.59257  (18050124)
       413333.39   3771017.24        0.28760  (21123024)               413333.39
       3771037.35        0.32497  (19052324)
       413337.53   3771067.43        0.39567  (19022024)               413343.36
       3771087.99        0.48732  (19022024)
       413343.52   3771105.34        0.49567  (19120424)               413345.82
       3771118.84        0.51616  (19120424)
```

```
2500          413347.97   3771143.09        0.51564  (19120424)                413348.74
              3771160.28         0.49783  (19120424)
2501          413352.57   3771184.68        0.48595  (19120424)                413353.49
              3771198.50         0.45413  (19120424)
2502          413353.80   3771225.51        0.37947  (21012724)                413358.87
              3771258.96         0.33505  (20011724)
2503          413361.63   3771282.14        0.26118  (20011724)                413362.09
              3771296.56         0.21845  (20011724)
2504          413366.23   3771341.23        0.13091  (20011724)                413416.88
              3771250.22         0.70939  (18122524)
2505          413567.74   3771246.07        0.66322  (21100724)                413479.96
              3771281.68         0.29650  (18122524)
2506          413452.64   3771272.93        0.35700  (18122524)                413513.57
              3771244.69         0.75204  (20011024)
2507          413388.18   3771250.98        0.61884  (19020724)                413682.54
              3771320.66         0.15787  (21100724)
2508          413651.85   3771342.15        0.14555  (21100724)                413368.16
              3771352.50         0.11563  (20011724)
2509          413368.70   3771372.00        0.09660  (18120324)                413421.43
              3771372.18         0.09332  (20121424)
2510          413450.68   3771369.65        0.10222  (21122824)                413502.68
              3771368.75         0.11093  (21122824)
2511          413531.57   3771367.49        0.11130  (21122824)                413588.44
              3771364.60         0.11707  (21100724)
2512          413616.97   3771362.61        0.12296  (21100724)                413654.17
              3771385.18         0.10384  (21100724)
2513          413641.58   3771240.54        0.64304  (21100724)                413598.27
              3771241.58         0.71872  (20011024)
2514          413658.14   3771227.23        0.73155  (20012124)                413652.53
              3771171.92         0.99974  (17103024)
2515          413762.55   3771326.43        0.11587  (18112224)                413755.32
              3771297.72         0.13920  (17120124)
2516          413752.25   3771264.86        0.17563  (17120124)                413751.53
              3771243.92         0.19258  (17012724)
2517          413749.19   3771225.68        0.21824  (21120924)                413747.38
              3771206.72         0.25118  (21120924)
2518          413745.03   3771187.22        0.26916  (21120924)                413743.41
              3771169.17         0.27315  (21120924)
2519          413742.32   3771152.55        0.26987  (21120924)                413739.98
              3771133.59         0.28411  (17103024)
2520          413738.35   3771115.54        0.30067  (17103024)                413734.92
              3771095.50         0.31819  (17103024)
2521          413735.10   3771077.44        0.33090  (17103024)                413733.30
              3771064.26         0.35942  (17103024)
2522          413731.49   3771046.38        0.40343  (17103024)                413729.50
              3771027.61         0.39093  (17103024)
2523          413728.06   3771009.55        0.30092  (17103024)                413725.53
              3770991.67         0.20582  (21041324)
2524          413724.45   3770973.62        0.15504  (21041324)                413721.78
              3770948.07         0.10332  (21041324)
2525          413355.15   3771622.70        0.02584  (20121424)                413235.89
              3771619.04         0.02484  (19103024)
2526          412848.39   3771774.93        0.01329  (20011724)                415201.66
              3771330.49         0.00643  (19121624)
2527          413782.51   3771959.51        0.00949  (21122824)                413664.85
              3771641.09         0.03043  (21122824)
2528          413674.05   3770851.12        0.03830  (17112124)                413714.09
              3770847.47         0.04062  (17112124)
2529          413663.50   3770808.78        0.02746  (20020324)                413698.79
              3770760.11         0.02116  (17112124)
2530          413617.17   3770676.59        0.02380  (20020324)                413664.14
              3770663.20         0.01596  (19022124)
2531          413613.35   3770516.97        0.01371  (20020324)                413345.98
              3770490.83         0.02425  (20020324)
2532  FF *** AERMOD - VERSION 24142  ***   *** C:\Users\Michael Tirohn\Desktop\HRAs\16435 Del
      Norte\16435 Cons\1643 ***        05/15/25
```

                                *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES
                                FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   VOL13   , VOL14   ,
                                    VOL15   , VOL16   , VOL17   ,
                VOL18   , VOL19   , VOL20   , VOL21   , VOL22   ,
                VOL23   , VOL24   , VOL25   ,
                VOL26   , VOL27   , VOL28   , VOL29   , VOL30   ,
                VOL31   , VOL32   , VOL33   ,
                VOL34   , VOL35   , VOL36   , VOL37   , VOL38   ,
                VOL39   , VOL40   , . . .   ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF PM_2.5   IN
                                       MICROGRAMS/M**3   **

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
     Y-COORD (M)   CONC   (YYMMDDHH)
- - - -

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 43 Warning Message(s)
A Total of 474 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 41 Calm Hours Identified

A Total of 433 Missing Hours Identified (0.99 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
ME W186 956 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 956 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
CN W732 1176 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2017021824
CN W732 10368 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2018030824
CN W732 12408 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2018060124
CN W732 22848 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2019081024
CN W732 25440 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2019112624
CN W732 25464 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2019112724
CN W732 26304 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020010124
CN W732 28032 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020031324
CN W732 28056 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020031424
CN W732 28080 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020031524
CN W732 28104 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020031624
CN W732 28512 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020040224
CN W732 28536 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020040324
CN W732 28632 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020040724
CN W732 28944 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020042024
CN W732 33024 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020100724
CN W732 33096 AVER: 24-hr avg, < 18 hours of data, calms policy used. 2020101024

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 CN W732   33888         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020111224
 CN W732   34032         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020111824
 CN W732   34080         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112024
 CN W732   34104         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112124
 CN W732   34128         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112224
 CN W732   34152         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112324
 CN W732   34176         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112424
 CN W732   34200         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020112524
 CN W732   34680         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020121524
 CN W732   34824         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2020122124
 CN W732   35280         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021010924
 CN W732   35304         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021011024
 CN W732   35328         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021011124
 CN W732   35352         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021011224
 CN W732   35616         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021012324
 CN W732   35640         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021012424
 CN W732   35664         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021012524
 CN W732   36816         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021031424
 CN W732   37200         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021033024
 CN W732   37296         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021040324
 CN W732   38760         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021060324
 CN W732   40920         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021090124
 CN W732   41808         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021100824
 CN W732   41832         AVER: 24-hr avg, < 18 hours of data, calms policy used.
2021100924

    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************


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Appendix E

Preliminary Geotechnical Due Diligence Study

SA GEOTECHNICAL
OPTIMIZED SOIL ENGINEERING

June 14, 2024

Project No. 24082-01

To: Meritage Homes
5 Peters Canyon Road, Suite 310
Irvine, California 92606

Attention: Mr. Danny Hinojosa

Subject: Geotechnical Due Diligence Study, Subsurface Exploration, and Preliminary Design Recommendations, 1501 West Del Norte Street, Assessor's Parcel Number 8458-020-901, City of West Covina, California

At your request, SA Geotechnical, Inc. (SA GEO) has conducted a geotechnical due diligence study and subsurface exploration for the proposed residential development at 1501 West Del Norte Street, Assessor's Parcel Number (APN) 8458-020-901, in the City of West Covina, California (Figure 1). The purpose of this study was to evaluate the geotechnical site conditions considering the proposed grading and improvements in order to provide a geotechnical summary and preliminary geotechnical recommendations for project design, grading, and construction. Our evaluation included review of available geologic maps and data pertinent to the subject site; a site-specific subsurface exploration; laboratory testing; percolation testing; geotechnical analysis; and preparation of this report.

The subject site is currently developed with an existing (non-operational) occupational school and technical center with asphalt concrete parking lot and associated hardscape/landscape improvements. A large portion of the property includes open fields and sports fields. Based on our review and subsurface exploration, the primary geotechnical constraints include the presence of weathered/unsuitable alluvium in the uppermost 5 to 7 feet, the presence of friable sandy soils prone to caving in steep sided (trench) excavations, and seismic shaking during a strong earthquake event. The site subsurface soils generally consist of sandy silt and silty sand near-surface and silty sand and sand with gravel at depth. Groundwater was not encountered during our exploration to a maximum depth of 50.5 feet below ground surface. Percolation testing was also performed during this study and indicates that stormwater infiltration is feasible at the site.

This report presents our findings, conclusions, and preliminary design recommendations for the proposed residential development. Based on our exploration and review, the proposed grading and development is considered geotechnically feasible provided the recommendations in this report are implemented during design, grading, and construction. Additional geotechnical evaluation and analysis may need to be performed as the project plans for grading, foundations, and stormwater infiltration systems are developed.

References pertinent to the site are included in Appendix A. Boring logs are included in Appendix B. Laboratory test results are included in Appendix C. Seismic design parameters are presented in Appendix D. Percolation test data sheets are provided in Appendix E. General Earthwork and grading specifications are presented in Appendix F.

If you have any questions regarding this report, please contact our office. We appreciate the opportunity to provide our services.

Respectfully submitted,

SA GEOTECHNICAL, INC.

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EXECUTIVE SUMMARY

The subject site is underlain by native alluvium generally composed of sandy silt and silty sand near surface and silty to clean sand with gravel at depth. Groundwater was not encountered during our exploration to a maximum depth of 50.5 feet below ground surface and is anticipated to remain at depths greater than 100 feet below ground surface. The primary geotechnical constraints at the site include the following:

- The presence of weathered/unsuitable alluvium in the upper 5 to 7 feet below existing grades, which will need to be removed and replaced as compacted fill;
- Presence of friable sandy soils prone to caving in steep sided (trench) excavations; and
- Potential for strong seismic shaking during an earthquake event.

Remedial grading for the site should consist of the removal and recompaction of all weathered/disturbed alluvium in order to provide competent subgrade and bearing conditions for the proposed building structural slabs and foundations. In general, remedial removals are anticipated to extend 5 to 7 feet below existing grades within the site. Deeper removals may be required locally, where existing trees, utility lines, and structures/foundations are to be abandoned and removed or where deeper unsuitable soils are encountered. The recommended remedial removals will help reduce the potential for future settlement at the site. Septic tanks, cesspools, underground structures, and/or wells may be encountered at the site during demolition and grading. If encountered, they should be removed in accordance with Los Angeles County Department of Public Health requirements and the project environmental engineer's recommendations.

Building foundations and slabs should be designed to tolerate a total settlement of 1-inch and a differential settlement of ½-inch over a span of 40 feet. Onsite soils are anticipated to have "Very Low" expansion potential at the completion of grading and are not considered corrosive to concrete.

Based on our findings, we conclude that the proposed residential development is feasible from a geotechnical viewpoint, provided it is designed and constructed in accordance with the recommendations presented in this report and any future design report(s). The site is considered suitable for stormwater infiltration.

1.0 INTRODUCTION

1.1 Introduction and Scope of Services

At your request, SA Geotechnical, Inc. (SA GEO) has conducted geotechnical due diligence review and subsurface exploration for the proposed residential development at the subject site in the City of West Covina, California (Figure 1). The purpose of our study was to assess the onsite geologic and geotechnical conditions and provide preliminary recommendations for design, grading, and construction of the proposed improvements. We have reviewed the Conceptual Site Plan, dated May 2024, which shows the generalized development configuration; however, contains no existing or proposed grades. A Google Earth satellite image was utilized as the base for our Geotechnical Map (Plate 1).

Our scope of services for this due diligence study included the following tasks:

- Review of available geologic and geotechnical maps, reports, and data for the subject site and surrounding area. A list of references is included in Appendix A.
- Review of available historic aerial photographs dating back to 1948.
- Notification and coordination with DigAlert to identify and clear boring locations of underground utilities.
- Subsurface exploration consisting of nine hollow-stem auger borings (H-1 through H-5 and P-1 through P-4) to depths ranging from 10.5 to 50.5 feet below ground surface (bgs). Boring logs are included in Appendix B.
- Percolation testing at four locations (P-1 through P-4) to determine infiltration rates. Percolation data sheets are included in Appendix E.
- Laboratory testing of selected samples to determine engineering properties of onsite soils, including in-situ moisture and density, grain size distribution, Atterberg limits, maximum density and optimum moisture content, consolidation/collapse, shear strength, R-value, expansion potential, and soluble sulfate content. Laboratory test results are included in Appendix C.
- Geotechnical evaluation and analysis of the compiled data regarding the proposed grading and development.
- Evaluation of faulting, seismicity, and seismic and static settlement in accordance with the 2022 California Building Code (CBC).
- Preparation of this report including our findings, conclusions, preliminary recommendations, and accompanying illustrations.
- Consultations with the project team.

SA GEO's expertise and scope of services do not include assessment of potential subsurface environmental contaminants or environmental health hazards.

1.2 Site Condition and History

The subject site is located at 1501 West Del Norte Street in the City of West Covina, California (Figure 1). The approximately 13.6-acre property is roughly rectangular-shaped and is bound to the north and east by a park and recreational facilities (Del Norte Park), to the west by North Nora Avenue, and to the south by West Del Norte Street. The site is currently developed with an occupational school and technical center that is non-operational at this time. The school campus includes classrooms/buildings, sports fields covering most of the site, parking lots and associated drive aisles, and associated hardscape/landscape improvements.

Based on our review of available historic aerial photographs dating back to 1948, the earliest observed site use was for agriculture. During this time an onsite residential structure and outbuildings were observed in the southerly portion of the site, adjacent to Del Norte Street, within the footprint of the current school buildings. By 1964, the prior structures and agriculture/orchards had been removed and the current school campus was developed. Except for minor upgrades to landscape and hardscape, including solar panels in the southwest parking lot, the site has remained largely unchanged up to the present day.

1.3 Proposed Grading and Improvements

Based on our review of the Conceptual Site Plan and review of the general site topography during our site exploration, we anticipate design cuts and fills to be relatively minor across the site, on the order of 1 to 5 feet. We understand the project is proposed to include grading for 39 multifamily residential buildings (338 total units), common space/outdoor areas, and utility and street improvements to support the proposed residential development. The proposed multifamily units will be 3- to 4-stories, consisting of wood-framed construction.

1.4 Subsurface Exploration

Our field exploration was performed on May 23 and 24, 2024, and included nine hollow-stem auger borings (H-1 through H-5 and P-1 through P-4) to depths ranging from 10.5 to 50.5 feet below ground surface (bgs). The borings were geologically logged, and samples were obtained at selected intervals. The approximate boring locations are shown on Plate 1 (Geotechnical Map). Boring logs are included in Appendix B.

Soil sampling in borings was performed using a Modified California ring sampler. Relatively undisturbed ring samples were obtained from the borings at various depths with a 2.5-inch inside-diameter, split-barrel sampler. The sampler was driven with a 140-pound, automatic trip hammer, free falling 30 inches. Representative bulk samples of onsite soils were also collected from soil cuttings and used for additional soil identification purposes and laboratory testing. The sampling was used to assess the soil beneath the site and to obtain a measure of soil resistance to penetration (recorded as blows-per-foot on the geotechnical boring logs).

Following drilling, percolation testing was performed in four borings (P-1 through P-4) in general conformance with the 2021 Los Angeles County Guidelines (GS200.1). Within the borings, a 2-inch diameter slotted well pipe was installed, and the annular space was backfilled with No. 3 select sand to prevent caving during testing. The results of the onsite percolation testing are

included in Appendix E and discussed in Sections 2.6 and 3.13. At the completion of testing, the pipes were removed, and the borings were backfilled with soil cutting and sand.

1.5 Laboratory Testing

Representative samples of onsite soils collected during our field exploration were tested to characterize the engineering properties. Laboratory tests performed on selected relatively undisturbed and bulk soil samples included:

- Moisture content and dry density;
- Sieve analysis;
- Atterberg limits;
- Direct shear;
- Consolidation/collapse;
- Maximum density and optimum moisture content;
- R-value;
- Expansion potential; and
- Soluble sulfate.

Laboratory tests were conducted in general conformance with applicable ASTM International standards. The laboratory test results are provided in Appendix C.

2.0 GEOTECHNICAL FINDINGS

2.1 Geologic Setting and Geotechnical Conditions

The subject site is located northwest of the San Jose Hills and north of Walnut Creek, within the Peninsular Ranges geomorphic province of Southern California. The site is mapped by the California Division of Mines and Geology (CDMG, 2000) as underlain by Quaternary-age young alluvial fan deposits (Figure 2). The alluvium (Qal) encountered in our borings generally consisted of dark brown, yellowish brown, yellowish gray and gray sandy silt and silty sand near-surface (uppermost 5 to 7 feet), below which the soils consisted of silty sand, clean sand, and sand with gravel.

Based on our geotechnical exploration and laboratory testing (Appendix C), the site geotechnical conditions are generally as follows:

Soil Moisture Content and Dry Density: Native alluvial soils had in-situ moisture content and dry densities ranging from 1.6 to 15.4 percent and 87.7 to 137.3 pounds per cubic foot (pcf), respectively. Blow counts in the alluvial materials ranged from 4 to 20 blows per foot in the uppermost 5 to 7 feet. Below 7 feet, blow counts in the alluvium ranged from 18 to 84+ blows per foot. The alluvium was generally found to be loose/soft near surface and medium dense to very dense at depth.

Soil Properties: Grain-size distribution tests were conducted on two bulk samples collected from the uppermost 5 feet and eight ring samples collected at depths between 2.5 and 12 feet bgs. The near-surface bulk samples were classified in accordance with the Unified Soil Classification System (USCS) as silty sand (SM), with fines contents (passing No. 200 sieve) of 35 and 49 percent. The ring samples were classified as poorly graded sand (SP), sand with silt (SP-SM), and silty sand (SM), with fines contents ranging from 2 to 17 percent.

Soil plasticity testing was performed on two rings samples collected at depths of 7.5 and 9 feet bgs. Both samples were sandy, contained less than 50 percent fines, and were classified as non-plastic.

Maximum dry density testing of one near surface sample (0 to 5 feet bgs) indicates that the silty sand has a maximum dry density of 122.5 pcf at an optimum moisture content of 11.5 percent.

Shear Strength: Direct shear testing was performed on two samples: one relatively undisturbed sample collected at a depth of 7.5 feet bgs and one remolded sample performed on material from a bulk sample collected in the uppermost 5 feet, representative of future compacted fill material (remolded to 90% relative compaction). The undisturbed sample had ultimate and peak internal friction angle of 38 and a cohesion of 375 pounds per square foot (psf). The remolded sample had ultimate and peak internal friction angle of 30 degrees and cohesions of 75 and 150 psf, respectively.

Consolidation/Collapse Potential: In general, the onsite soils are anticipated to have low compressibility/collapse potential upon the completion of grading. Laboratory testing was performed on five samples collected from the uppermost 10 feet and indicates collapse potentials of less than 1.5 percent upon addition of water at loads of 3.2 and 1.6 ksf.

R-value: One sample collected a depth of 0 to 5 feet in Boring H-5 had an R-value of 65.

Expansion Potential: Two near-surface samples, both collected at depths of 0 to 5 feet in Borings H-2 and H-4, had "Very Low" expansion potential, with expansion indices of 3 and 4, respectively.

Soluble Sulfate: Two bulk samples, both collected at depths of 0 to 5 feet in Borings H-2 and H-4, were also tested for sulfate content. The tests are anticipated to indicate that sulfate content of the soils may be classified as "S0" (negligible) per Table 19.3.1.1 of ACI-318.

2.2 Groundwater

Historic high groundwater mapping by California Division of Mines and Geology indicates very deep groundwater, approximately 100 feet bgs (CDMG, 1998). Groundwater was not encountered during our subsurface exploration to a maximum depth of 50.5 feet. We have also reviewed groundwater data available through the GeoTracker database for several sites near the subject site. The data indicates groundwater in the vicinity of the site is generally greater than 110+ feet deep.

2.3 Regional Faulting and Seismicity

Regional Faults: The site is not located within a fault-rupture hazard zone as defined by the Alquist-Priolo Special Studies Zones Act (CGS, 2018). Also, based on mapping by the State (Jennings and Bryant, 2010), there are no active faults mapped at the site. Regional Faults are presented in Figure 3.

Seismicity: Properties in southern California are subject to seismic hazards of varying degrees depending upon the proximity, degree of activity, and capability of nearby faults. These hazards can be primary (i.e., directly related to the energy release of an earthquake) or secondary (i.e., related to the effect of earthquake energy on the physical world). Since there are no active faults at the site, the potential for primary ground rupture is considered very low. The primary seismic hazard for this site is ground shaking during a future earthquake. The closest active fault to the site is the San Jose Fault, approximately 4.1 miles southeast of the site. The maximum moment magnitude for the controlling fault is 7.4 Mw, which would be generated from the Puente Hills Fault.

The site is not located within a potential liquefaction hazard zone, as defined by the State's Seismic Hazard Mapping (CDMG, 1999). The attached Site Location and Seismic Hazard Map (Figure 1) depicts the site relative to mapped potential liquefaction hazard zones. Other secondary seismic hazards, such as tsunami and seiche are considered nil due to the site elevation of approximately 400 feet above sea level and distance from the ocean or other confined bodies of water.

2.4 Settlement and Foundation Considerations

In general, the anticipated settlements depend upon the building loads, type of foundations, and the geotechnical properties of the supporting subgrade. Considering the subsurface soil conditions, laboratory test data, and anticipated lightly loaded residential structures, we estimate total settlement (combined static and seismic) to be on the order of 1-inch with differential settlement of ½-inch over a 40-foot span. The settlement estimate assumes remedial grading measures recommended in Section 3.2 of this report are implemented during grading.

2.5 Shrinkage and Bulking

The shrinkage and bulking (reduction or increase in volume of excavated materials on recompaction as fill) depend primarily on in-situ density and the maximum dry density of the soil type. We anticipate that the weathered alluvium will shrink 8 to 15 percent. An average shrinkage value of 12 percent may be assumed for soils in the upper 7 feet. Ground subsidence at the site is estimated to be on the order of 0.1 foot.

2.6 Percolation Testing

Percolation testing was performed on May 23 and 24, 2024, in general conformance with the 2021 Los Angeles County Guidelines (GS200.1). The Small Diameter Boring Infiltration Test procedure was performed in general accordance with the referenced guidelines. Percolation testing was performed in Borings P-1 through P-4, which were drilled to depths ranging from 10.5 to 15 feet bgs. Within the percolation test borings, a 2-inch-diameter slotted well pipe was installed and backfilled (annular space) with No. 3 select sand, as noted on the boring logs, in order to prevent caving during testing.

Initial soaking was performed prior to testing to ensure that the native soil was fully saturated. The Small Diameter Boring Infiltration Test was performed following the initial presoak. The three final measurements were used to calculate the pre-adjusted infiltration rates. Infiltration rates were calculated by dividing the approximate discharged water volume by the wetted surface area in a given amount of time, per the guidelines. The infiltration rates ranged from 4.7 to 12.4 inches per hour, using the minimum Reduction Factor of 3. This reduction factor does not consider infiltration device design, pre-filtration, maintenance, or other factors that may affect long-term performance. The infiltration rates are representative of the location and depths at which the tests were performed. The field percolation test data sheets are provided in Appendix E.

Boring No.	***Tested Depth (feet)***	***Pre-Adjusted Infiltration Rate (in./hr.)***	***Infiltration Rate (in./hr.) – Reduction Factor of 3***
P-1	5 to 9.5	14.2	4.7
P-2	13 to 14.75	17.9	6.0
P-3	7 to 9.5	32.6	10.9
P-4	13.25 to 14.75	37.1	12.4

3.0 CONCLUSION AND PRELIMINARY RECOMMENDATIONS

3.1 General Conclusion and Recommendation

Based on our subsurface exploration and review, construction of the proposed residential development, as described herein, is considered geotechnically feasible provided the preliminary recommendations in this report are implemented during design, grading, and construction. Additional geotechnical exploration, including percolation testing at the location/depth of the infiltration devices, may need to be performed during the design phase. Also, grading, foundation, utility, structural and wall plans for the project should be reviewed by the geotechnical consultant during the design phase. Updated recommendations should be provided once the project plans are finalized and reviewed by SA GEO and as needed.

The recommendations in this report should be considered minimum and may be superseded by more restrictive requirements of others. In addition to the following recommendations, General Earthwork and Grading Specifications are provided in Appendix F.

3.2 Site Preparation and Earthwork

Site preparation and grading should be performed in accordance with the recommendations herein and the requirements of the City of West Covina.

3.2.1 Site Demolition and Clearing

Prior to remedial grading, any existing structures, foundations, hardscape/landscape, and utilities to be abandoned should be demolished. Deleterious materials and debris should be cleared and disposed of offsite. Onsite concrete material may be mixed with onsite soils and placed as compacted fill provided that it is broken into pieces that are smaller than 6 inches in the largest diameter. Onsite asphalt concrete may also be used in compacted fill materials; however, it should not be placed under the residential pads. Placement of concrete and asphalt as compacted fill should also be approved by the project environmental engineer. Excavations for the removal of existing foundations, utilities, and vegetation, including onsite trees, should be observed by the geotechnical consultant. Large roots, highly organic soils, and existing utilities should be removed and should not be incorporated into new fills.

Soil that is disturbed as part of excavations or removal of trees or underground utilities should be evaluated by the geotechnical consultant. Excavations that require backfill should be properly documented and compacted under the observation and testing of the geotechnical consultant.

Cesspools, septic tanks, underground storage tanks, and/or wells may be encountered at the site. If encountered, they should be removed in accordance with Los Angeles County Department of Public Health requirements and the project environmental engineer's recommendations. The voids should be backfilled with suitable onsite or import materials and compacted in accordance with the recommendations provided in Section 3.2.4.

3.2.2 Protection of Existing Improvements and Utilities

Existing buildings, improvements, and utilities adjacent to the site that are to be protected in place should be located and visually marked prior to grading operations. Excavations adjacent to improvements to be protected in-place or any utility easement should be performed with care, so as not to undermine existing foundations or destabilize the adjacent ground (see the following Section 3.2.3).

Stockpiling of soils more than 5 feet in height at or near existing structures and over utility lines should not be allowed. If deeper removals are required, shoring or other special measures (i.e., setback or laybacks) to provide safety and mitigate the potential for lateral/vertical movements may be required.

3.2.3 Remedial Grading Measures

Remedial grading at the site should consist of removal of undocumented fill, if any, and weathered/unsuitable alluvium in their entirety. In general, we recommend that remedial removals consist of removal and recompaction of soils in the upper 5 to 7 feet, below existing grades across the site. Where deeper unsuitable material or undocumented fill is encountered, the removals should be extended to the bottom of unsuitable materials and/or undocumented fill to competent native soils. Where not limited by adjacent properties, the removals should extend a minimum of 5 feet laterally beyond the building footprints.

The geotechnical consultant should review and approve removal bottoms prior to fill placement and should provide specific recommendations based on actual conditions, if necessary.

Excavations deeper than 4 feet will need to be laid back at a minimum inclination of 1.5H:1V (horizontal to vertical) or provided with shoring. Shallow, unconfined excavations (4 feet or less) may consist of near-vertical excavation, locally, and upon review by the geotechnical consultant. Trench excavations should be performed in accordance with Cal/OSHA requirements for Soil Type "C" (also see Section 3.11). The contractor's qualified person should verify compliance with Cal/OSHA requirements. Excavations near existing structures (within a 1:1 projection) should be provided with shoring that is designed to support the surcharge load of the existing structure. Otherwise, excavations may need to be performed in sections (A/B/C slot cuts). Slot cuts should not exceed more than 20 feet in length. The conditions should be reviewed in the field by the project geotechnical consultant. Additional recommendations should be provided based on the actual conditions encountered during excavation and grading, as needed.

3.2.4 Fill Placement

Upon the completion of remedial grading measures, the approved removal bottoms should be scarified a minimum of 6 inches. The removal bottoms and fill materials should be compacted to at least 90 percent of maximum dry density, as determined by ASTM Test Method D1557. Fill materials should be placed in loose lifts no thicker than 8 inches.

Fill materials should be relatively free of deleterious material. The existing native alluvial soils are considered suitable for re-use as compacted fill provided any deleterious material is

removed. Existing onsite concrete material may be mixed with onsite soils and placed as compacted fill provided that it is broken into pieces that are smaller than 6 inches in the largest diameter. Existing onsite asphalt concrete may also be used in compacted fill materials; however, it should not be placed under the residential pads. Placement of concrete and asphalt as compacted fill should also be approved by the project environmental engineer. The compacted fill soils should be moisture conditioned to above optimum moisture content but within the compactable moisture range.

3.2.5 Import

The geotechnical consultant should evaluate and accept any import soils prior to transportation to the subject site. We recommend that import soils have similar engineering properties as onsite soils. At minimum, the import materials should have Expansion Index of less than 50, Plasticity Index of less than 15, fines content (passing Sieve 200) of less than 50 percent, and negligible soluble sulfate content.

3.3 Settlement Potential

The amount of settlement will depend upon the type of foundation(s) selected and future loading by additional fill and structures. Based on our subsurface exploration, analysis, and considering the remedial grading recommendations provided in this report are implemented during grading, and the anticipated structural loads typically associated with the proposed structures, we estimate that total and differential post-construction settlement (combined static and seismic) will be on the order of 1-inch and ½-inch over a span of 40 feet, respectively.

SA GEO should be provided with the foundation plans and structural loads, once available, in order to further evaluate the potential for post-construction settlement of the proposed building and associated improvements. The parameters provided herein will then be confirmed/updated based on the planned foundations and loads and additional testing and analysis.

3.4 Foundation Design

We understand that post-tension slabs will be used for the proposed residential units. The slab and foundations should be designed by the project structural engineer based on the proposed structure type and the anticipated loading conditions. The following foundation recommendations are provided with the assumption that the recommendations included in Section 3.2 of this report are implemented during grading of the site.

The recommended net allowable bearing capacity for continuous and isolated footings may be calculated based on the following equation:

$q_{all} = 800\ D + 300\ B + 700$ (but not to exceed 3,500 psf)

where:
D = embedment depth of footing, in feet
B = width of footing, in feet

Also, the following parameters may be used for design of foundation and slabs:

- Soil unit weight = 120 pcf
- Soil internal friction angle = 30 degrees
- Coefficient of Friction = 0.38
- Subgrade modulus (k) of 125 pci (corrected for large slabs)
- Soil elastic modulus (Es) of 2,500 psi

The dead load of concrete below adjacent grades (buried concrete foundations) may be neglected. The allowable bearing pressure and friction coefficient may be increased by one-third for wind and seismic loading.

We recommend that strip and isolated footings for the buildings have a minimum embedment depth of 12 inches below the lowest adjacent grade. Continuous footings should be at least 12 inches wide and isolated column footings should be at least 24 inches wide. The footings of freestanding and isolated structures, such as walls and pilasters, should have a minimum embedment depth of 18 inches into approved soils.

Considering that the onsite soils have "very low" expansion potential, the design of post-tension foundation slabs may be based on Post-Tensioning Institute (PTI) DC 10.5 Edition, "Slabs on Stable Soils" using TYPE II slabs per the Building Research Advisory Board (BRAB) report. The following table provides our general guidelines and preliminary recommendations for design of post-tensioned foundations and slabs in accordance with the 2022 California Building Code (CBC) and Post-Tension Institute (PTI) DC 10.5 Edition provisions (as an alternative to Type II slabs per BRAB).

GEOTECHNICAL GUIDELINES
FOR DESIGN OF POST-TENSIONED SLABS

Parameter	Recommendation
Center Lift	
Edge Moisture Variation Distance, e_m	9.00 feet
Center Lift, y_m	0.35 inches
Edge Lift	
Edge Moisture Variation Distance, e_m	5.00 feet
Edge Lift, y_m	0.50 inch
Presaturation, as needed, to obtain the minimum moisture down to the minimum depth	Pre-wet

We recommend that post-tensioned slabs have a thickened edge such that the slab is embedded a minimum of 12 inches below the lowest adjacent grade.

In addition, as indicated in the DC 10.5 Edition of PTI, shape factor calculations should be performed by the project structural engineer in order to determine if strengthening/modification of foundations are necessary. Per PTI guidelines, modifications to the foundations design should be considered if the shape factor (ratio of square of foundation perimeter over foundation area) exceeds 24.

If non-post-tensioned slabs-on-grade and foundations are considered at the site, an effective Plasticity Index of 15 is considered appropriate for the upper 15 feet of soil materials, in accordance with Wire Reinforcement Institute (WRI) method (per the 2022 CBC). For non-post-tensioned slabs, we recommend a minimum embedment of 12 inches below the lowest adjacent grade for the perimeter footings.

The foundations and slabs should also be designed to tolerate the total and differential settlements discussed in Section 3.3 of this report.

For the design of pole-type foundations (i.e., light poles, shade structures, etc.), an allowable soil-bearing pressure ($_{S1}$) of 360 psf/ft may be used for Equation 18-1 (the "pole" equation) of the 2022 CBC Section 1807.3.2.1 to determine the depth of embedment for the footings, considering level ground conditions. The equation is applicable for designed embedment depths of less than 12 feet for the purpose of computing lateral pressure. Also, for vertical loads on pole-type foundations, an allowable skin friction of 250 pounds per square foot may be used. For cast-in-place pole-type foundations, the vertical end bearing pressure should be neglected. We recommend that pole-type foundations have a minimum embedment of 2.5 feet below lowest adjacent grades.

3.5 Interior Slab Moisture Mitigation

In addition to geotechnical and structural considerations, the project owner should also consider interior moisture mitigation when designing and constructing slabs-on-grade.

The intended use of the interior space, type of flooring, and the type of goods in contact with the floor may dictate the need for, and design of, measures to mitigate potential effects of moisture emission from and/or moisture vapor transmission through the slab. Typically, for human occupied structures, a vapor retarder or barrier is recommended under the slab to help mitigate moisture transmission through slabs. The most recent guidelines by the American Concrete Institute (ACI 302.1R-04) suggest that the vapor retarder be placed directly under the slab (no sand layer). However, the location of the vapor retarder may also be subject to the builder's past successful practice. Placement of 1 or 2 inches of sand over the moisture retardant has been common practice by builders in southern California. Specifying the strength of the retarder to resist puncture and its permeance rating is important. These qualities are not necessarily a function of the retarder thickness. A minimum of 10-mil is typical but some materials, such as 10-mil polyethylene ("Visqueen"), may not meet the desired standards for toughness and permeance.

Vapor retarders, when used, should be installed in accordance with standards such as ASTM E 1643 and/or those specified by the manufacturer.

Concrete mix design and curing are also significant factors in mitigating slab moisture problems. Concrete with lower water/cement ratios results in denser, less permeable slabs that also "dry" faster with regard to when flooring can be installed, due to reduced moisture emission quantities and rates. Rewetting of the slab following curing should be avoided since it can result in additional drying time required prior to flooring installation. Proper concrete slab testing prior to flooring installation is also important.

Concrete mix design, the type and location of the vapor retarder should be determined in coordination with all parties involved in the finished product, including the project owner, architect, structural engineer, geotechnical consultant, concrete subcontractors, and flooring subcontractors.

3.6 Retaining Walls Design and Lateral Earth Pressures

Recommendations for lateral earth pressures for permanent retaining walls and structures (if any) with approved onsite drained soils and above groundwater table are as follows:

Conditions	*Level (pcf)*	*2:1 Sloping*
Active	40	65
At-Rest	60	85
Passive	360	180 (sloping down)

These parameters are based on a soil internal friction angle of 30 degrees and soil unit weight of 120 pcf.

To design an unrestrained retaining wall, such as a cantilever wall, the active earth pressure may be used. For a restrained retaining wall, the at-rest pressure should be used. Passive pressure is used to compute lateral soils resistance developed against lateral structural movement. The passive pressures provided above may be increased by one-third for wind and seismic loads. The passive resistance is taken into account only if it is ensured that the soil against embedded structure will remain intact with time. Future landscaping/planting and improvements adjacent to the retaining walls should also be taken into account in the design of the retaining walls. Excessive soil disturbance, trenches (excavation and backfill), future landscaping adjacent to footings and over-saturation can adversely impact retaining structures and result in reduced lateral resistance.

For sliding resistance, the friction coefficient of 0.38 may be used at the concrete and soil interface. The coefficient of friction may be increased by one-third for wind and seismic loading. The retaining walls may also need to be designed for additional lateral loads if other structures or walls are planned within a 1H:1V projection.

The seismic lateral earth pressure for walls retaining more than 6 feet of soil and level backfill conditions may be estimated to be an additional 23 pcf for active and at-rest conditions. The earthquake soil pressure has a triangular distribution and is added to the static pressures. For the active and at-rest conditions, the additional earthquake loading is zero at the top and maximum at the base. The seismic lateral earth pressure does not apply to walls retaining less than, or equal to, 6 feet of soil (2022 CBC Section 1803.5.12).

Drainage behind walls retaining more than 2.5 feet of soil should also be provided in accordance with the attached Figure 4. Specific drainage connections, outlets and avoiding open joints should be considered during design.

3.7 Seismic Design Parameters

The following table summarizes the seismic design criteria for the subject site. The seismic design parameters are developed in accordance with ASCE 7-16 and 2022 CBC. Please note that, considering the proposed structures and anticipated structural periods, site-specific ground-motion hazard analysis was not performed for the site. Per Supplement 3 of ASCE 7-16, the value of S_{M1}, and therefore S_{D1}, have been increased by 50 percent. The seismic response coefficient, Cs, should be determined per the parameters provided below and using equation 12.8-2 of ASCE 7-16.

Selected Seismic Design Parameters from 2022 CBC/ASCE 7-16	***Seismic Design Values***	***Reference***
Latitude	34.0770 North	
Longitude	-117.9369 West	
Controlling Seismic Source	Puente Hills	USGS, 2024
Site Class per Table 20.3-1 of ASCE 7-16	D	
Spectral Acceleration for Short Periods (Ss)	1.663 g	SEA/OSHPD, 2024
Spectral Accelerations for 1-Second Periods (S_1)	0.611 g	SEA/OSHPD, 2024
Site Coefficient F_a, Table 11.4-1 of ASCE 7-16	1.0	SEA/OSHPD, 2024
Site Coefficient F_v, Table 11.4-2 of ASCE 7-16	1.7	
Design Spectral Response Acceleration at Short Periods (S_{DS}) from Equation 11.4-4 of ASCE 7-16	1.109 g	SEA/OSHPD, 2024
Design Spectral Response Acceleration at 1-Second Period (S_{D1}) from Equation 11.4-4 of ASCE 7-16 (Includes 50% increase per Supplement 3)	1.039 g	
T_S, S_{D1} /S_{DS} 11.4.6 of ASCE 7-16	0.937 sec	
T_L, Long-Period Transition Period	8 sec	SEA/OSHPD, 2024
Peak Ground Acceleration Corrected for Site Class Effects (PGA_M) from Equation 11.8-1 of ASCE 7-16	0.775 g	SEA/OSHPD, 2024
Seismic Design Category, Section 11.6 of ASCE 7-16	D	

3.8 Corrosivity

Based on the laboratory testing performed during our study, soluble sulfates exposure in the onsite soils is anticipated to be classified as "S0" per Table 19.3.1.1 of ACI-318-14. Structural concrete elements in contact with soil include footings and building slabs-on-grade. The flatwork and sidewalk concrete are typically not considered structural elements. Concrete mix for structural elements should be based on the "S0" soluble sulfate exposure class of Table 19.3.2.1 in ACI-318-14. Other ACI guidelines for structural concrete are recommended. Also, onsite soils are anticipated to be corrosive to metals.

3.9 Exterior Concrete

The driveway, patio slabs and other flatwork elements should be at least 4 inches thick. Considering that the onsite soils have " Very Low" expansion potential, reinforcement of concrete is not necessary from a geotechnical standpoint; however, reinforcement will reduce the potential for concrete cracking as a result of shrinkage. If reinforcement is used, we recommend that No. 3

bars be placed at 24 inches on center both ways. Concrete slabs should be provided with construction or weakened plane control joints at a maximum spacing of 10 feet. The control joints should have a thickness that is ¼ of the total concrete thickness. Upon the placement and compaction of subgrade soils (per Section 3.2 of these recommendations), the upper 6 inches of the subgrade soils should be pre-wetted to 110 percent of optimum moisture content prior to placement of concrete and reinforcement.

For exterior slabs, the use of a granular sublayer is primarily intended to facilitate presaturation and subsequent construction by providing a better working surface over the saturated soil. It also helps retain the added moisture in the native soil in the event that the slab is not placed immediately. Where these factors are not significant, the layer may be omitted. If used, we recommend placement of 2 to 4 inches of granular material over subgrade soils.

Exterior concrete elements such as curb and gutter, driveways, sidewalks, and patios are susceptible to lifting and cracking when constructed over expansive soils. With expansive soils, the impacts to flatwork/hardscape can be significant, generally requiring removal and replacement of the affected improvements. Please note that reducing concrete problems is often a function of proper slab design, concrete mix design, placement, and curing/finishing practices. Adherence to guidelines of the American Concrete Institute (ACI) is recommended. Also, the amount of post-construction watering, or lack thereof, can have a very significant impact on the adjacent concrete flatwork.

On projects with expansive soils, additional measures such as thickened concrete edges/footings, subdrains and/or moisture barriers should be considered where planters or natural areas with irrigation are located adjacent to the concrete improvements. Design and maintenance of proper surface drainage is also very important. If the concrete will be subject to heavy loading from cars/trucks or other heavy objects, at minimum, a 6-inch-thick pavement section should be used; however, the section should be designed by the geotechnical consultant using appropriate traffic indices for the intended use.

The above recommendations typically are not applied to curb and gutter.

3.10 Preliminary Asphalt Concrete Pavement Design

The testing of a sample collected of the onsite soils shows an R-value of 65. Final structural pavement sections should be based on R-value testing after the completion of grading and in accordance with City of West Covina requirements. Based on an assumed design R-value of 30 and estimated traffic indices (TIs), we recommend the following preliminary pavement sections:

Street Location	***Estimated TIs***	***Pavement Section***
General Drives	TI – 5.5	4-inch AC / 6-inch AB
Parking Stalls	TI – 4.0	3-inch AC / 6-inch AB
AC = Asphalt Concrete, AB = Aggregate Base		

Please note that for two-stage paving operations, we recommend that the final AC cap be a minimum of 1-inch thick.

Asphalt concrete pavement should be placed in accordance with the requirements of Sections 301 and 302 of the Standard Specifications of Public Works Construction (the Greenbook). Prior to construction of pavement sections, the subgrade soils should be scarified to a minimum depth of 6 inches, moisture-conditioned as needed, and recompacted in-place to a minimum of 90 percent relative compaction (per ASTM D1557). Subgrade should be firm prior to aggregate base placement.

Aggregate base materials may consist of crushed aggregate base or crushed miscellaneous base, in accordance with the Greenbook (Section 200-2). The materials should be free of any deleterious materials. Aggregate base materials should be placed in 6- to 8-inch-thick loose lifts, moisture-conditioned as necessary, and compacted to a minimum of 95 percent relative compaction (per ASTM D1557). Asphalt concrete should also be compacted to a minimum relative compaction of 95 percent.

Unpaved median and parkway areas should also be provided with vertical moisture barriers.

3.11 Trench Excavation and Backfill

Excavations should be performed in accordance with the requirements set forth by Cal/OSHA Excavation Safety Regulations (Construction Safety Orders, Section 1504, 1539 through 1547, Title 8, California Code of Regulations). In general, onsite soils may be classified as Type "C" (sandy, friable soils). Cal/OSHA regulations indicate that, for workmen in confined conditions, the steepest allowable slopes in Type "C" soils are 1.5H:1V (horizontal to vertical), for excavations less than 20 feet deep. Where there is no room for these layback slopes, we anticipate that shoring will be necessary.

The subsurface soils, especially at depths below 5 feet, consist of sandy soils that are highly friable, may be locally loose, and prone to caving. Adequate shoring (i.e., shields) should be provided, as deemed necessary. Backfilling may require sand-cement slurry in order to reduce the potential of caving during the removal of shoring. The soils within the adjacent streets are anticipated to be similar to onsite soils. Excavations should be reviewed periodically by the contractor's qualified person to confirm compliance with Cal/OSHA requirements.

Utility trench backfill should be in accordance with City of West Covina's requirements and/or the governing jurisdiction's specifications. In general, native soils are anticipated to be suitable for use as trench backfill (above the pipe zone) from a geotechnical viewpoint; however, the City or governing agency may require select material, sand-slurry, or other measures. The City requires 36 inches of crushed aggregate base, compacted to 95 percent relative compaction, in the upper portion of the trenches within the existing street right of way. Native backfill materials should be compacted to a minimum of 90 percent relative compaction (per ASTM D1557). Rocks greater than 3 inches in largest diameter should generally not be used as trench backfill materials unless approved by the agency and geotechnical consultant of record. Backfill of the pipe zones should generally consist of clean sand (SE 30 or better) or gravel/crushed rock, in accordance with governing agency requirements. Excavation and backfilling of HDPE pipes (if any) should be in accordance with the manufacturer’s requirement and the Greenbook. Select granular backfill (i.e.,

clean sand with SE 30 or better) may be used in lieu of native soils but should also be compacted or densified with water jetting and flooding.

Trenches excavated next to structures and foundations should also be properly backfilled and compacted to provide full lateral support and reduce settlement potential.

3.12 Groundwater

Based on our subsurface exploration and review of published groundwater data in the vicinity of the site, groundwater is anticipated to remain deeper than 100 feet below proposed finish grades. Groundwater is not expected to be encountered during rough grading; however, the presence of locally saturated soils and/or perched water cannot be ruled out, especially during rainy seasons.

3.13 Stormwater Infiltration

Based on our onsite percolation testing, stormwater infiltration is generally considered feasible at the tested locations, between 7 and 15 feet bgs. Additional percolation testing may need to be conducted onsite once a water quality management plan has been prepared in order to evaluate and test the subsurface soils at the actual location and depth of the proposed device(s). For preliminary design purposes, a design infiltration rate of 4.7 inches per hour may be used for devices that are 7 to 15 feet deep. This design infiltration rate includes the required minimum reduction factor (factor-of-safety) of 3 per the guidelines. Higher design infiltration rates may be used locally and at the locations/depths representative of the percolation tests performed during this study (see table in Section 2.6).

Infiltration systems should be designed and constructed in accordance with County of Los Angeles and City of West Covina requirements. Infiltration systems should have a minimum setback of at least 10 feet (or outside a 1:1 plane) from the bottom of adjacent foundations and at least 10 feet from property lines. The soils utilized as the infiltration surface should be reviewed and approved by the geotechnical consultant prior to installation of any infiltration devices. Special care should be taken to limit disturbance to native soils used as the infiltration surface. Proper maintenance will also be required to extend the operational life and reduce siltation or reduction in infiltration performance. All infiltration devices should be provided with an overflow system.

3.14 Surface Drainage and Irrigation

Maintaining adequate surface drainage, proper disposal of run-off water, and control of irrigation will help reduce the potential for future moisture-related problems and differential movements from soil heave/settlement.

Surface drainage should be carefully taken into consideration during design, grading, landscaping, and building construction. Positive surface drainage should be provided to direct surface water away from structures and slopes and toward the street or suitable drainage devices. Ponding of water adjacent to the structures should not be allowed. Buildings should have roof gutter systems and the run-off should be directed to parking lot/street gutters by area drainpipes or by sheet flow over paved areas. Paved areas should be provided with adequate drainage devices, gradients, and curbing to prevent run-off flowing from paved areas onto adjacent unpaved areas.

Considering the climatic conditions in southern California and the relatively low expansion potential of onsite soils, a two-percent slope away from structures should be provided and is in substantial compliance with the 2022 CBC. Also, swales with one-percent slopes are acceptable from our geotechnical standpoint and are common practice in this locale.

Construction of planter areas immediately adjacent to structures should be avoided if possible. If planter boxes are constructed adjacent to or near buildings, the planters should be provided with controls to prevent excessive penetration of the irrigation water into the foundation and flatwork subgrades. Provisions should be made to drain excess irrigation water from the planters without saturating the subgrade below or adjacent to the planters. Raised planter boxes may be drained with weepholes. Deep planters (such as palm tree planters) should be drained with below-ground, water-tight drainage lines connected to a suitable outlet. Moisture barriers should also be considered.

It is also important to maintain a consistent level of soil moisture, not allowing the subgrade soils to become overly dry or overly wet. Properly designed landscaping and irrigation systems can help in that regard.

3.15 Additional Subsurface Exploration and Laboratory Testing

Additional subsurface exploration and laboratory testing may be necessary during the design phase of the project for determination/confirmation of the percolation rates, depending on the location and depth of the proposed system(s). Also, additional laboratory testing should be performed during and upon the completion of grading to confirm/update the design parameters provided herein.

3.16 Review of Future Plans

The project grading, foundation, wall, and landscape plans should be reviewed and accepted by the geotechnical consultant prior to grading and construction.

3.17 Observation and Testing during Grading and Construction

Geotechnical observation and testing should be performed by SA GEO during the following phases of grading and construction:

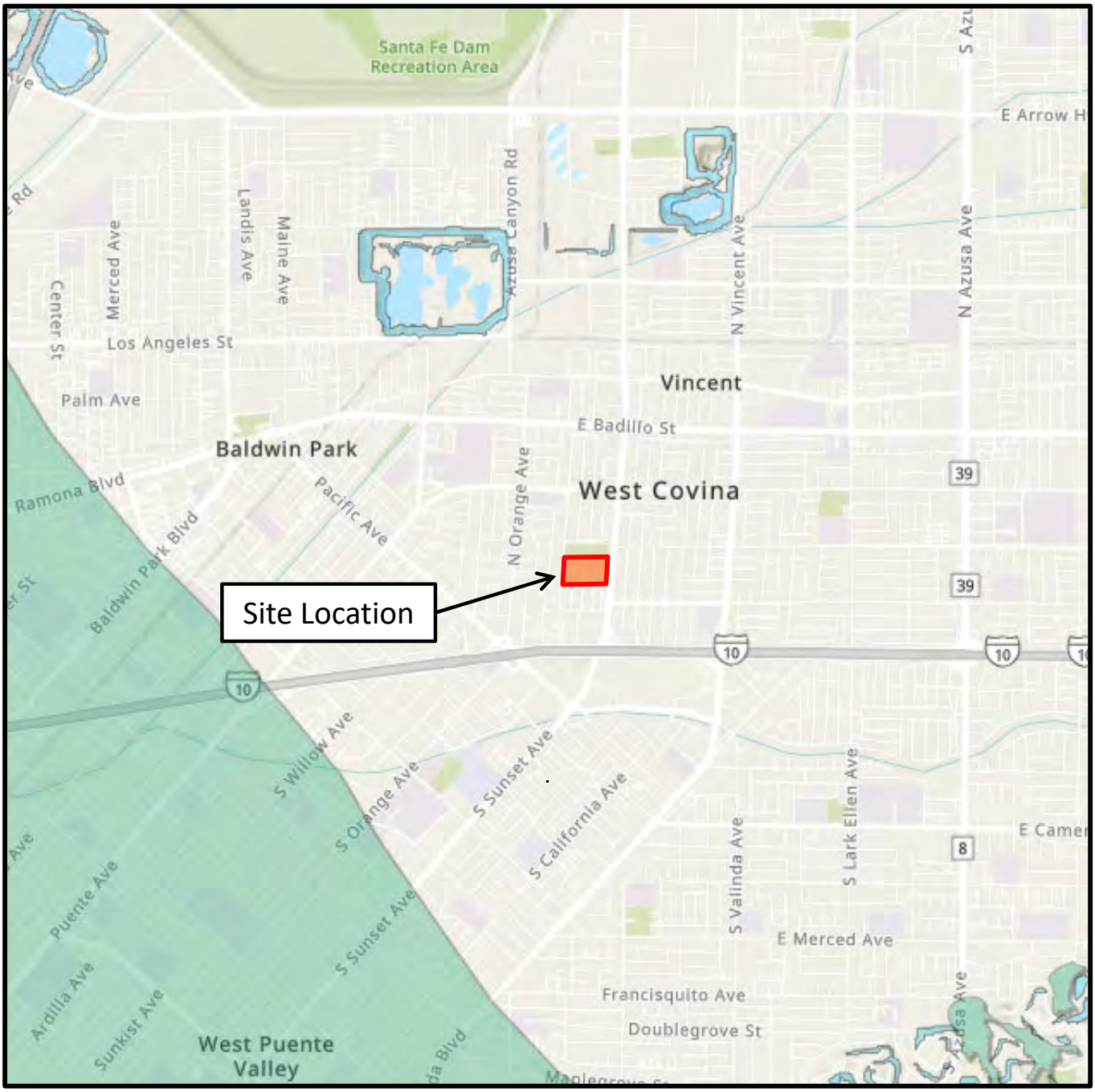
- During site demolition, preparation and clearing;
- During excavations performed for remedial grading and to relocate or remove existing underground improvements;
- During earthwork, including observation and acceptance of remedial removal bottoms and fill placement, including import material, if any;
- Following the completion of grading, in order to verify soil properties for foundations, slab-on-grade and pavements;
- Upon completion of any foundation or structural excavation, prior to pouring concrete;
- During slab and flatwork subgrade preparation prior to pouring concrete;

- During placement of backfill for utility trenches, and stormwater infiltration/filtration devices;
- During placement of backfill for retaining structures (if any);
- During installation and backfill of subdrainage systems (if any); and
- When any unusual soil conditions are encountered.

4.0 LIMITATIONS

This report has been prepared for the exclusive use of our client, Meritage Homes, within the scope of services requested for the subject property described herein. This report or its contents should not be used or relied upon for other projects or purposes, or by other parties without the acknowledgement of SA GEO and the consultation of a geotechnical professional. The means and methods used by SA GEO for this study are based on local geotechnical standards of practice, care, and requirements of governing agencies. No warranty or guarantee, expressed or implied, is given.

Our findings, conclusions, and recommendations are professional opinions based on interpretations and inferences made from geologic and engineering data from specific locations and depths, observed or collected at a given time. By nature, geologic conditions can vary from point to point, can be very different in-between exploration points, and can also change over time. Our conclusions and recommendations are, by nature, preliminary and subject to verification and/or modification during grading and construction when more subsurface data is exposed.



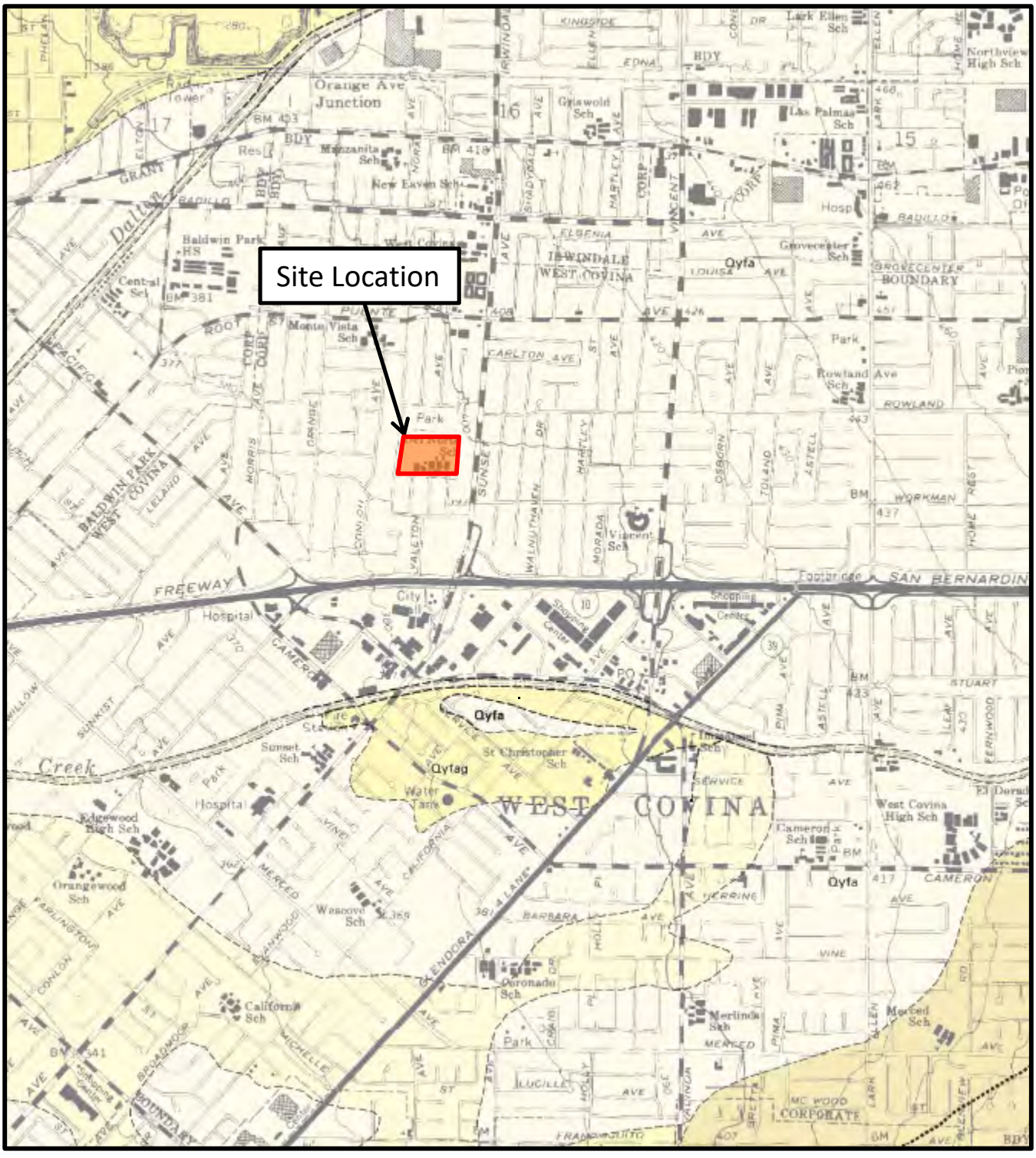
Source: Seismic Hazard Zones, Baldwin Park Quadrangle (CDMG, 1999)

Liquefaction
Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resource Code Section 2693(c) would be required.

Earthquake-Induced Landslides
Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resource Code Section 2693(c) would be required.

Site Location and Seismic Hazard Map

Meritage Homes Proposed Residential Development 1501 Del Norte Street West Covina, California	Project Number: 24082-01 Date: June 14, 2024 Figure 1



Source: Geologic Map of the Baldwin Park 7.5' Quadrangle (CDMG, 2000)

Regional Geologic Map		
Meritage Homes Proposed Residential Development 1501 Del Norte Street West Covina, California	Project Number: 24082-01 Date: June 14, 2024 Figure 2	S/A

Source: Fault Activity Map of California (Jennings and Bryant, 2010)

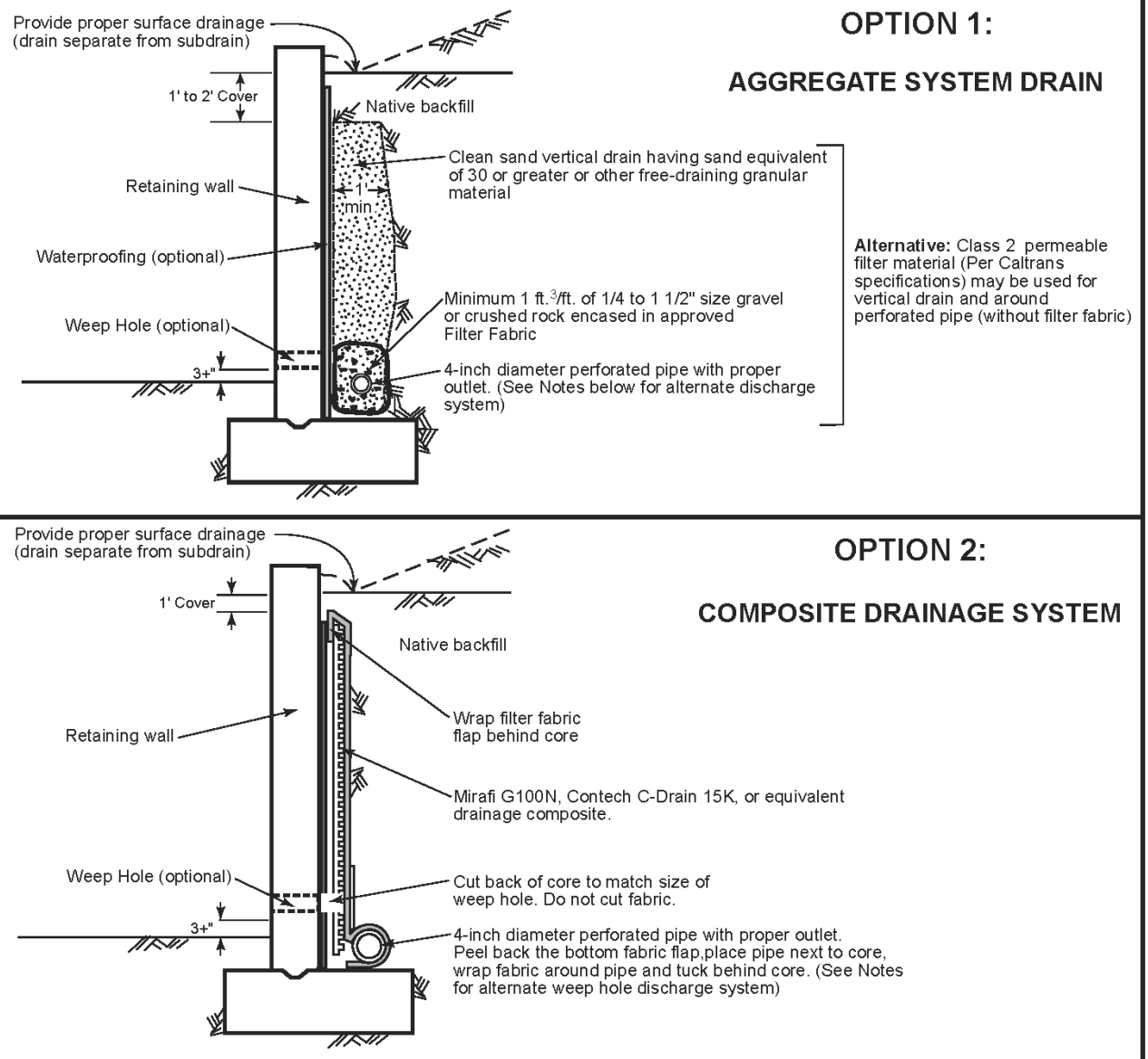
Holocene fault displacement (during past 11,700 years) without historic record. Geomorphic evidence for Holocene faulting includes sag ponds, scarps showing little erosion, or the following features in Holocene age deposits: offset stream courses, linear scarps, shutter ridges, and triangular faceted spurs. Recency of faulting offshore is based on the interpreted age of the youngest strata displaced by faulting.

Late Quaternary fault displacement (during past 700,000 years). Geomorphic evidence similar to that described for Holocene faults except features are less distinct. Faulting may be younger, but lack of younger overlying deposits precludes more accurate age classification.

Quaternary fault (age undifferentiated). Most faults of this category show evidence of displacement sometime during the past 1.6 million years; possible exceptions are faults which displace rocks of undifferentiated Plio-Pleistocene age. Unnumbered Quaternary faults were based on Fault Map of California, 1975. See Bulletin 201, Appendix D for source data.

Pre-Quaternary fault (older that 1.6 million years) or fault without recognized Quaternary displacement. Some faults are shown in this category because the source of mapping used was of reconnaissnce nature, or was not done with the object of dating fault displacements. Faults in this category are not necessarily inactive.

Regional Fault Map	
Meritage Homes Proposed Residential Development 1501 Del Norte Street West Covina, California	Project Number: 24082-01 Date: June 14, 2024 Figure 3



NOTES:

1. PIPE TYPE SHOULD BE PVC OR ABS, SCHEDULE 40 OR SDR35 SATISFYING THE REQUIREMENTS OF ASTM TEST STANDARD D1527, D1785, D2751 , OR D3034.
2. FILTER FABRIC SHALL BE APPROVED PERMEABLE NON-WOVEN POLYESTER, NYLON, OR POLYPROPYLENE MATERIAL.
3. DRAIN PIPE SHOULD HAVE A GRADIENT OF 1 PERCENT MINIMUM.
4. WATERPROOFING MEMBRANE MAY BE REQUIRED FOR A SPECIFIC RETAINING WALL (SUCH AS A STUCCO OR BASEMENT WALL).
5. WEEP HOLES MAY BE PROVIDED FOR LOW RETAINING WALLS (LESS THAN 3 FEET IN HEIGHT) IN LIEU OF A VERTICAL DRAIN AND PIPE AND WHERE POTENTIAL WATER FROM BEHIND THE RETAINING WALL WILL NOT CREATE A NUISANCE WATER CONDITION. IF EXPOSURE IS NOT PERMITTED, A PROPER SUBDRAIN OUTLET SYSTEM SHOULD BE PROVIDED.
6. IF EXPOSURE IS PERMITTED, WEEP HOLES SHOULD BE 2-INCH MINIMUM DIAMETER AND PROVIDED AT 25-FOOT MAXIMUM SPACING ALONG WALL. WEEP HOLES SHOULD BE LOCATED 3+ INCHES ABOVE FINISHED GRADE.
7. SCREENING SUCH AS WITH A FILTER FABRIC SHOULD BE PROVIDED FOR WEEP HOLES/OPEN JOINTS TO PREVENT EARTH MATERIALS FROM ENTERING THE HOLES/JOINTS.
8. OPEN VERTICAL MASONRY JOINTS (I.E., OMIT MORTAR FROM JOINTS OF FIRST COURSE ABOVE FINISHED GRADE) AT 32-INCH MAXIMUM INTERVALS MAY BE SUBSTITUTED FOR WEEP HOLES.
9. THE GEOTECHNICAL CONSULTANT MAY PROVIDE ADDITIONAL RECOMMENDATIONS FOR RETAINING WALLS DESIGNED FOR SELECT SAND BACKFILL.

Retaining Wall Drainage Detail

Figure 4

Appendix A

APPENDIX A

REFERENCES

California Division of Mines and Geology (CDMG), 1998, Seismic Hazard Zone Report for the Baldwin Park 7.5-Minute Quadrangle, Los Angeles County, California, Seismic Hazard Zone Report 022.

California Division of Mines and Geology (CDMG), 1999, Seismic Hazard Zones Map, Baldwin Park Quadrangle, Official Map dated March 25, 1999.

California Division of Mines and Geology (CDMG), 2000, Geologic Map of the Baldwin Park 7.5' Quadrangle, California, DMG Open-File Report 98-30.

California Geological Survey (CGS), 2008, Guidelines for Evaluation and Mitigating Seismic Hazards in California, Special Publication 117A.

California Geological Survey (CGS), 2018, Earthquake Fault Zones, A Guide for Government Agencies, Property Owners / Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California, Special Publication 42, Revised 2018.

Jennings, Charles W. and Bryant W.A., 2010, Fault Activity Map of California, Department of Conservation, California Geological Survey, Geologic Data Map No. 6.

Los Angeles County Department of Public Works, 2021, Guidelines for Geotechnical Investigation and Reporting Low Impact Development Stormwater Infiltration, Document GS200.1, Dated June 30, 2021.

Nationwide Environmental Title Research, LLC (NETR), 2024, Historic Aerials by NETR Online, Date Accessed: June 10, 2024; website address: http://historicaerials.com

State of California Water Resources Control Board, 2024, GeoTracker Website, http://geotracker.waterboards.ca.gov/

Structural Engineers Association/Office of Statewide Health Planning and Development (SEA/OSHPD), 2024, U.S. Seismic Design Maps, web site address: https://seismicmaps.org/; Date Accessed: June 10, 2024.

U.S. Geological Survey, 2024, Unified Hazard Tool, NSHM 2014 Dynamic Deaggregation Program; web site address: https://earthquake.usgs.gov/hazards/interactive/; Date Accessed: June 10, 2024.

Appendix B

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	*GRAVEL AND GRAVELLY SOILS* MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	*CLEAN GRAVELS* (LITTLE OR NO FINES)	**GW**	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	**GM**	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	*CLEAN SANDS* (LITTLE OR NO FINES)	**SW**	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SP	POORLY GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	**SM**	SILTY SANDS, SAND - SILT MIXTURES
			SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	*SILTS AND CLAYS*	LIQUID LIMIT LESS THAN 50	**ML**	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50	**MH**	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			**PT**	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Dual symbols are used to indicate gravels or sand with 5-12% fines and soils with fines classifying as CL-ML. Symbols separated by a slash indicate borderline soil classifications.

Sampler and Symbol Descriptions

- Modified California sample (D-#)
- Standard Penetration Test (S-#)
- Shelby tube sample (T-#)
- Large bulk sample (B-#)
- Small bulk sample (SB-#)
- Approximate depth of groundwater during drilling
- Approximate depth of static groundwater

Note: Number of blows required to advance driven sample 12 inches (or length noted).

Laboratory and Field Test Abbreviations

AL	Atterberg limits (plasticity)
CC	Chemical Testing incl. Soluble Sulfate
CN	Consolidation
DS	Direct Shear
EI	Expansion Index
GS	Grain Size Analysis (Sieve, Hydro. and/or -No. 200)
MD	Maximum Density and Optimum Moisture
RV	Resistance Value (R-Value)
SE	Sand Equivalent
UU	Unconsolidated Undrained Shear Strength

Notes:

1. Soil classifications are based on the Unified Soil Classification System and include color, moisture, and relative density or consistency. Field descriptions have been modified to reflect results of laboratory tests where deemed appropriate. Bedrock descriptions are based on visual classification and include rock type, moisture, color, grain size, strength, and weathering.
2. Descriptions on these boring logs apply only at the specific boring locations and at the time the borings were drilled. They are not warranted to be representative of subsurface conditions at other locations or times.

S/A

KEY TO LOG OF BORING

Date(s)Drilled: 5-24-2024	**Logged By:** AC
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 11”
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)
Sampling Method(s): Modified California	
Approximate Groundwater Depth: Groundwater Not Encountered.	
Comments:	

H-1

Total Depth Drilled (ft) 36.5

Approximate Ground Surface Elevation (ft)

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
0				Surface: Grass			
				Alluvium (Qal)			
	D-1	4	SM	@ 2.5’: Upper: Dark brown silty fine SAND, moist, loose, roots, weathered/disturbed.	13.6	93.0	GS
			SP-SM	Lower: Brown fine to coarse SAND with silt, moist, loose, roots.			
5	D-2	13	SP-SM	@ 5’: Dark yellowish brown to yellowish gray fine to coarse SAND with silt, damp, loose to medium dense, trace gravel, roots in upper sample.	2.4	98.4	CN
	D-3	28	SP	@ 7.5’: Dark yellowish brown to yellowish gray fine to coarse SAND with gravel, damp, medium dense, trace silt.	1.8	109.2	DS
10	D-4	62	SP	@ 10’: Dark yellowish brown to yellowish gray fine to coarse SAND with fine gravel, damp, medium dense, trace silt.	2.3	114.2	
15	D-5	75	SP	@ 15’: Yellowish gray to brownish gray fine to coarse SAND with fine to coarse gravel, damp, dense, trace silt.	3.6	123.1	
20	D-6	40	SP-SM	@ 20’: Yellowish gray to yellowish brown fine to coarse SAND with silt, damp, medium dense, fine to coarse gravel. -Cobbles @ 21’	5.3	101.0	
25	D-7	50/5”	SP	@ 25’: Yellowish gray to light gray fine to coarse SAND, damp, medium dense, fine to coarse gravel.	2.4	109.2	
30							

Log Of Boring

Meritage Homes
Proposed Residential Development
1501 Del Norte Street
West Covina, California

Project Number: 24082-01

Appendix B

Date(s)Drilled: 5-24-2024	**Logged By:** AC	**H-1**
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 11”	Page 2 of 2
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)	
Sampling Method(s): Modified California		**Total Depth Drilled (ft)** 36.5
Approximate Groundwater Depth: Groundwater Not Encountered.		**Approximate Ground Surface Elevation (ft)**
Comments:		

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
30	D-8	50/ 6”	SP	@ 30’: Yellowish gray fine to coarse SAND, damp, dense, fine to coarse gravel.	2.4	119.1	
35	D-9	85	SP	@ 35’: Yellowish gray to yellowish brown fine to coarse SAND with fine to coarse gravel, damp, dense.	3.0	112.3	
40				Notes: Total Depth: 36.5 Feet. Groundwater Not Encountered. Backfilled with Cuttings and Tamped.			
45							
50							
55							
60							

Log Of Boring

Meritage Homes
Proposed Residential Development
1501 Del Norte Street
West Covina, California

Project Number: 24082-01

Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 11”
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)
Sampling Method(s): Modified California, Bulk	
Approximate Groundwater Depth: Groundwater Not Encountered.	
Comments:	

H-2

Total Depth Drilled (ft) 30.5

Approximate Ground Surface Elevation (ft)

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
				Surface: Grass			
0	B-1			**Alluvium (Qal)**			B-1 @ 0-5’ GS, EI, CC, DS, MD
	D-1	4	SM	@ 3’: Dark brown to dark yellowish brown silty fine SAND, moist, loose, roots, weathered/disturbed.	15.4	90.3	
5	D-2	20	SP-SM	@ 6’: Yellowish gray fine to medium SAND with silt, damp, medium dense.	4.0	90.8	
	D-3	23	SP	@ 9’: Yellowish gray to light gray fine to coarse SAND, damp, medium dense, fine gravel.	2.3	110.0	
10	D-4	29	SP-SM	@ 12’: Reddish brown to yellowish gray fine to coarse SAND with silt, damp, very dense, fine gravel.	6.3	127.4	
15	D-5	63	SP	@ 15’: Pale yellowish gray fine to coarse SAND with fine to coarse gravel, damp, dense.	2.1	117.3	
20	D-6	50/6”	SP	@ 20’: Pale yellowish gray fine to coarse SAND with fine to coarse gravel, damp, dense.	1.9	117.4	
25	D-7	50/6”	SP-SM	@ 25’: Yellowish brown to brownish gray fine to coarse SAND with silt, damp, very dense, fine to coarse gravel. -Cobbles @ 27’	3.1	126.4	
30							

Log Of Boring

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Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC	**H-2**
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 11”	
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)	Page 2 of 2
Sampling Method(s): Modified California, Bulk		**Total Depth Drilled (ft)** 30.5
Approximate Groundwater Depth: Groundwater Not Encountered.		**Approximate Ground Surface Elevation (ft)**
Comments:		

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
30	D-8	50/ 5”	SP	@ 30’: Yellowish brown to brownish gray fine to coarse SAND, damp, very dense, gravel.	3.2	113.7	
				Notes: Total Depth: 30.5 Feet. Groundwater Not Encountered. Backfilled with Cuttings and Tamped.			
35							
40							
45							
50							
55							
60							

Log Of Boring

Meritage Homes
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1501 Del Norte Street
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Project Number: 24082-01

Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC	**H-3**
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 11"	
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30")	Page 1 of 2
Sampling Method(s): Modified California		**Total Depth Drilled (ft)** 31
Approximate Groundwater Depth: Groundwater Not Encountered.		**Approximate Ground Surface Elevation (ft)**
Comments:		

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
				Surface: Grass			
0				**Alluvium (Qal)**			
	D-1	4	SM	@ 2.5': Dark brown to dark yellowish brown silty fine SAND, moist, loose, roots, weathered/disturbed.	9.5	96.6	
5	D-2	6	SM	@ 5': Dark brown to yellowish brown silty fine SAND, moist, medium dense, trace coarse gravel, roots, weathered/ disturbed.	5.9	102.5	GS, CN
	D-3	18	SP	@ 7.5': Yellowish gray fine to medium SAND, damp, medium dense, trace fine gravel and coarse sand.	3.6	102.4	
10	D-4	72	SP	@ 10': Yellowish gray to light gray fine to coarse SAND, damp, dense, fine to coarse gravel.	2.4	123.0	
				-Cobbles @ 14'			
15	D-5	59	SP	@ 15': Yellowish gray to light gray fine to coarse SAND, damp, dense, fine to coarse gravel, trace cobbles.	2.2	126.7	
20	D-6	51	SP	@ 20': Yellowish gray to light gray fine to coarse SAND, damp, dense, fine to coarse gravel, trace cobbles.	3.2	123.6	
25	D-7	82	SP	@ 25': Yellowish gray to light gray fine to coarse SAND, damp, dense, fine to coarse gravel and cobbles.	2.6	125.9	
30							

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Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC	**H-3**
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 11”	
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)	Page 2 of 2
Sampling Method(s): Modified California		**Total Depth Drilled (ft)** 31
Approximate Groundwater Depth: Groundwater Not Encountered.		**Approximate Ground Surface Elevation (ft)**
Comments:		

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
30	D-8	50/ 5”	SP	@ 30’: Yellowish gray to light gray fine to coarse SAND, damp, very dense, fine to coarse gravel and cobbles.	4.0	102.7	
				Notes: Total Depth: 31 Feet. Groundwater Not Encountered. Backfilled with Cuttings and Tamped.			
35							
40							
45							
50							
55							
60							

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1501 Del Norte Street
West Covina, California

Project Number: 24082-01

Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 11”
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)
Sampling Method(s): Modified California, Bulk	
Approximate Groundwater Depth: Groundwater Not Encountered.	
Comments:	

H-4

Total Depth Drilled (ft) 50.5

Approximate Ground Surface Elevation (ft)

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
				Surface: Grass			
0	B-1			**Alluvium (Qal)**			B-1 @ 0-5’ GS, EI, CC
	D-1	4	SM	@ 2.5’: Dark brown silty fine SAND, moist, medium dense, trace coarse sand, pores, roots, weathered/disturbed.	9.3	102.3	
5	D-2	5	SM	@ 5’: Dark brown silty fine to medium SAND, moist, medium dense, trace coarse sand, soil pores, roots, weathered/ disturbed.	10.9	100.0	
	D-3	10	SP-SM	@ 7.5’: Yellowish gray to light gray fine to coarse SAND with silt, moist, medium dense, trace fine gravel.	7.0	102.4	GS, AL, CN
10	D-4	18	SP	@ 10’: Yellowish gray fine to coarse SAND, damp, medium dense to dense, trace silt and fine gravel.	2.5	112.7	
15	D-5	54	SP	@ 15’: Yellowish gray fine to coarse gravelly SAND, damp, dense, trace silt.	3.7	113.5	
20	D-6	19	SP-SM	@ 20’: Light yellowish gray fine to coarse SAND with silt and fine to coarse gravel, damp, dense. -Cobbles @ 21’	2.1	125.3	
25	D-7	50/ 6”	SP	@ 25’: Dark gray to dark yellowish gray fine to coarse SAND, damp, dense, coarse gravel, trace silt.	3.1	129.0	
30							

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Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 11”
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)
Sampling Method(s): Modified California, Bulk	
Approximate Groundwater Depth: Groundwater Not Encountered.	
Comments:	

H-4

Total Depth Drilled (ft) 50.5

Approximate Ground Surface Elevation (ft)

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
30	D-8	84	SP	@ 30’: Yellowish brown fine to medium SAND, moist, medium dense, micaceous. -Cobbles @ 33’	4.8	104.7	
35	D-9	50/ 6”	SP	@ 35’: Yellowish brown fine to coarse SAND, damp, very dense, coarse gravel, trace cobbles.	3.2	126.5	
40	D-10	50/ 6”	SP	@ 40’: Yellowish brown fine to coarse SAND, damp, very dense, fine to coarse gravel, trace cobbles.	2.8	123.7	
45	D-11	50/ 2”	SP	@ 45’: Yellowish gray to light gray fine to coarse SAND, damp, very dense, fine to coarse gravel and cobbles.	3.1	137.3	
50	D-12	50/ 5”		@ 50’: No Sample Recovery.			
55				Notes: Total Depth: 50.5 Feet. Groundwater Not Encountered. Backfilled with Cuttings and Tamped.			
60							

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Appendix B

Date(s)Drilled: 5-24-2024	**Logged By:** AC	**H-5**
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 11”	Page 1 of 1
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)	
Sampling Method(s): Modified California, Bulk		**Total Depth Drilled (ft)** 26.5
Approximate Groundwater Depth: Groundwater Not Encountered.		**Approximate Ground Surface Elevation (ft)**
Comments:		

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
				Surface: Grass			
0	B-1			**Alluvium (Qal)**			B-1 @ 0-5’
	D-1	5	SM	@ 2.5’: Dark brown silty fine SAND, moist, loose, roots, weathered/disturbed.	11.4	102.2	
5	D-2	6	SM	@ 5’: Dark brown silty fine SAND, moist, loose, roots, weathered/disturbed, less silty in sampler tip.	11.0	101.1	
	D-3	16	SP	@ 7.5’: Yellowish gray to yellowish brown fine to medium SAND, damp, loose to medium dense.	3.8	99.2	GS, AL, CN
10	D-4	24	SP	@ 10’: Yellowish gray fine to coarse SAND, damp, medium dense, trace coarse gravel.	2.6	118.3	
				-Cobbles @ 14’			
15	D-5	40	SP	@ 15’: Yellowish gray to light gray fine to coarse SAND with fine to coarse gravel, damp, medium dense.	3.0	102.9	
20	D-6	50/ 5”	SP	@ 20’: Yellowish gray to yellowish brown gravelly fine to coarse SAND, damp, dense, trace coarse gravel. – SAMPLE DISTURBED –	2.1	117.1	
25	D-7	50/ 5”	SP	@ 25’: Yellowish gray to yellowish brown fine to coarse SAND, damp, dense, fine gravel, trace coarse gravel.	2.4	112.1	
				Notes: Total Depth: 26.5 Feet. Groundwater Not Encountered. Backfilled with Cuttings and Tamped.			
30							

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Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC	**P-1**
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 9"	Page 1 of 1
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30")	
Sampling Method(s): Modified California		**Total Depth Drilled (ft)** 10.5
Approximate Groundwater Depth: Groundwater Not Encountered.		**Approximate Ground Surface Elevation (ft)**
Comments:		

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
0				Surface: Grass **Alluvium (Qal)**			
	D-1	4	SM	@ 3': Dark brown silty fine SAND, moist, loose, trace fine gravel, roots, weathered/disturbed.	13.2	87.7	
5	D-2	9	SM	@ 6': Dark brown to dark yellowish brown silty fine SAND, moist, loose, trace fine gravel.	8.6	99.0	
	D-3	19	SP	@ 9': Yellowish gray to light gray fine to coarse SAND, damp, medium dense.	2.1	110.8	GS
10				Notes: Total Depth: 10.5 Feet. Groundwater Not Encountered. 10' Slotted 2" Well Pipe Installed. Backfilled with No. 3 Sand. Presoak performed 5/23/24. Percolation Testing Performed 5/23/24. Backfilled with Cuttings/Sand.			
15							
20							
25							
30							

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Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 9”
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)
Sampling Method(s): Modified California	
Approximate Groundwater Depth: Groundwater Not Encountered.	
Comments:	

P-2

Total Depth Drilled (ft) 15

Approximate Ground Surface Elevation (ft)

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
				Surface: Grass			
0				**Alluvium (Qal)**			
	D-1	6	SM	@ 3’: Dark brown silty fine SAND, moist, loose, roots, weathered/disturbed.	12.7	100.4	
5	D-2	18	SP	@ 6’: Yellowish gray to yellowish brown fine to coarse SAND, damp, medium dense, trace fine gravel.	3.2	104.4	
	D-3	29	SP	@ 9’: Yellowish gray fine to coarse SAND with fine to coarse gravel, damp, medium dense.	2.5	110.0	
10	D-4	50	SP	@ 12’: Yellowish gray to yellowish brown fine to coarse SAND with fine to coarse gravel, damp, medium dense, cobble in sampler tip.	4.5	104.8	GS
15				Notes: Total Depth: 15 Feet. Groundwater Not Encountered. 10’ Slotted; 5’ Solid 2” Well Pipe Installed. Backfilled with No. 3 Sand. Presoak performed 5/23/24. Percolation Testing Performed 5/23/24. Backfilled with Cuttings/Sand.			
20							
25							
30							

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Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC	**P-3**
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 9"	
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30")	Page 1 of 1
Sampling Method(s): Modified California		**Total Depth Drilled (ft)** 10.5
Approximate Groundwater Depth: Groundwater Not Encountered.		**Approximate Ground Surface Elevation (ft)**
Comments:		

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
				Surface: Grass			
0				**Alluvium (Qal)**			
	D-1	5	SM	@ 3': Dark brown to yellowish brown silty fine to medium SAND, moist, loose, trace fine gravel, roots, weathered/ disturbed.	8.3	98.5	
5	D-2	16	SP	@ 6': Yellowish gray to light gray fine to medium SAND, damp, loose to medium dense, trace coarse gravel.	3.2	93.2	
	D-3	26	SP	@ 9': Yellowish gray to gray fine to coarse SAND with gravel and cobbles, damp, medium dense.	1.6	114.8	GS, CN
10				Notes: Total Depth: 10.5 Feet. Groundwater Not Encountered. 10' Slotted 2" Well Pipe Installed. Backfilled with No. 3 Sand. Presoak performed 5/24/24. Percolation Testing Performed 5/24/24. Backfilled with Cuttings/Sand.			
15							
20							
25							
30							

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Appendix B

Date(s)Drilled: 5-23-2024	**Logged By:** AC
Drilling Method: Hollow Stem	**Drill Bit Size/Type:** 9”
Drill Rig Type: CME 85	**Hammer Type:** Auto (140lbs @ 30”)
Sampling Method(s): Modified California	
Approximate Groundwater Depth: Groundwater Not Encountered.	
Comments:	

P-4

Total Depth Drilled (ft) 15

Approximate Ground Surface Elevation (ft)

Depth (ft)	SAMPLES Type Number	SAMPLES Blows Per Foot	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	REMARKS
				Surface: 2.25” AC			
0				**Alluvium (Qal)**			
	D-1	7	SM	@ 3’: Dark brown to yellowish brown silty fine to medium SAND, moist, loose, roots, weathered/disturbed.	10.0	98.8	
5	D-2	20	SP	@ 6’: Yellowish gray to yellowish brown fine to medium SAND, damp, medium dense, trace fine gravel.	3.4	108.6	
	D-3	31	SP	@ 9’: Yellowish gray fine to coarse SAND with fine gravel, damp, dense, slightly friable, trace coarse gravel.	2.1	120.0	
10	D-4	37	SP	@ 12’: Yellowish gray fine to coarse SAND with fine gravel, damp, medium dense, slightly friable, trace coarse gravel.	3.6	119.0	GS
15				Notes: Total Depth: 15 Feet. Groundwater Not Encountered. 10’ Slotted; 5’ Solid 2” Well Pipe Installed. Backfilled with No. 3 Sand. Presoak performed 5/24/24. Percolation Testing Performed 5/24/24. Backfilled with Cuttings/Sand.			
20							
25							
30							

Log Of Boring

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Appendix B

Appendix C

MATERIALS FINER THAN 75-µm (No. 200) SIEVE by WASHING

ASTM D1140

Client: SA Geotechnical, Inc
Project: 1501 Del Norte Street
Project No.: 24082-01

HAI Project No.: SAG-24-026
Performed by: GA
Checked by: KL
Date: 5/31/2024

Boring No.	Sample No.	Depth (ft)	Sample Description (USCS)	Dry Soil before Wash + $W_{Container}$	Dry Soil after #200 Wash + $W_{Container}$	$W_{Container}$	Wt of soil retained on # 200 sieve	Initial wt of dry soil	**Soil % passing 200 sieve**
				g	g	g	g	g	**%**
H-1	D1	2.5	Brown, Poorly Graded Sand with Silt (SP-SM)	593.43	572.76	216.74	356.02	376.69	**5.49**
H-2	B1	0-5	Brown, Silty Sand (SM)	597.40	412.11	221.68	190.43	375.72	**49.32**
H-3	D2	5	Brown, Silty Sand (SM)	591.20	527.26	221.74	305.52	369.46	**17.31**
H-4	B1	0-5	Brown, Silty Sand (SM)	672.63	515.36	220.52	294.84	452.11	**34.79**
H-4	D3	9	Light Brown, Poorly Graded Sand with Silt (SP-SM)	576.52	548.19	216.86	331.33	359.66	**7.88**
H-5	D3	7.5	Light Brown, Poorly Graded Sand (SP)	591.53	583.86	220.51	363.35	371.02	**2.07**

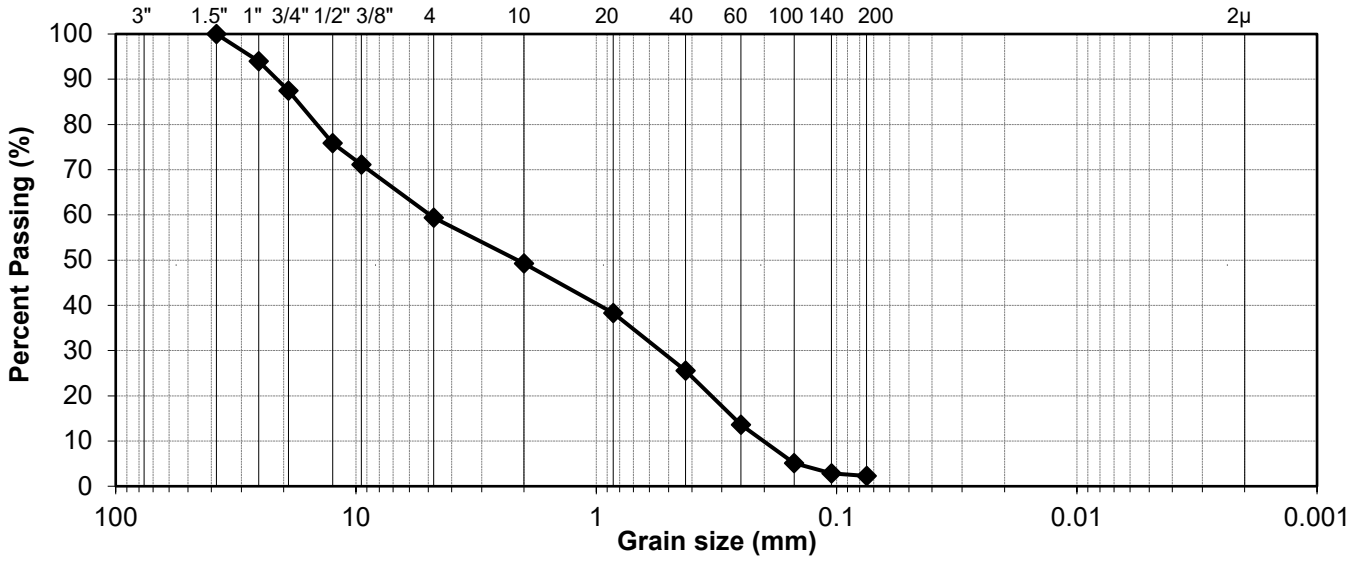
PARTICLE-SIZE ANALYSIS OF SOILS

ASTM D6913

Client:	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	GA
Project No.:	24082-01	*Checked by:*	KL
Boring No.:	P-1	*Date:*	05/31/24
Sample No.:	D-3		
Depth (ft):	9		
Sample Description:	Light Brown, Poorly Graded Sand with Gravel (SP)		

Dry Weight (g) **506.9**

Sieve Size	Aperture	Weight Retained	% Retained	**% Passing**	**Project Specification**
	mm	g	%	**%**	**%**
3"	76.2	0.00	0.0	**100.0**	-
1.5"	38.1	0.00	0.0	**100.0**	-
1"	25.4	30.42	6.0	**94.0**	-
3/4 "	19.1	33.18	6.5	**87.5**	-
1/2 "	12.5	58.66	11.6	**75.9**	-
3/8 "	9.5	24.04	4.7	**71.1**	-
# 4	4.75	59.51	11.7	**59.4**	-
# 10	2.00	51.42	10.1	**49.3**	-
# 20	0.85	55.49	10.9	**38.3**	-
# 40	0.425	64.54	12.7	**25.6**	-
# 60	0.250	60.60	12.0	**13.6**	-
# 100	0.150	43.24	8.5	**5.1**	-
# 140	0.105	11.31	2.2	**2.9**	-
# 200	0.075	2.98	0.6	**2.3**	-
Pan		11.53	2.3	**0.0**	-



Particle-Size Analysis	D_{10}	0.21	% Gravel	% Sand	% Fines
	D_{30}	0.57	40.6	57.1	2.3
	D_{60}	4.99	Sample Description / USCS Classification		
	C_u	24.06	Light Brown, Poorly Graded Sand with Gravel (SP)		
	C_c	0.32			

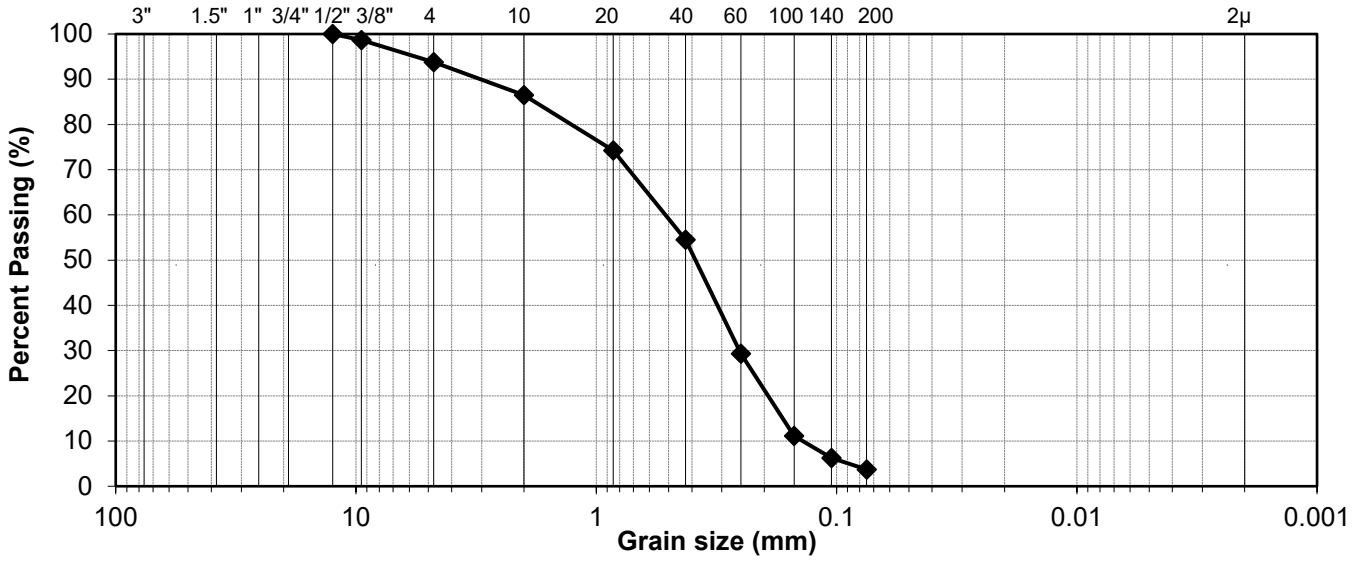
PARTICLE-SIZE ANALYSIS OF SOILS

ASTM D6913

Client:	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	GA
Project No.:	24082-01	*Checked by:*	KL
Boring No.:	P-2	*Date:*	05/31/24
Sample No.:	D-4		
Depth (ft):	12		
Sample Description:	Light Brown, Poorly Graded Sand (SP)		

Dry Weight (g) **384.4**

Sieve Size	Aperture	Weight Retained	% Retained	**% Passing**	**Project Specification**
	mm	g	%	**%**	**%**
3"	76.2	0.00	0.0	**100.0**	-
1.5"	38.1	0.00	0.0	**100.0**	-
1"	25.4	0.00	0.0	**100.0**	-
3/4 "	19.1	0.00	0.0	**100.0**	-
1/2 "	12.5	0.00	0.0	**100.0**	-
3/8 "	9.5	5.08	1.3	**98.7**	-
# 4	4.75	18.77	4.9	**93.8**	-
# 10	2.00	28.18	7.3	**86.5**	-
# 20	0.85	47.04	12.2	**74.2**	-
# 40	0.425	75.94	19.8	**54.5**	-
# 60	0.250	96.67	25.1	**29.3**	-
# 100	0.150	69.93	18.2	**11.1**	-
# 140	0.105	18.69	4.9	**6.3**	-
# 200	0.075	9.79	2.5	**3.7**	-
Pan		14.29	3.7	**0.0**	-



Particle-Size Analysis	D_{10}	0.14	% Gravel	% Sand	% Fines
	D_{30}	0.25	6.2	90.1	3.7
	D_{60}	0.54	Sample Description / USCS Classification		
	C_u	3.90	Light Brown, Poorly Graded Sand (SP)		
	C_c	0.85			

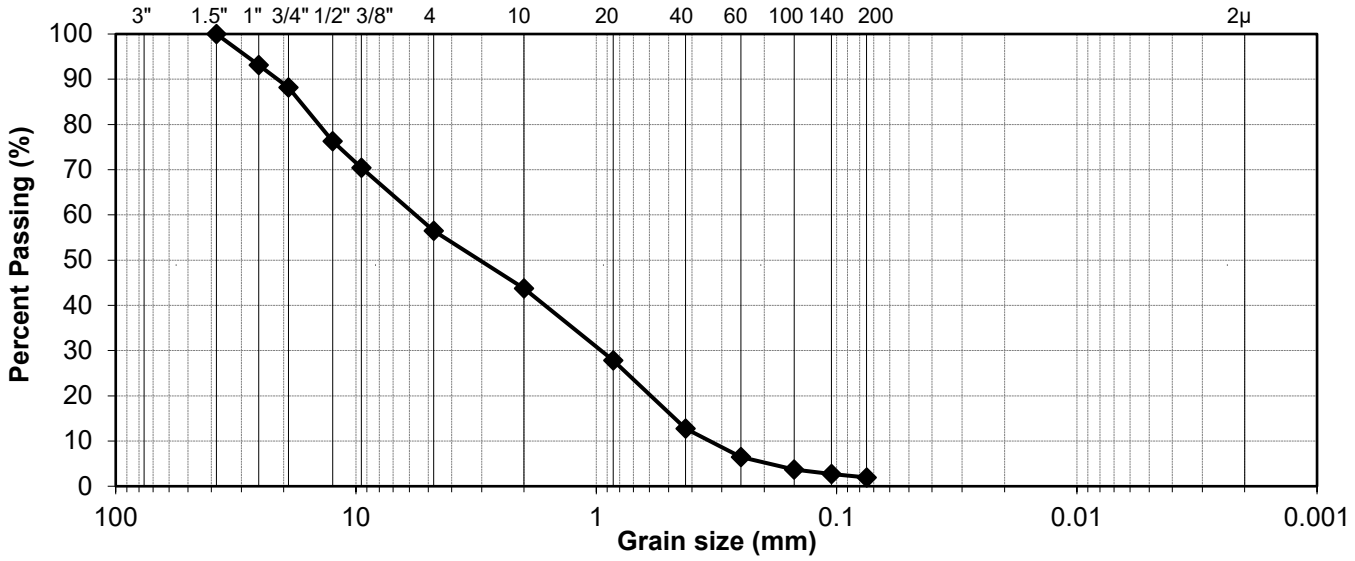
PARTICLE-SIZE ANALYSIS OF SOILS

ASTM D6913

Client:	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	GA
Project No.:	24082-01	*Checked by:*	KL
Boring No.:	P-3	*Date:*	05/31/24
Sample No.:	D-3		
Depth (ft):	9		
Sample Description:	Light Brown, Poorly Graded Sand with Gravel (SP)		

Dry Weight (g) **719.8**

Sieve Size	Aperture	Weight Retained	% Retained	**% Passing**	**Project Specification**
	mm	g	%	**%**	**%**
3"	76.2	0.00	0.0	**100.0**	-
1.5"	38.1	0.00	0.0	**100.0**	-
1"	25.4	49.45	6.9	**93.1**	-
3/4 "	19.1	35.51	4.9	**88.2**	-
1/2 "	12.5	85.83	11.9	**76.3**	-
3/8 "	9.5	42.04	5.8	**70.4**	-
# 4	4.75	100.29	13.9	**56.5**	-
# 10	2.00	91.93	12.8	**43.7**	-
# 20	0.85	114.28	15.9	**27.9**	-
# 40	0.425	108.76	15.1	**12.7**	-
# 60	0.250	45.42	6.3	**6.4**	-
# 100	0.150	19.44	2.7	**3.7**	-
# 140	0.105	7.28	1.0	**2.7**	-
# 200	0.075	5.55	0.8	**1.9**	-
Pan		14.02	1.9	**0.0**	-



Particle-Size Analysis	D_{10}	0.35	% Gravel	% Sand	% Fines
	D_{30}	1.01	43.5	54.6	1.9
	D_{60}	5.94	Sample Description / USCS Classification		
	C_u	17.03	Light Brown, Poorly Graded Sand with Gravel (SP)		
	C_c	0.49			

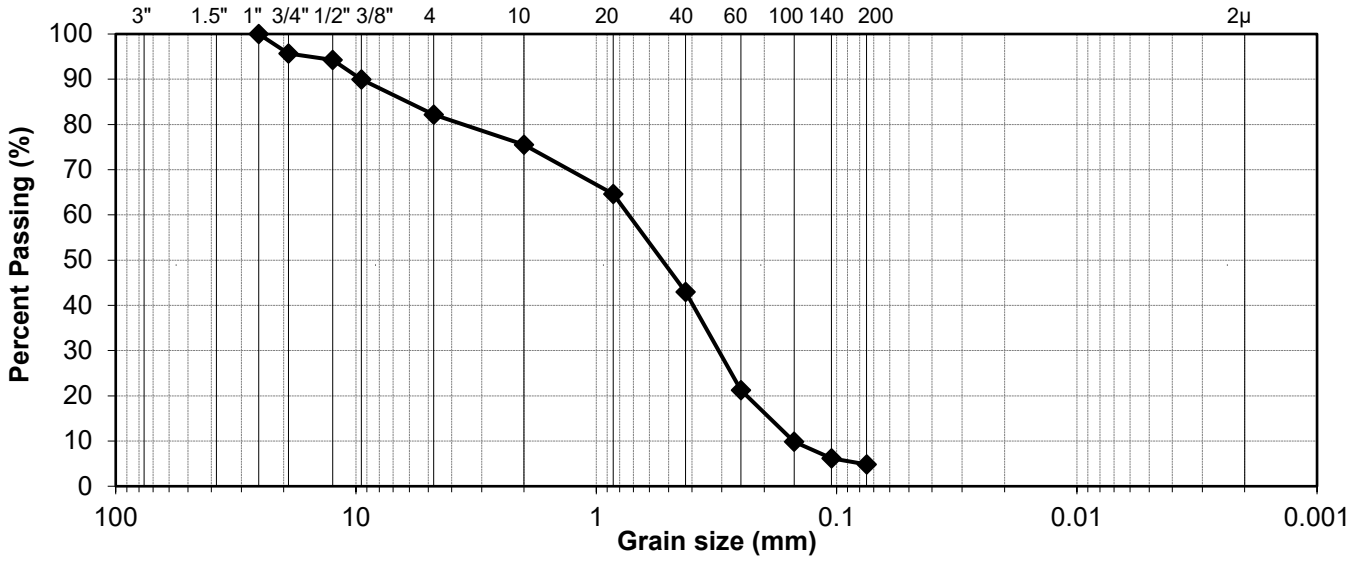
PARTICLE-SIZE ANALYSIS OF SOILS

ASTM D6913

Client:	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	GA
Project No.:	24082-01	*Checked by:*	KL
Boring No.:	P-4	*Date:*	05/31/24
Sample No.:	D-4		
Depth (ft):	12		
Sample Description:	Light Brown, Poorly Graded Sand with Gravel (SP)		

Dry Weight (g) **468.2**

Sieve Size	Aperture	Weight Retained	% Retained	**% Passing**	**Project Specification**
	mm	g	%	**%**	**%**
3"	76.2	0.00	0.0	**100.0**	-
1.5"	38.1	0.00	0.0	**100.0**	-
1"	25.4	0.00	0.0	**100.0**	-
3/4 "	19.1	20.27	4.3	**95.7**	-
1/2 "	12.5	6.62	1.4	**94.3**	-
3/8 "	9.5	20.08	4.3	**90.0**	-
# 4	4.75	36.55	7.8	**82.2**	-
# 10	2.00	31.27	6.7	**75.5**	-
# 20	0.85	50.72	10.8	**64.7**	-
# 40	0.425	101.48	21.7	**43.0**	-
# 60	0.250	101.78	21.7	**21.2**	-
# 100	0.150	53.21	11.4	**9.9**	-
# 140	0.105	17.27	3.7	**6.2**	-
# 200	0.075	6.37	1.4	**4.8**	-
Pan		22.60	4.8	**0.0**	-



Particle-Size Analysis	D_{10}	0.15	% Gravel	% Sand	% Fines
	D_{30}	0.32	17.8	77.3	4.8
	D_{60}	0.76	Sample Description / USCS Classification		
	C_u	5.02	Light Brown, Poorly Graded Sand with Gravel (SP)		
	C_c	0.90			

Liquid Limit, Plastic Limit, and Plasticity Index of Soils

ASTM D4318

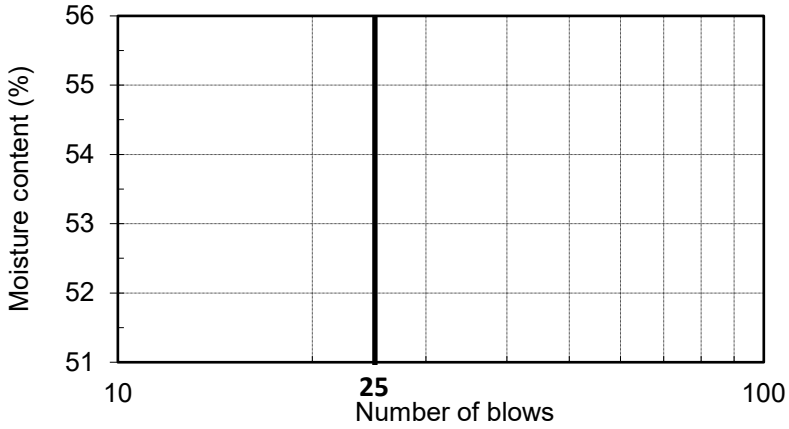
Client:	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	GA
Project No.:	24082-01	*Checked by:*	KL
Boring No.:	H-4	*Date:*	05/31/24
Sample No.:	D3		
Depth (ft):	9.0		
Soil Description:	Light Brown, Poorly Graded Sand with Silt (SP-SM)		

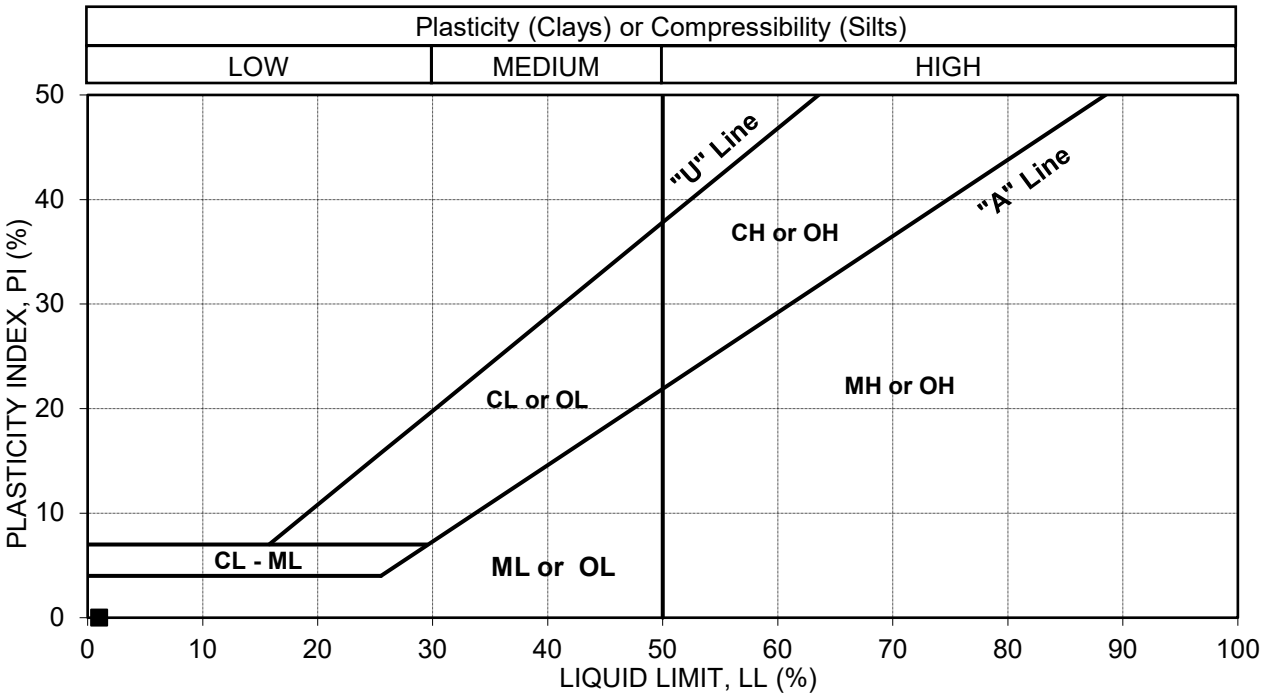
Test		LL	LL	LL	PL	PL
No. of blows	-	-	-	-	-	-
Wt. of Wet Soil + Container	(g)	-	-	-	-	-
Wt. of Dry soil + Container	(g)	-	-	-	-	-
Wt. of Container	(g)	-	-	-	-	-
Water content	**(%)**	-	-	-	-	-

Liquid Limit (LL)	-
Plastic Limit (PL)	-
Plasticity Index (PI)	-
USCS	**NP**

Remarks:

- Fine Sample is Less than 50% of Passing #200)





Liquid Limit, Plastic Limit, and Plasticity Index of Soils

ASTM D4318

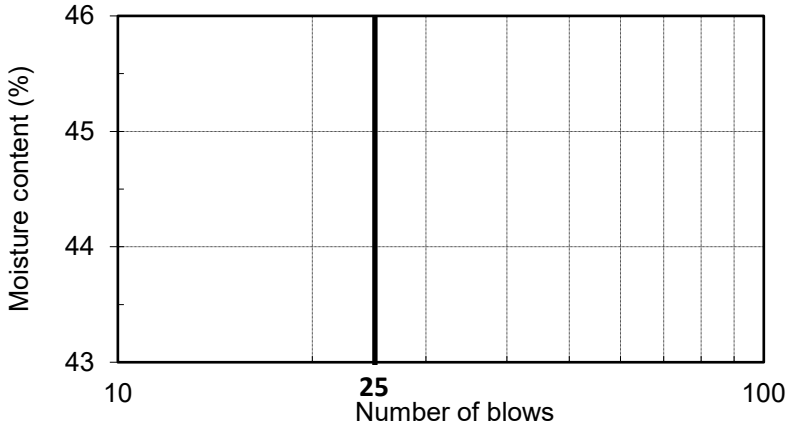
Client:	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	GA
Project No.:	24082-01	*Checked by:*	KL
Boring No.:	H-5	*Date:*	05/31/24
Sample No.:	D3		
Depth (ft):	7.5		
Soil Description:	Light Brown, Poorly Graded Sand (SP)		

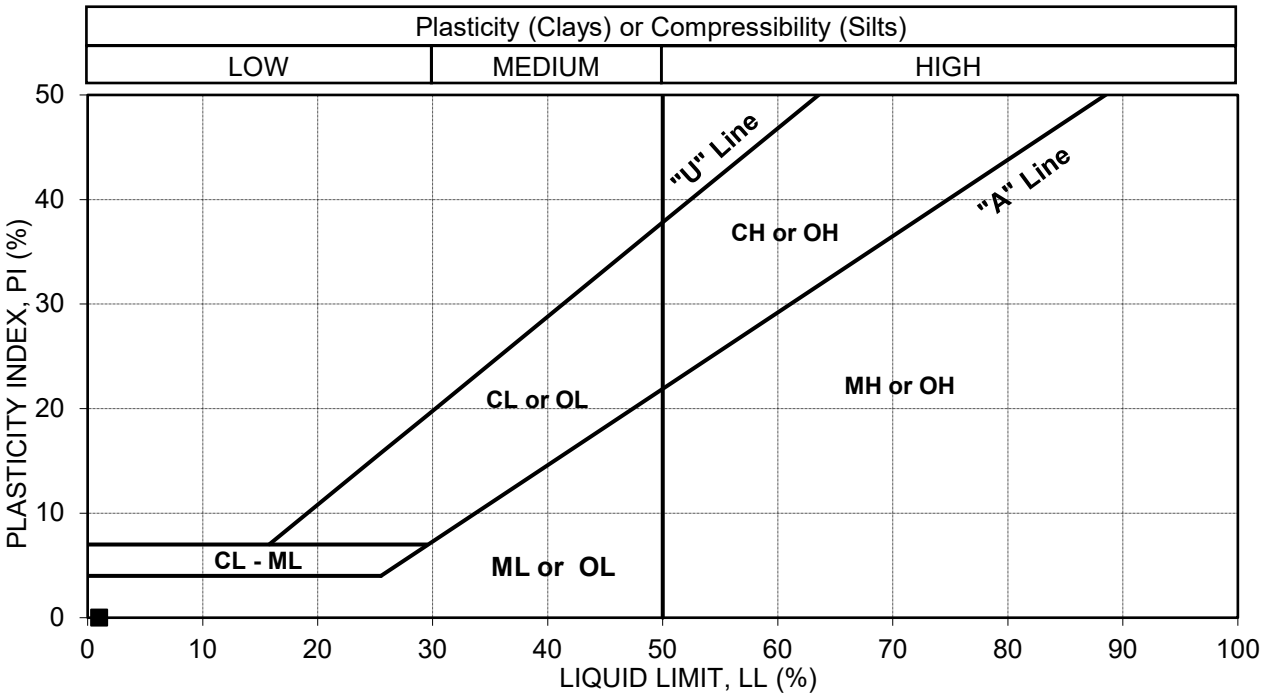
Test		LL	LL	LL	PL	PL
No. of blows	-	-	-	-	-	-
Wt. of Wet Soil + Container	(g)	-	-	-	-	-
Wt. of Dry soil + Container	(g)	-	-	-	-	-
Wt. of Container	(g)	-	-	-	-	-
Water content	**(%)**	-	-	-	-	-

Liquid Limit (LL)	-
Plastic Limit (PL)	-
Plasticity Index (PI)	-
USCS	**NP**

Remarks:

- Fine Sample is Less than 50% of Passing #200)





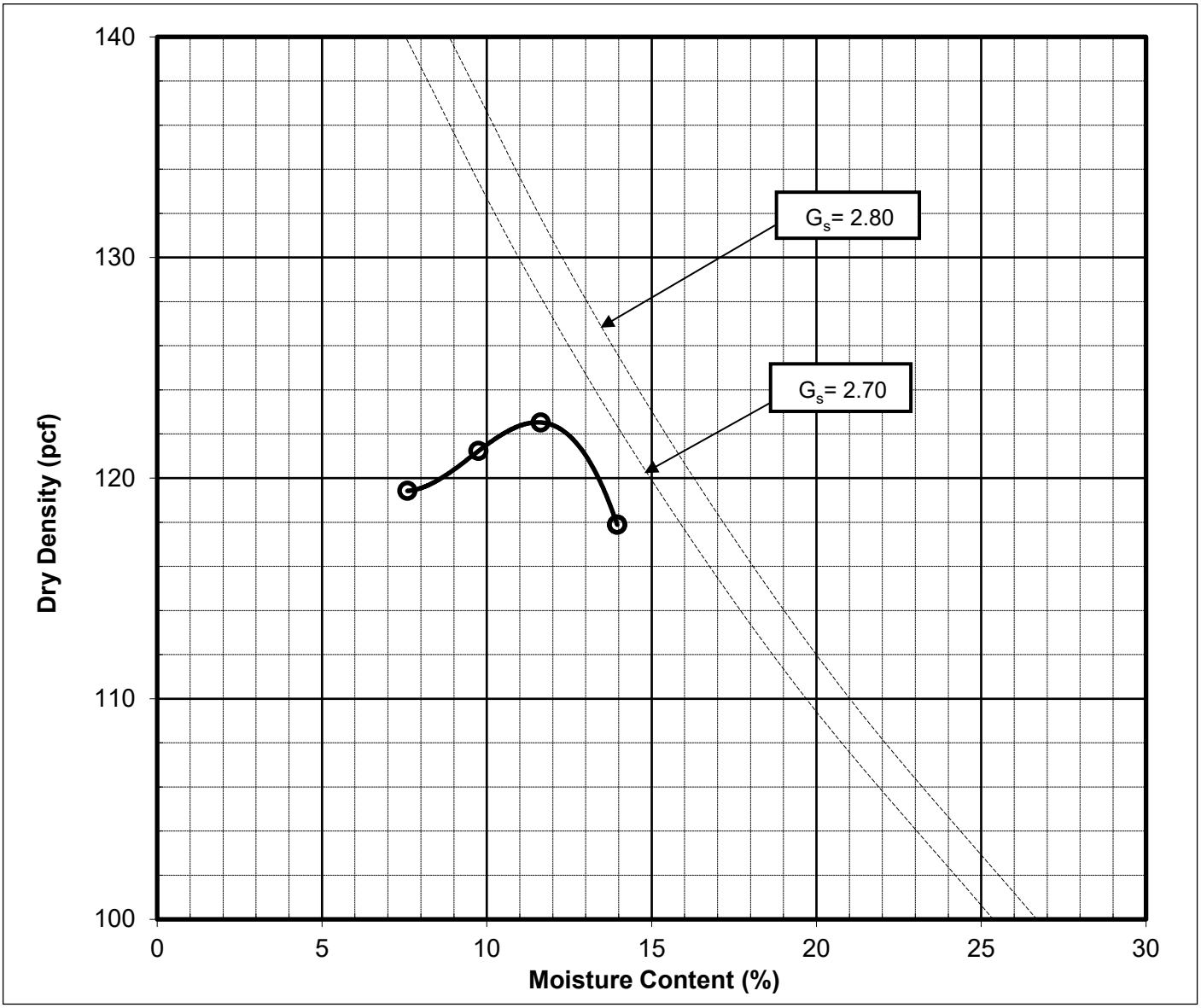
Compaction Characteristics of Soils Using Modified Effort

ASTM D1557

Client:	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project:	1501 Del Norte Street	*Tested by:*	GA
Project No.:	24082-01	*Checked by:*	KL
Boring Number:	H-2	*Date:*	05/31/24
Sample Number:	B1		
Depth (ft) :	0-5		
Soil Description:	Brown, Silty Sand (SM)		

Mold size (in)	4"
Procedure	A
Weight Retained on:	1.9
Remarks:	

Maximum Dry Density (pcf)	**122.5**
Optimum Moisture Content (%)	**11.5**
Corrected Maximum Dry Density (pcf)	**-**
Corrected Optimum Moisture Content (%)	**-**



EXPANSION INDEX

ASTM D4829

Client:	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	GA
Project No.:	24082-01	*Checked by:*	KL
Boring No.:	H-2	*Date:*	5/31/2024
Sample No.:	B1		
Depth (ft):	0-5	*Apparatus No.:*	2
Soil Description:	Brown, Silty Sand (SM)		

Initial Specimen Info		
Wt. of wet soil + cont.	243.79	g
Wt. of dry soil + cont.	229.04	g
Wt. of container	24.44	g
Wt. of water	14.75	g
Wt. of dry soil	204.60	g
Moisture Content	**7.2**	**%**

Final Specimen Info		
Wt. of wet soil + cont.	654.61	g
Wt. of dry soil + cont.	591.17	g
Wt. of container	206.33	g
Wt. of water	63.44	g
Wt. of dry soil	384.84	g
Moisture Content	**16.5**	**%**

Wt. of wet soil + ring	625.55	g
Wt. of ring	206.33	g
Wt. of wet soil	419.22	g
Wet density of soil	130.6	pcf
Dry density of soil	121.8	pcf
Specific gravity of soil	2.68	-
Saturation	**51.8**	**%**

Date & Time	**Elapsed Time (min)**	**Dial Reading**	**Δh, Expansion**
6/6/2024 16:00	0	0	0
6/6/2024 16:10	10	0.0000	0
Add Distilled Water to Sample			
6/7/2024 16:00	1440	0.0025	0.0025

Expansion Index = **3** **Very Low**

EXPANSION INDEX

ASTM D4829

Client:	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	GA
Project No.:	24082-01	*Checked by:*	KL
Boring No.:	H-4	*Date:*	5/31/2024
Sample No.:	B1		
Depth (ft):	0-5	*Apparatus No.:*	3
Soil Description:	Brown, Silty Sand (SM)		

Initial Specimen Info		
Wt. of wet soil + cont.	231.17	g
Wt. of dry soil + cont.	214.68	g
Wt. of container	24.54	g
Wt. of water	16.49	g
Wt. of dry soil	190.14	g
Moisture Content	**8.7**	**%**

Final Specimen Info		
Wt. of wet soil + cont.	635.28	g
Wt. of dry soil + cont.	570.53	g
Wt. of container	197.22	g
Wt. of water	64.75	g
Wt. of dry soil	373.31	g
Moisture Content	**17.3**	**%**

Wt. of wet soil + ring	607.05	g
Wt. of ring	197.22	g
Wt. of wet soil	409.83	g
Wet density of soil	124.9	pcf
Dry density of soil	115.0	pcf
Specific gravity of soil	2.68	-
Saturation	**51.1**	**%**

Date & Time	**Elapsed Time (min)**	**Dial Reading**	**Δh, Expansion**
6/6/2024 16:20	0	0	0
6/6/2024 16:30	10	0.0000	0
Add Distilled Water to Sample			
6/7/2024 16:20	1440	0.0036	0.0036

Expansion Index = **4** **Very Low**

HUSHMAND ASSOCIATES, INC.
Geotechnical and Earthquake Engineers

DIRECT SHEAR TEST

ASTM D3080

HAI Project No.: SAG-24-026

Tested by: GA

Checked by: KL

Date: 5/31/2024

Client: SA Geotechnical, Inc

Project Name: 1501 Del Norte Street

Project Number: 24082-01

Boring No.: H-1

Sample No.: D3

Sample Type: Undisturbed Ring

Depth (ft): 7.5

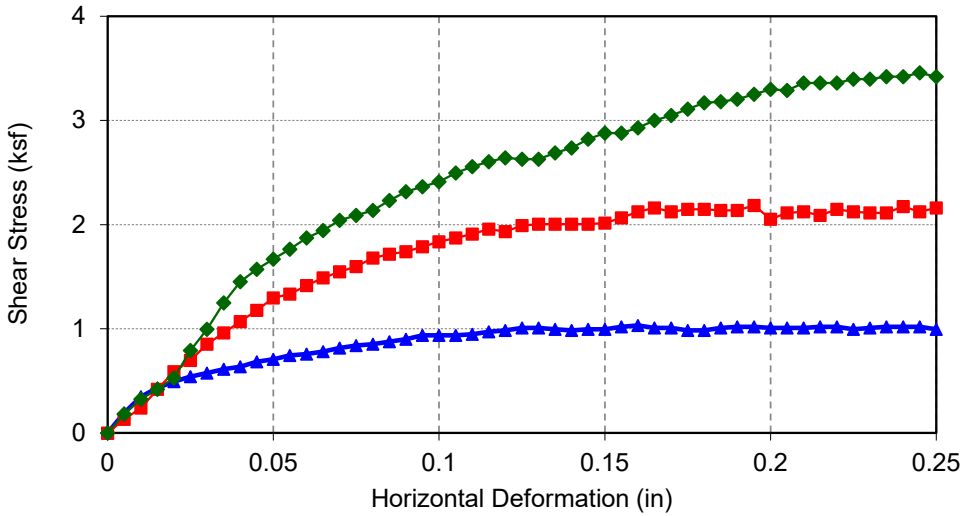
Soil Description: Brown, Poorly Graded Sand with Silt (SP-SM)

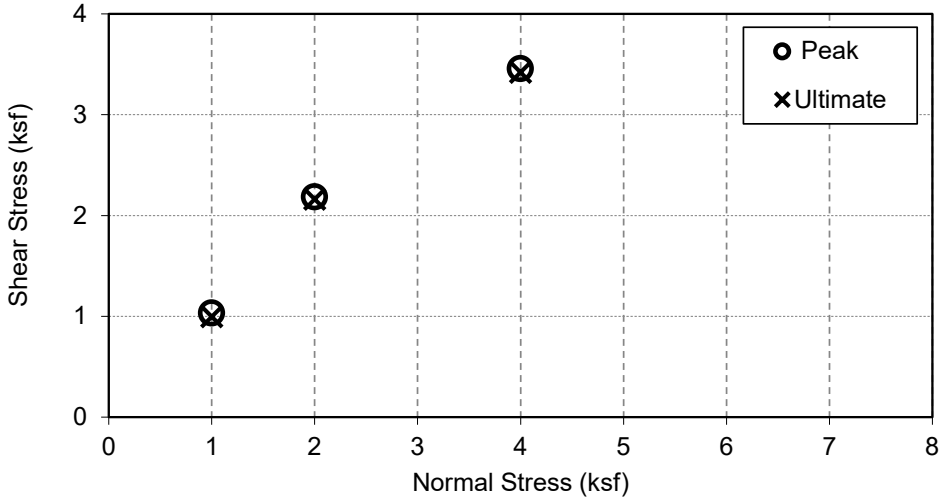
Type of test: **Consolidated, Drained**

Test No.	1	2	3
Symbol	▲	■	◆
Normal Stress (ksf)	**1**	**2**	**4**
Deformation Rate (in/min)	**0.002**	**0.002**	**0.002**

Peak Shear Stress (ksf)	**O**	**1.03**	**2.18**	**3.46**
Shear Stress @ End of Test (ksf)	**X**	**1.00**	**2.16**	**3.42**

Initial Height of Sample (in)	1.000	1.000	1.000
Height of Sample before Shear (in)	0.9981	0.9939	0.9813
Diameter of Sample (in)	2.416	2.416	2.416
Initial Moisture Content (%)	**1.8**	**1.8**	**1.8**
Final Moisture Content (%)	**16.1**	**13.6**	**13.4**
Dry Density (pcf)	**103.7**	**113.1**	**109.6**





HUSHMAND ASSOCIATES, INC.
Geotechnical and Earthquake Engineers

DIRECT SHEAR TEST

ASTM D3080

HAI Project No.: SAG-24-026

Tested by: GA

Checked by: KL

Date: 5/31/2024

Client: SA Geotechnical, Inc

Project Name: 1501 Del Norte Street

Project Number: 24082-01

Boring No.: H-2

Sample No.: B1

Sample Type: Sample Remold

Depth (ft): 0-5

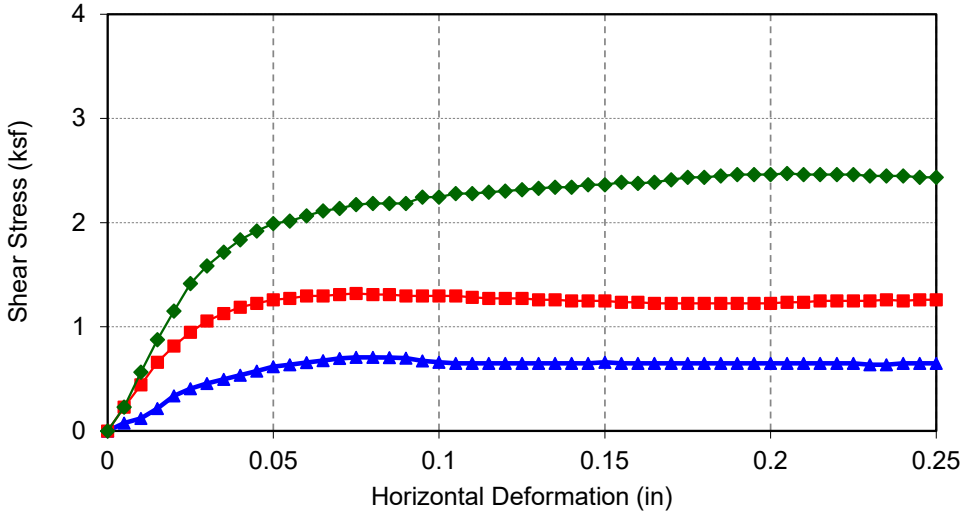
Soil Description: Brown, Silty Sand (SM)

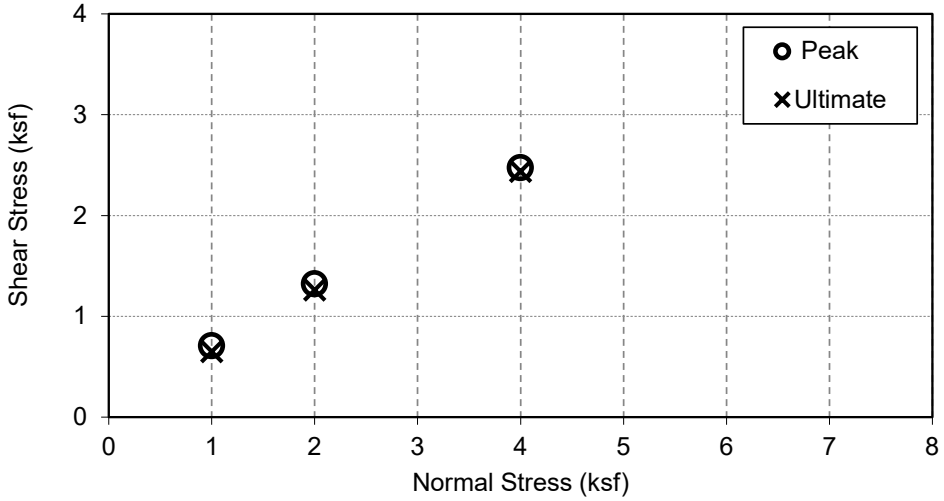
Type of test: **Consolidated, Drained**

Test No.	1	2	3
Symbol	▲	■	◆
Normal Stress (ksf)	**1**	**2**	**4**
Deformation Rate (in/min)	**0.002**	**0.002**	**0.002**

Peak Shear Stress (ksf)	**O**	**0.71**	**1.32**	**2.47**
Shear Stress @ End of Test (ksf)	**X**	**0.65**	**1.26**	**2.44**

Initial Height of Sample (in)	1.000	1.000	1.000
Height of Sample before Shear (in)	0.9938	0.9889	0.9978
Diameter of Sample (in)	2.416	2.416	2.416
Initial Moisture Content (%)	**11.5**	**11.5**	**11.5**
Final Moisture Content (%)	**17.7**	**17.7**	**17.9**
Dry Density (pcf)	**110.1**	**110.0**	**110.1**





CONSOLIDATION TEST

ASTM D2435

Client :	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	KL
Project Number:	24082-01	*Checked by:*	MV
Boring No.:	H-1	*Date:*	05/31/24
Sample No.:	D-2		
Type of Sample:	Undisturbed ring		
Depth (ft):	5		
Soil Description:	Brown, Poorly Graded Sand with Silt (SP-SM)		

Initial Total Weight	Final Total Weight	Final Dry Weight
(g)	(g)	(g)
136.92	152.71	133.75

			Initial Conditions	Final Conditions
Height	H	(in)	1.000	0.946
Height of Solids	H_s	(in)	0.664	0.664
Height of Water	H_w	(in)	0.042	0.252
Height of Air	H_a	(in)	0.293	0.029
Dry Density		**(pcf)**	**111.1**	**124.2**
Water Content		**(%)**	**2.4**	**14.2**
Saturation		**(%)**	**12.6**	**89.7**

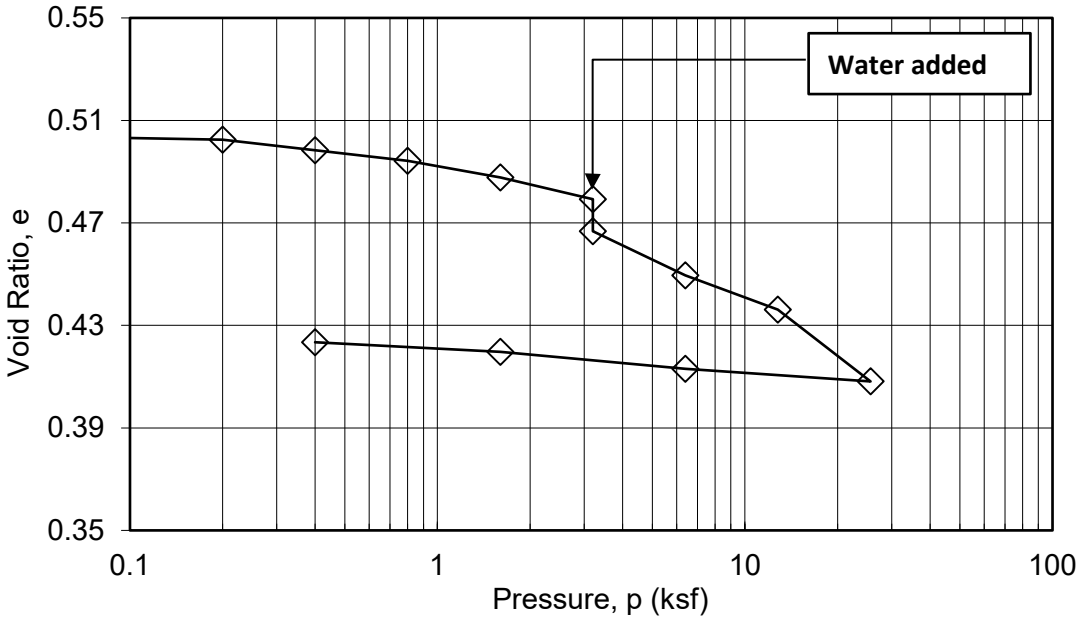
* Saturation is calculated based on Gs= 2.68

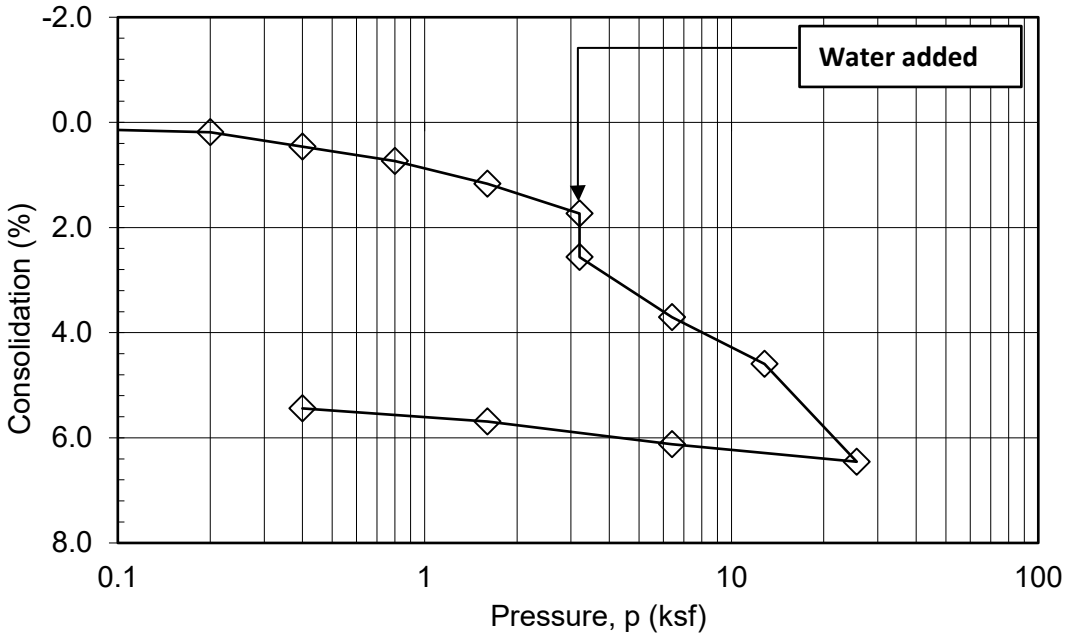
Load (ksf)	**δH (in)**	**H (in)**	**Voids (in)**	**e**	**Consol. (%)**	**a_v (ksf^{-1})**	**M_v (ksf^{-1})**	**Comment**
0.01	-------	1.0000	0.336	0.505	0			
0.2	0.0019	0.9981	0.334	0.502	0.2	1.5E-02	1.0E-02	
0.4	0.0046	0.9954	0.331	0.498	0.5	2.0E-02	1.4E-02	
0.8	0.0074	0.9927	0.328	0.494	0.7	1.0E-02	6.9E-03	
1.6	0.0117	0.9883	0.324	0.488	1.2	8.2E-03	5.5E-03	
3.2	0.0174	0.9827	0.318	0.479	1.7	5.3E-03	3.6E-03	
3.2	0.0256	0.9744	0.310	0.467	2.6	Water Added		
6.4	0.0371	0.9630	0.299	0.450	3.7	5.4E-03	3.7E-03	
12.8	0.0460	0.9541	0.290	0.436	4.6	2.1E-03	1.5E-03	
25.6	0.0646	0.9355	0.271	0.408	6.5	2.2E-03	1.6E-03	
6.4	0.0613	0.9388	0.274	0.413	6.1	Unloaded		
1.6	0.0569	0.9431	0.279	0.420	5.7			
0.4	0.0544	0.9456	0.281	0.423	5.4			

CONSOLIDATION TEST

ASTM D2435

Client :	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	KL
Project Number:	24082-01	*Checked by:*	MV
Boring No.:	H-1	*Date:*	05/31/24
Sample No.:	D-2		
Type of Sample:	Undisturbed ring		
Depth (ft):	5		
Soil Description:	Brown, Poorly Graded Sand with Silt (SP-SM)		





CONSOLIDATION TEST

ASTM D2435

Client :	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	KL
Project Number:	24082-01	*Checked by:*	MV
Boring No.:	H-3	*Date:*	05/31/24
Sample No.:	D-2		
Type of Sample:	Undisturbed ring		
Depth (ft):	5		
Soil Description:	Brown, Silty Sand (SM)		

Initial Total Weight	Final Total Weight	Final Dry Weight
(g)	(g)	(g)
137.31	150.25	127.91

			Initial Conditions	Final Conditions
Height	H	(in)	1.005	0.937
Height of Solids	H_s	(in)	0.635	0.635
Height of Water	H_w	(in)	0.125	0.297
Height of Air	H_a	(in)	0.244	0.004
Dry Density		**(pcf)**	**105.8**	**121.1**
Water Content		**(%)**	**7.3**	**17.5**
Saturation		**(%)**	**33.9**	**98.7**

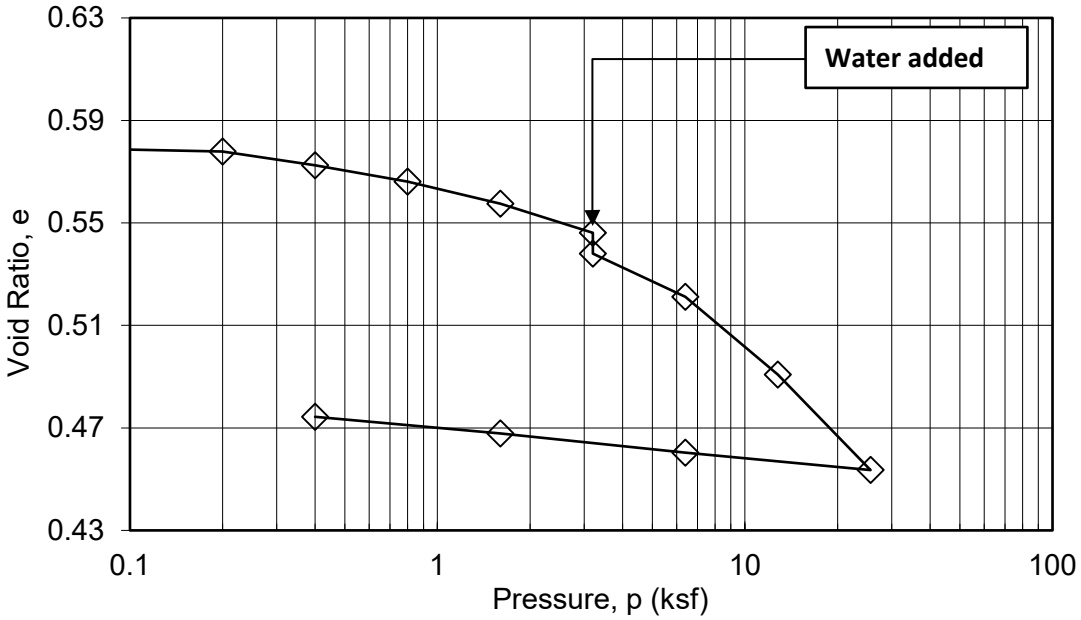
* Saturation is calculated based on Gs= 2.68

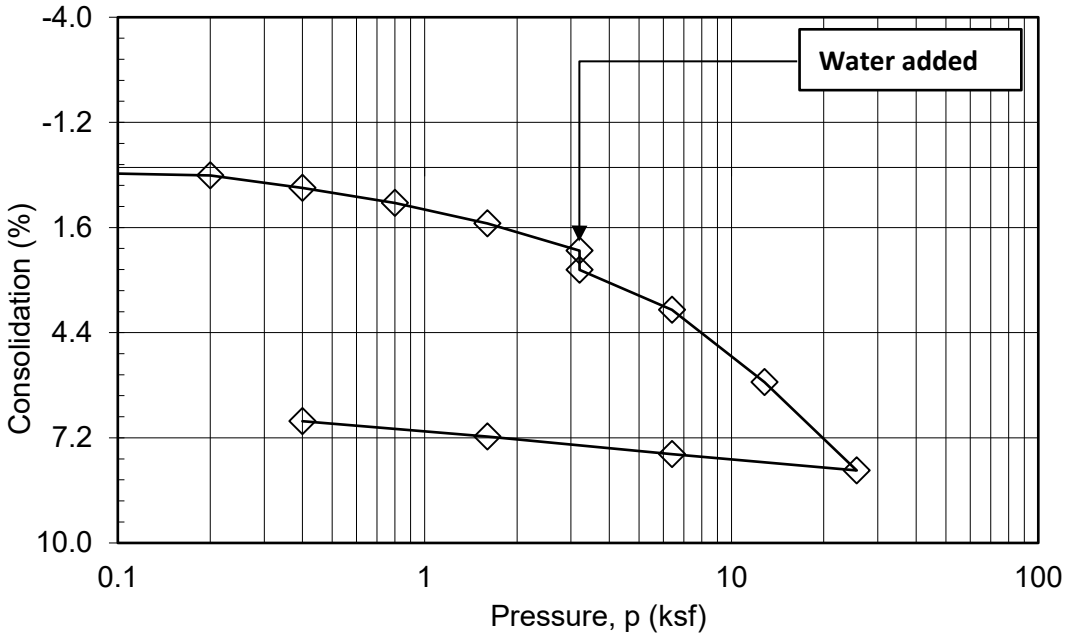
Load (ksf)	**δH (in)**	**H (in)**	**Voids (in)**	**e**	**Consol. (%)**	**a_v (ksf^{-1})**	**M_v (ksf^{-1})**	**Comment**
0.01	-------	1.0045	0.369	0.581	0			
0.2	0.0021	1.0024	0.367	0.578	0.2	1.7E-02	1.1E-02	
0.4	0.0054	0.9991	0.364	0.573	0.5	2.6E-02	1.7E-02	
0.8	0.0095	0.9950	0.360	0.566	0.9	1.6E-02	1.0E-02	
1.6	0.0150	0.9895	0.354	0.558	1.5	1.1E-02	6.9E-03	
3.2	0.0223	0.9823	0.347	0.546	2.2	7.1E-03	4.6E-03	
3.2	0.0274	0.9771	0.342	0.538	2.7	Water Added		
6.4	0.0381	0.9664	0.331	0.521	3.8	5.3E-03	3.5E-03	
12.8	0.0574	0.9471	0.312	0.491	5.7	4.7E-03	3.2E-03	
25.6	0.0811	0.9235	0.288	0.454	8.1	2.9E-03	2.0E-03	
6.4	0.0767	0.9278	0.292	0.460	7.6	Unloaded		
1.6	0.0720	0.9325	0.297	0.468	7.2			
0.4	0.0679	0.9367	0.301	0.474	6.8			

CONSOLIDATION TEST

ASTM D2435

Client :	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	KL
Project Number:	24082-01	*Checked by:*	MV
Boring No.:	H-3	*Date:*	05/31/24
Sample No.:	D-2		
Type of Sample:	Undisturbed ring		
Depth (ft):	5		
Soil Description:	Brown, Silty Sand (SM)		





CONSOLIDATION TEST

ASTM D2435

Client :	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	KL
Project Number:	24082-01	*Checked by:*	MV
Boring No.:	H-4	*Date:*	05/31/24
Sample No.:	D3		
Type of Sample:	Undisturbed ring		
Depth (ft):	7.5		
Soil Description:	Light Brown, Poorly Graded Sand with Silt (SP-SM)		

Initial Total Weight	Final Total Weight	Final Dry Weight
(g)	(g)	(g)
131.19	146.13	124.20

			Initial Conditions	Final Conditions
Height	H	(in)	1.000	0.937
Height of Solids	H_s	(in)	0.617	0.617
Height of Water	H_w	(in)	0.093	0.292
Height of Air	H_a	(in)	0.290	0.028
Dry Density		**(pcf)**	**103.2**	**117.5**
Water Content		**(%)**	**5.6**	**17.7**
Saturation		**(%)**	**24.3**	**91.2**

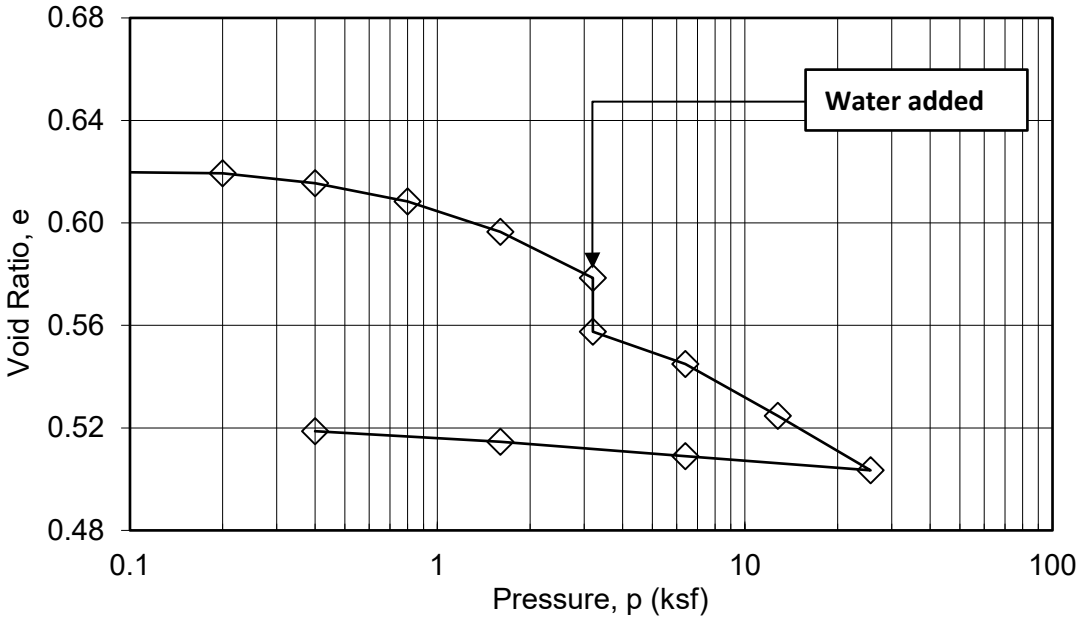
* Saturation is calculated based on Gs= 2.68

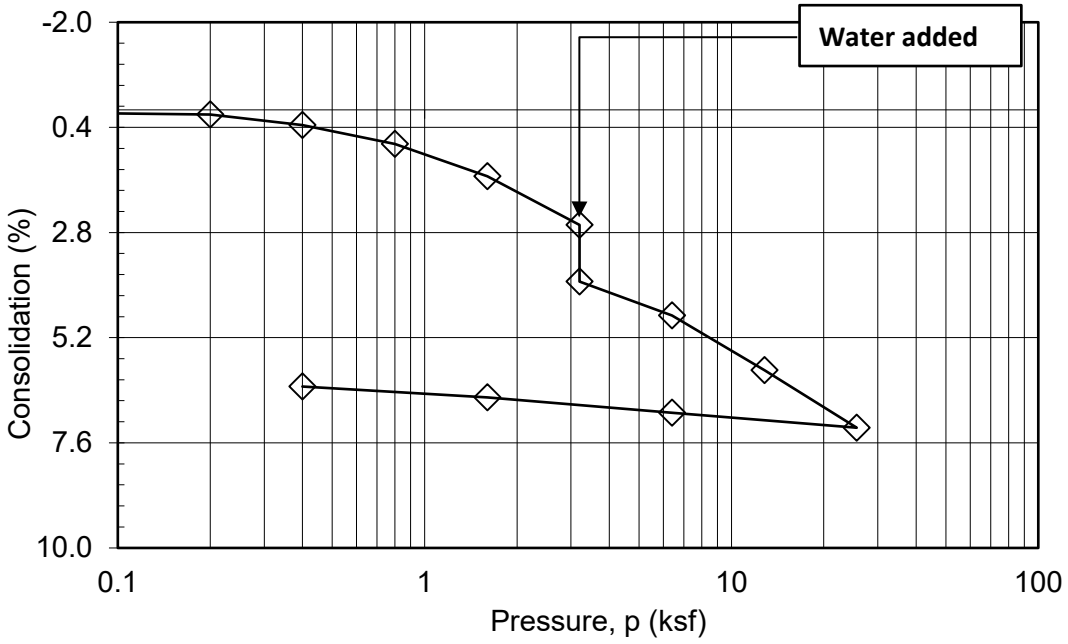
Load (ksf)	**δH (in)**	**H (in)**	**Voids (in)**	**e**	**Consol. (%)**	**a_v (ksf^{-1})**	**M_v (ksf^{-1})**	**Comment**
0.01	-------	1.0000	0.383	0.621	0			
0.2	0.0010	0.9990	0.382	0.619	0.1	9.0E-03	5.5E-03	
0.4	0.0035	0.9966	0.380	0.615	0.3	1.9E-02	1.2E-02	
0.8	0.0078	0.9922	0.375	0.608	0.8	1.8E-02	1.1E-02	
1.6	0.0152	0.9849	0.368	0.596	1.5	1.5E-02	9.3E-03	
3.2	0.0263	0.9738	0.357	0.579	2.6	1.1E-02	7.1E-03	
3.2	0.0392	0.9608	0.344	0.558	3.9	Water Added		
6.4	0.0470	0.9531	0.336	0.545	4.7	3.9E-03	2.5E-03	
12.8	0.0595	0.9406	0.324	0.525	5.9	3.2E-03	2.1E-03	
25.6	0.0726	0.9275	0.311	0.503	7.3	1.7E-03	1.1E-03	
6.4	0.0692	0.9309	0.314	0.509	6.9	Unloaded		
1.6	0.0657	0.9344	0.317	0.515	6.6			
0.4	0.0632	0.9369	0.320	0.519	6.3			

CONSOLIDATION TEST

ASTM D2435

Client :	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	KL
Project Number:	24082-01	*Checked by:*	MV
Boring No.:	H-4	*Date:*	05/31/24
Sample No.:	D3		
Type of Sample:	Undisturbed ring		
Depth (ft):	7.5		
Soil Description:	Light Brown, Poorly Graded Sand with Silt (SP-SM)		





CONSOLIDATION TEST

ASTM D2435

Client :	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	KL
Project Number:	24082-01	*Checked by:*	MV
Boring No.:	H-5	*Date:*	05/31/24
Sample No.:	D3		
Type of Sample:	Undisturbed ring		
Depth (ft):	7.5		
Soil Description:	Light Brown, Poorly Graded Sand (SP)		

Initial Total Weight	Final Total Weight	Final Dry Weight
(g)	(g)	(g)
120.40	142.53	115.58

			Initial Conditions	Final Conditions
Height	H	(in)	1.000	0.953
Height of Solids	H_s	(in)	0.574	0.574
Height of Water	H_w	(in)	0.064	0.359
Height of Air	H_a	(in)	0.362	0.020
Dry Density		**(pcf)**	**96.0**	**105.7**
Water Content		**(%)**	**4.2**	**23.3**
Saturation		**(%)**	**15.1**	**94.7**

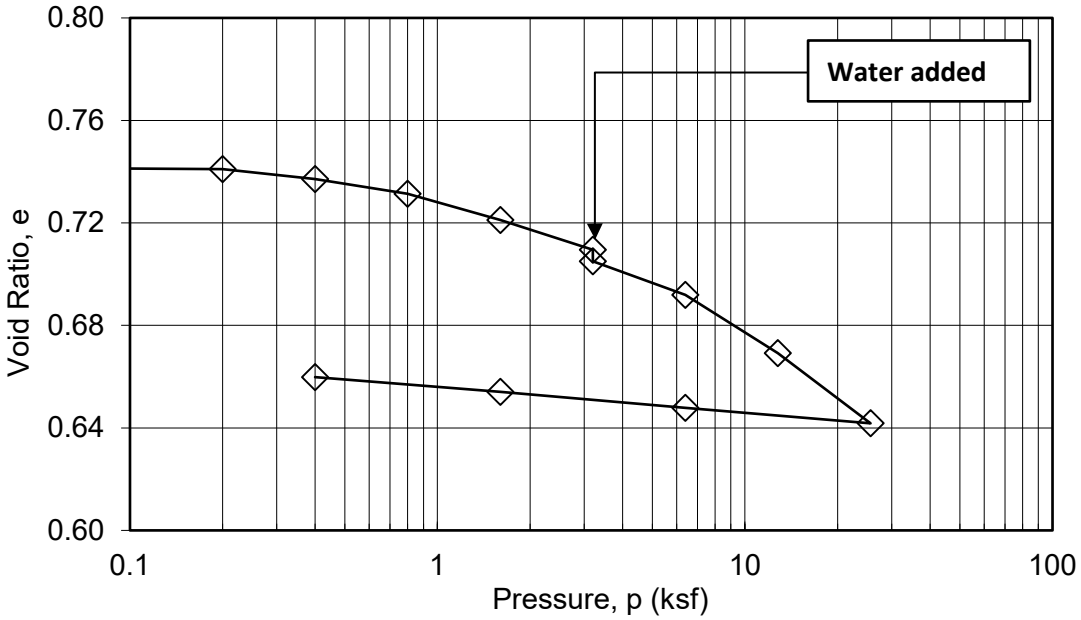
* Saturation is calculated based on Gs= 2.68

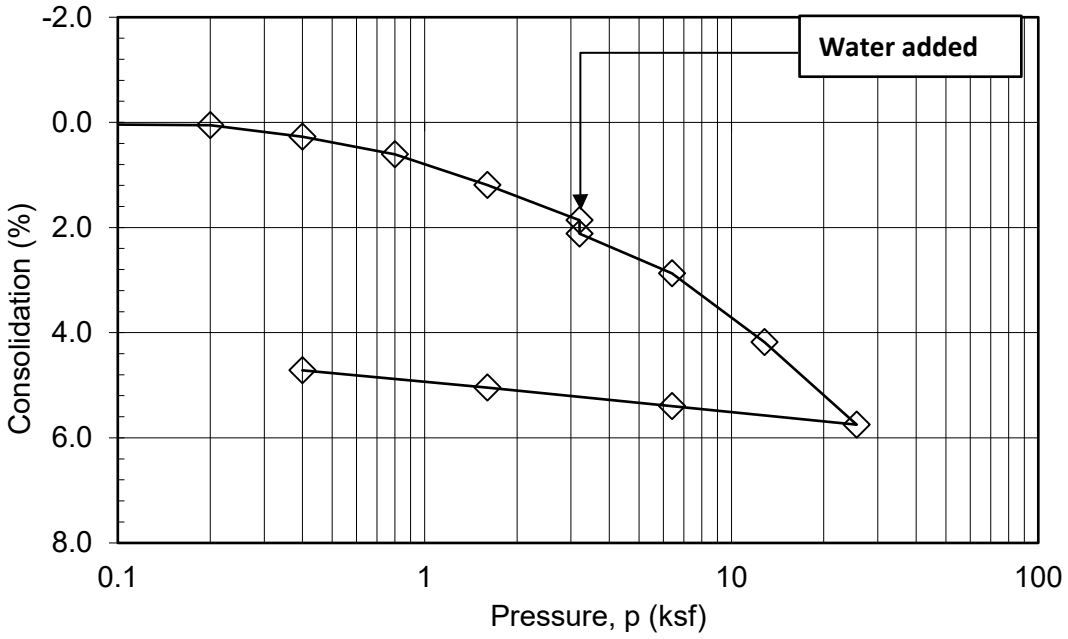
Load (ksf)	**δH (in)**	**H (in)**	**Voids (in)**	**e**	**Consol. (%)**	**a_v (ksf^{-1})**	**M_v (ksf^{-1})**	**Comment**
0.01	-------	1.0000	0.426	0.742	0			
0.2	0.0006	0.9995	0.425	0.741	0.1	5.0E-03	2.9E-03	
0.4	0.0028	0.9973	0.423	0.737	0.3	1.9E-02	1.1E-02	
0.8	0.0060	0.9940	0.420	0.731	0.6	1.4E-02	8.3E-03	
1.6	0.0120	0.9881	0.414	0.721	1.2	1.3E-02	7.5E-03	
3.2	0.0186	0.9814	0.407	0.710	1.9	7.2E-03	4.2E-03	
3.2	0.0212	0.9788	0.405	0.705	2.1	Water Added		
6.4	0.0287	0.9713	0.397	0.692	2.9	4.1E-03	2.4E-03	
12.8	0.0418	0.9582	0.384	0.669	4.2	3.6E-03	2.1E-03	
25.6	0.0575	0.9425	0.368	0.642	5.8	2.1E-03	1.3E-03	
6.4	0.0540	0.9460	0.372	0.648	5.4	Unloaded		
1.6	0.0505	0.9496	0.375	0.654	5.0			
0.4	0.0472	0.9529	0.379	0.660	4.7			

CONSOLIDATION TEST

ASTM D2435

Client :	SA Geotechnical, Inc	*HAI Project No.:*	SAG-24-026
Project Name:	1501 Del Norte Street	*Tested by:*	KL
Project Number:	24082-01	*Checked by:*	MV
Boring No.:	H-5	*Date:*	05/31/24
Sample No.:	D3		
Type of Sample:	Undisturbed ring		
Depth (ft):	7.5		
Soil Description:	Light Brown, Poorly Graded Sand (SP)		





SWELL / COLLAPSE TEST

ASTM D4546

Client :	SA Geotechnical, Inc	***HAI Project No.:***	SAG-24-026
Project Name:	1501 Del Norte Street	***Tested by:***	KL
Project No.:	24082-01	***Checked by:***	MV
Boring No.:	P-3	***Date:***	05/31/24
Sample No.:	D3		
Type of Sample:	Undisturbed Ring		
Depth (ft):	9		
Soil Description:	Light Brown, Poorly Graded Sand with Gravel (SP)	**Load (ksf):**	**1.6**

Initial Total Weight (g)	Final Total Weight (g)	Final Dry Weight (g)
134.34	147.83	130.91

			Initial Conditions	Final Conditions
Height	H	(in)	1.000	0.983
Height of Solids	Hs	(in)	0.650	0.650
Height of Water	Hw	(in)	0.046	0.225
Height of Air	Ha	(in)	0.304	0.108
Dry Density		**(pcf)**	**108.7**	**112.5**
Water Content		**(%)**	**2.6**	**12.9**
Saturation		**(%)**	**13.1**	**67.6**

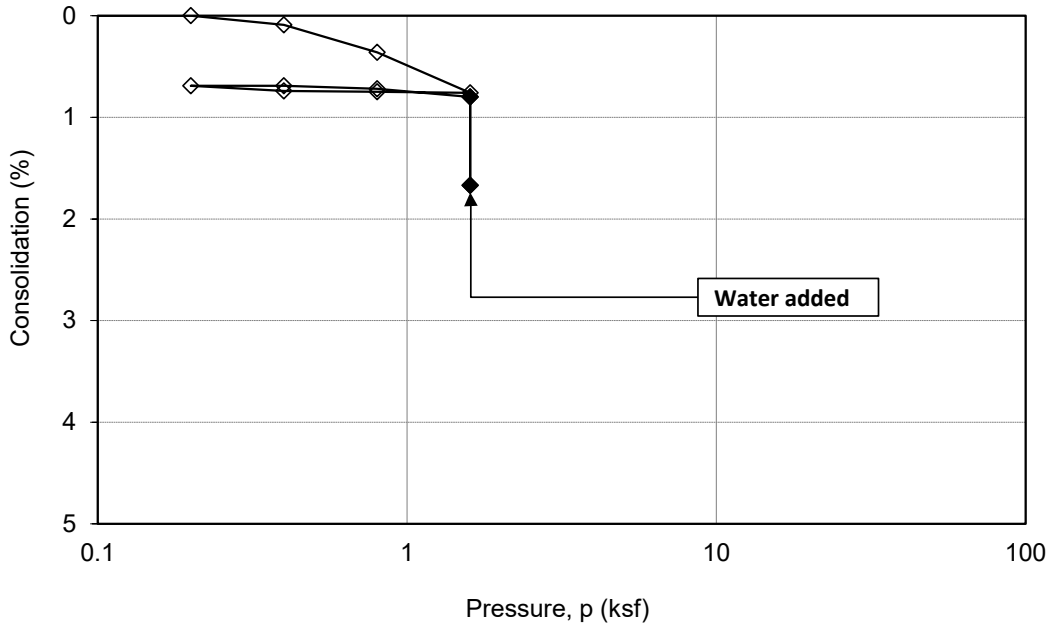
* Saturation is calcualted using Gs= 2.68

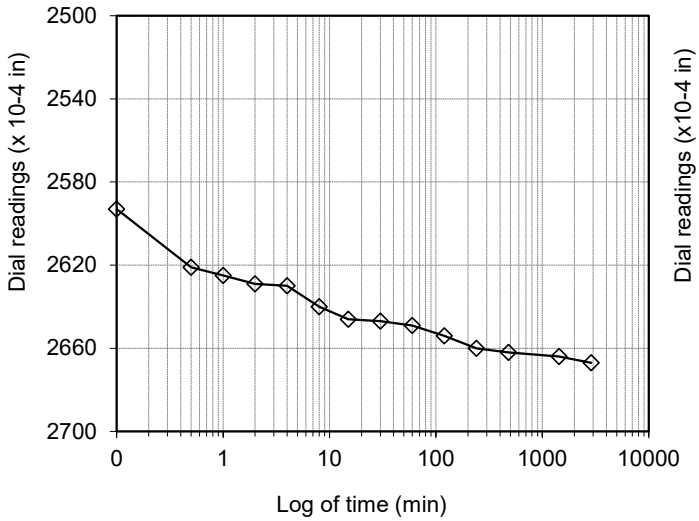
Load (ksf)	δH (in)	H (in)	Voids (in)	e	Consol. (%)	a_v (ksf^{-1})	M_v (ksf^{-1})	Comment
0.01	-------	1.0000	0.350	0.538	0			
0.2	0.0000	1.0000	0.350	0.538	0.0	0.0E+00	0.0E+00	
0.4	0.0009	0.9991	0.349	0.537	0.1	6.9E-03	4.5E-03	
0.8	0.0036	0.9964	0.346	0.532	0.4	1.0E-02	6.8E-03	
1.6	0.0076	0.9924	0.342	0.526	0.8	7.7E-03	5.0E-03	
0.8	0.0075	0.9925	0.342	0.526	0.8	Unloaded		
0.4	0.0074	0.9926	0.342	0.527	0.7			
0.2	0.0069	0.9931	0.343	0.527	0.7			
0.4	0.0069	0.9931	0.343	0.527	0.7	0.0E+00	0.0E+00	
0.8	0.0072	0.9928	0.343	0.527	0.7	1.2E-03	7.6E-04	
1.6	0.0080	0.9920	0.342	0.526	0.8	1.5E-03	1.0E-03	
1.6	0.0167	0.9833	0.333	0.512	1.7	Water Added		

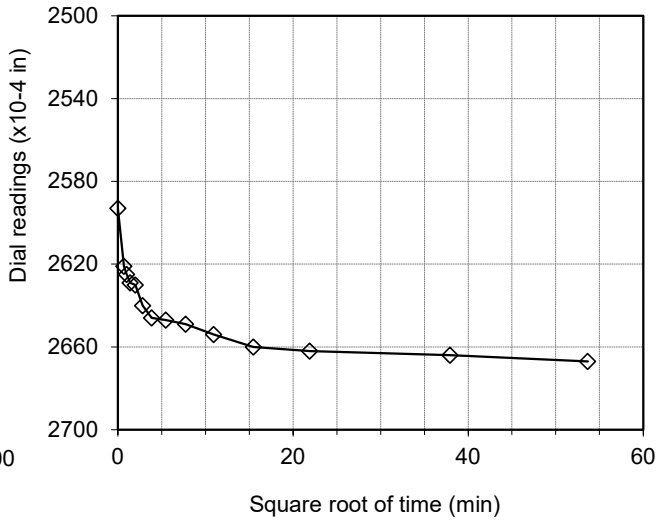
SWELL / COLLAPSE TEST

ASTM D4546

Client :	SA Geotechnical, Inc	***HAI Project No.:***	SAG-24-026
Project Name:	1501 Del Norte Street	***Tested by:***	KL
Project No.:	24082-01	***Checked by:***	MV
Boring No.:	P-3	***Date:***	05/31/24
Sample No.:	D3		
Type of Sample:	Undisturbed Ring		
Depth (ft):	9		
Soil Description:	Light Brown, Poorly Graded Sand with Gravel (SP)	**Load (ksf):**	**1.6**
		Settlement (%)	**0.87**







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• ANALYSIS
• DESIGN

LaBelle • Marvin

• SOILS, ASPHALT TECHNOLOGY

PROFESSIONAL PAVEMENT ENGINEERING
A CALIFORNIA CORPORATION

June 10, 2024

Kang Chieh Lin
Hushmand Associates, Inc.
250 Goddard
Irvine, California 92618

Project No. 50087

Attention: Kang Chieh Lin
Testing of the bulk soil sample delivered to our laboratory on 6/7/2024 have been completed.

P.N.:	**SAG-24-026/24082-01**
Reference:	**1501 Del Norte Street**
Sample:	**H-5, B-1 @ 0-5**

Data sheets are attached for your use and file. Any untested portion of the sample will be retained for a period of 60 days prior to disposal. The opportunity to be of service is sincerely appreciated and should you have any questions, kindly call.

Very truly yours,

REGISTERED PROFESSIONAL ENGINEER
STEVEN R. MARVIN
DocuSigned by:
NO. 30659
D9A356504F9B448...
CIVIL
STATE OF CALIFORNIA

Steven R. Marvin
RCE 30659

SRM:tw
Enclosure

2700 S. GRAND AVENUE • SANTA ANA, CA 92705-5404 • (714) 546-3468 • FAX (714) 546-5841
INFO@LABELLEMARVIN.COM

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LaBelle Marvin

R - VALUE DATA SHEET

PROJECT No. 50087

DATE: 6/10/2024

BORING NO. H-5, B-1 @ 0-5

1501 Del Norte Street

P.N. SAG-24-026/24082-01

SAMPLE DESCRIPTION: Brown Slightly Silty Sand

R-VALUE TESTING DATA | CA TEST 301

	SPECIMEN ID		
	a	b	c
Mold ID Number	1	2	3
Water added, grams	58	48	43
Initial Test Water, %	12.0	11.0	10.5
Compact Gage Pressure,psi	250	350	350
Exudation Pressure, psi	163	391	654
Height Sample, Inches	2.53	2.52	2.54
Gross Weight Mold, grams	3068	3050	3058
Tare Weight Mold, grams	1949	1940	1952
Sample Wet Weight, grams	1119	1110	1106
Expansion, Inches x 10exp-4	2	9	14
Stability 2,000 lbs (160psi)	26 / 47	17 / 31	16 / 30
Turns Displacement	5.38	4.95	4.80
R-Value Uncorrected	53	68	69
R-Value Corrected	53	68	69
Dry Density, pcf	119.6	120.2	119.4

DESIGN CALCULATION DATA

Traffic Index	Assumed:	4.0	4.0	4.0
G.E. by Stability		0.48	0.33	0.32
G. E. by Expansion		0.07	0.30	0.47

Equilibrium R-Value	**65** by EXUDATION	Examined & Checked: 6 /10/ 24
REMARKS:	Gf = 1.25 1.0% Retained on the 3/4" Sieve.	REGISTERED PROFESSIONAL ENGINEER STEVEN R. MARVIN No. 30659 CIVIL STATE OF CALIFORNIA DocuSigned by: D9A356504F9B448... Steven R. Marvin, RCE 30659

The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.

LaBelle Marvin

R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 50087

DATE: 6 /10/ 24

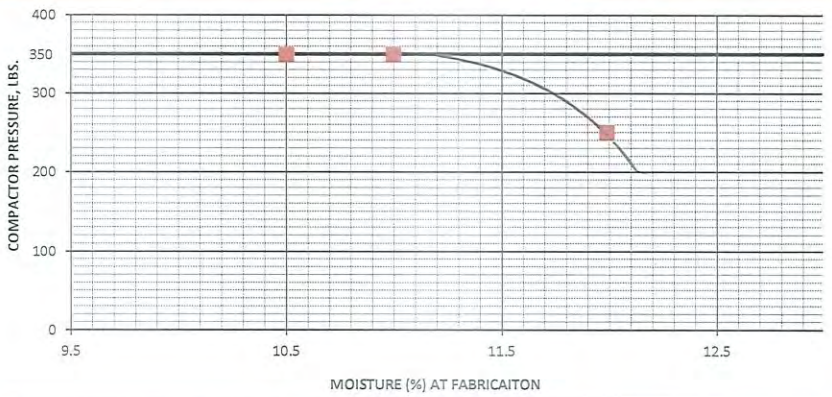
REMARKS:

BORING NO. H-5, B-1 @ 0-5

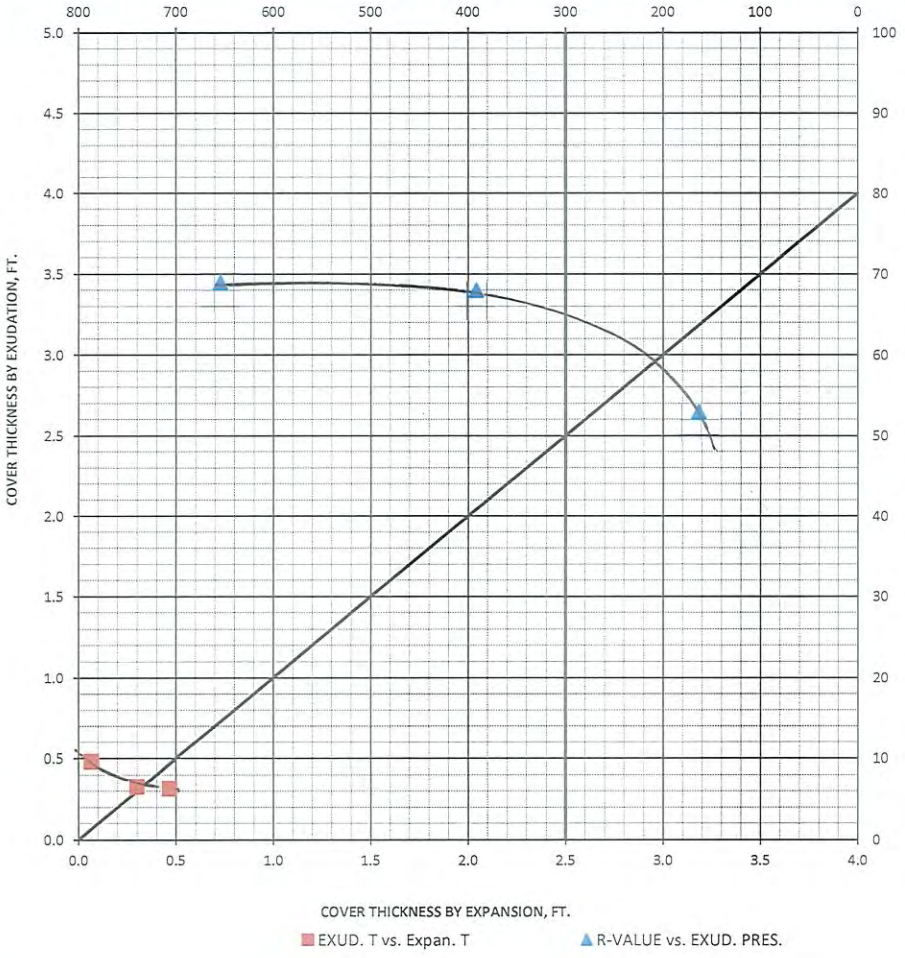
1501 Del Norte Street

P.N. SAG-24-026/24082-01

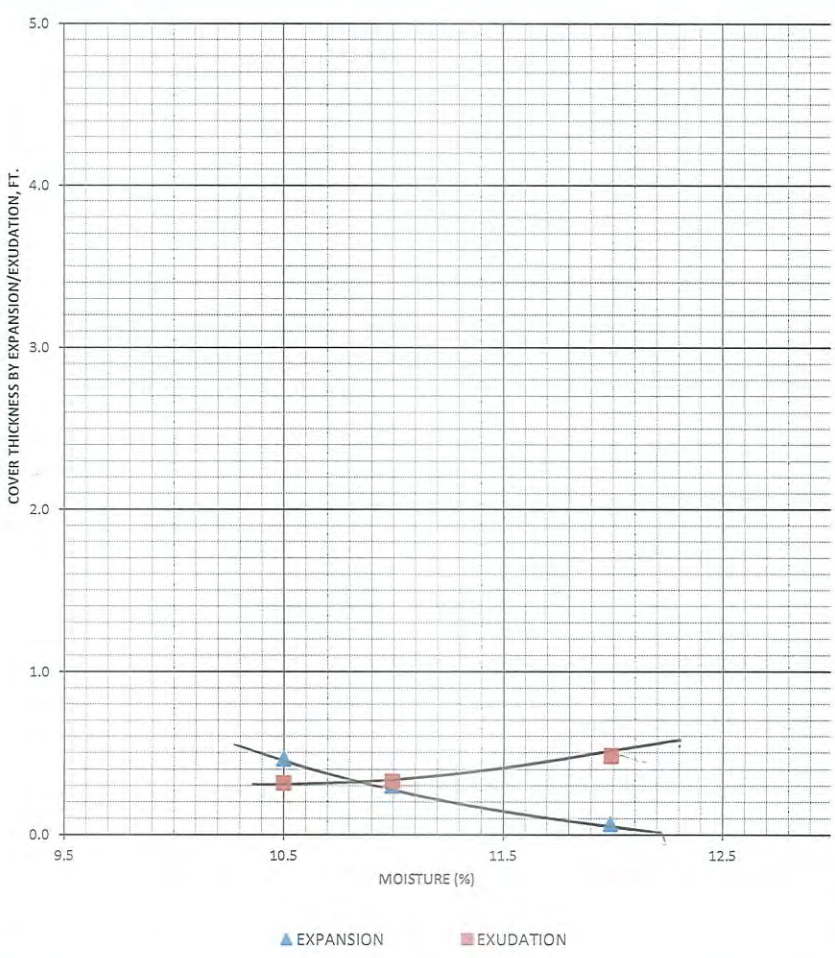
COMPACTOR PRESSURE vs MOISTURE %



COVER THICKNESS BY EXUDATION vs COVER THICKNESS BY EXPANSION



COVER THICKNESS vs MOISTURE %



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Soil Analysis Lab Results

Client: HAI
Job Name: Del Norte Street
Client Job Number: SAG-24-026 / 24082-01
Project X Job Number: S240604G
June 6, 2024

	Method	ASTM D4327		ASTM D4327	
Bore# / Description	Depth	Sulfates SO_4^{2-}		Chlorides Cl^-	
	(ft)	(mg/kg)	(wt%)	(mg/kg)	(wt%)
H-2 B1	0-5	38.9	0.0039	12.2	0.0012
H-4 B1	0-5	28.6	0.0029	8.2	0.0008

Cations and Anions, except Sulfide and Bicarbonate, tested with Ion Chromatography
mg/kg = milligrams per kilogram (parts per million) of dry soil weight
ND = 0 = Not Detected | NT = Not Tested | Unk = Unknown
Chemical Analysis performed on 1:3 Soil-To-Water extract
PPM = mg/kg (soil) = mg/L (Liquid)

Note: Sometimes a bad sulfate hit is a contaminated spot. Typical fertilizers are Potassium chloride, ammonium sulfate or ammonium sulfate nitrate (ASN). So this is another reason why testing full corrosion series is good because we then have the data to see if those other ingredients are present meaning the soil sample is just fertilizer-contaminated soil. This can happen often when the soil samples collected are simply surface scoops. This is why it's best to dig in a foot, throw away the top and test the deeper stuff. Dairy farms are also notorious for these items.

If one sample pops up much more corrosive than all others, we would recommend collecting more samples surrounding the problem sample location to determine if the peak is isolated to it. This allows us to conclude it was a contaminated sample and able to declare it an outlier.

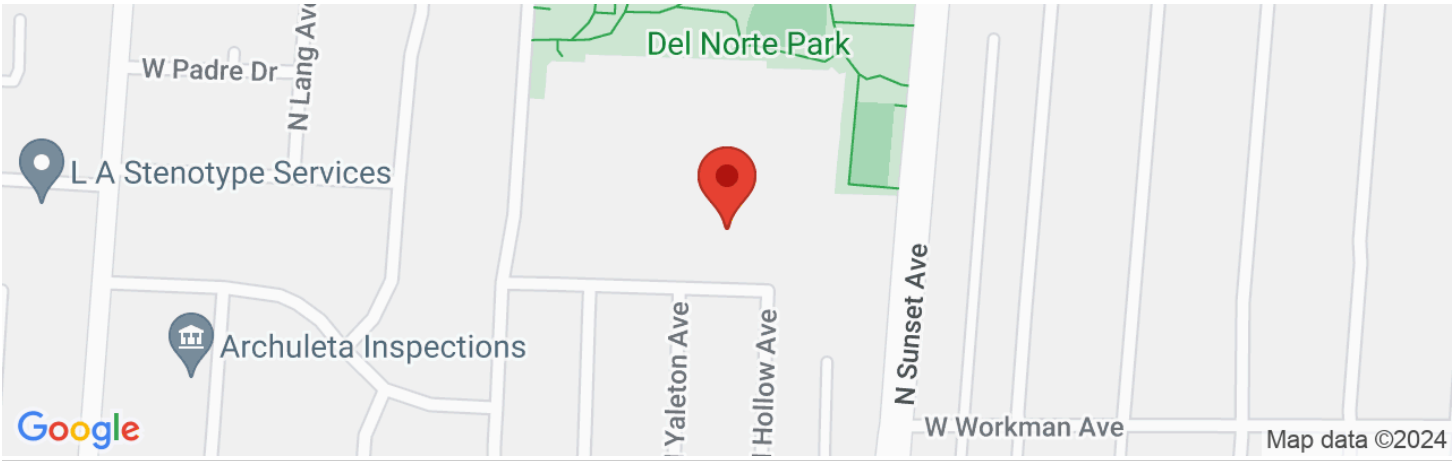
Try out our new online forms: SOIL CORROSIVITY & THERMAL RESISTIVITY LAB REQUEST FORM & IN-SITU WENNER 4 PIN QUOTE REQUEST FORM

Appendix D

USGS web services were down for some period of time and as a result this tool wasn't operational, resulting in *timeout* error.
USGS web services are now operational so this tool should work as expected.

1501 W Del Norte St, West Covina, CA 91790, USA

Latitude, Longitude: 34.0770309, -117.9369244



Date	6/10/2024, 11:39:33 AM
Design Code Reference Document	ASCE7-16
Risk Category	II
Site Class	D - Stiff Soil

Type	Value	Description
S_S	1.663	MCE_R ground motion. (for 0.2 second period)
S_1	0.611	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.663	Site-modified spectral acceleration value
S_{M1}	null -See Section 11.4.8	Site-modified spectral acceleration value
S_{DS}	1.109	Numeric seismic design value at 0.2 second SA
S_{D1}	null -See Section 11.4.8	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	null -See Section 11.4.8	Seismic design category
F_a	1	Site amplification factor at 0.2 second
F_v	null -See Section 11.4.8	Site amplification factor at 1.0 second
PGA	0.704	MCE_G peak ground acceleration
F_{PGA}	1.1	Site amplification factor at PGA
PGA_M	0.775	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	1.663	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	1.819	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	2.158	Factored deterministic acceleration value. (0.2 second)
S1RT	0.611	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.675	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.671	Factored deterministic acceleration value. (1.0 second)
PGAd	0.862	Factored deterministic acceleration value. (Peak Ground Acceleration)

Type	Value	Description
PGA_{UH}	0.704	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.914	Mapped value of the risk coefficient at short periods
C_{R1}	0.905	Mapped value of the risk coefficient at a period of 1 s
C_V	1.433	Vertical coefficient

DISCLAIMER

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U.S. Geological Survey - Earthquake Hazards Program

Unified Hazard Tool

Please do not use this tool to obtain ground motion parameter values for the design code reference documents covered by the U.S. Seismic Design Maps web tools (e.g., the International Building Code and the ASCE 7 or 41 Standard). The values returned by the two applications are not identical.

Please also see the new USGS Earthquake Hazard Toolbox for access to the most recent NSHMs for the conterminous U.S. and Hawaii.

Input

Edition

Dynamic: Conterminous U.S. 2014 (u…

Spectral Period

Peak Ground Acceleration

Latitude

Decimal degrees

34.0770309

Time Horizon

Return period in years

2475

Longitude

Decimal degrees, negative values for western longitudes

-117.9369244

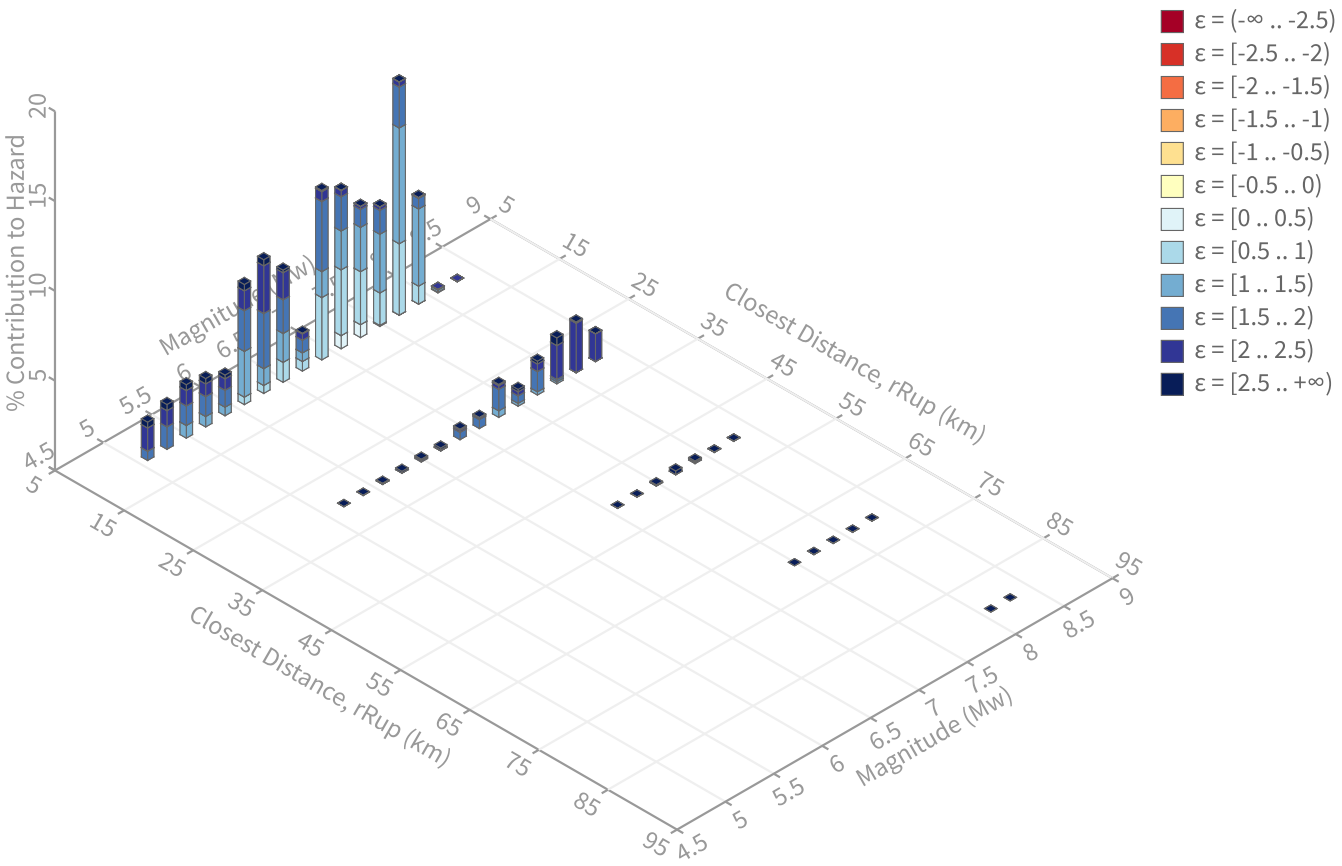
Site Class

259 m/s (Site class D)

Deaggregation

Component

Total



Summary statistics for, Deaggregation: Total

Deaggregation targets

Return period: 2475 yrs
Exceedance rate: 0.0004040404 yr^{-1}
PGA ground motion: 0.76250482 g

Recovered targets

Return period: 2961.7856 yrs
Exceedance rate: 0.00033763416 yr^{-1}

Totals

Binned: 100 %
Residual: 0 %
Trace: 0.09 %

Mean (over all sources)

m: 6.97
r: 13.83 km
ε_0: 1.52 σ

Mode (largest m-r bin)

m: 7.72
r: 11.84 km
ε_0: 1.18 σ
Contribution: 12.99 %

Mode (largest m-r-ε_0 bin)

m: 7.72
r: 11.46 km
ε_0: 1.24 σ
Contribution: 6.45 %

Discretization

r: min = 0.0, max = 1000.0, Δ = 20.0 km
m: min = 4.4, max = 9.4, Δ = 0.2
ε: min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε0: [-∞ .. -2.5)
ε1: [-2.5 .. -2.0)
ε2: [-2.0 .. -1.5)
ε3: [-1.5 .. -1.0)
ε4: [-1.0 .. -0.5)
ε5: [-0.5 .. 0.0)
ε6: [0.0 .. 0.5)
ε7: [0.5 .. 1.0)
ε8: [1.0 .. 1.5)
ε9: [1.5 .. 2.0)
ε10: [2.0 .. 2.5)
ε11: [2.5 .. +∞]

Deaggregation Contributors

Source Set ↳ Source	Type	r	m	ε_0	lon	lat	az	%
UC33brAvg_FM31	System							40.13
Puente Hills [1]		11.76	7.37	0.84	117.957°W	33.944°N	186.96	6.60
Sierra Madre [2]		9.24	7.66	1.20	117.933°W	34.159°N	2.50	5.91
San Jose [2]		6.59	7.00	0.84	117.881°W	34.043°N	126.32	5.38
Whittier alt 1 [7]		12.02	6.89	1.59	118.000°W	33.979°N	207.89	3.61
San Andreas (Mojave S) [12]		39.94	8.06	2.29	117.738°W	34.397°N	27.13	3.43
Raymond [0]		11.14	7.11	1.58	117.991°W	34.166°N	333.32	2.86
Elysian Park (Upper) [0]		15.32	6.53	2.18	118.097°W	34.077°N	270.06	1.72
Compton [0]		21.60	7.27	1.68	118.122°W	33.750°N	205.14	1.28
Whittier alt 1 [6]		12.02	6.51	1.71	117.980°W	33.972°N	198.95	1.08
Chino alt 1 [0]		16.79	6.52	2.24	117.752°W	34.028°N	107.82	1.04
UC33brAvg_FM32	System							40.01
Sierra Madre [2]		9.24	7.67	1.20	117.933°W	34.159°N	2.50	5.91
San Jose [2]		6.59	6.98	0.84	117.881°W	34.043°N	126.32	5.26
Whittier alt 2 [6]		12.36	7.32	1.42	118.001°W	33.979°N	208.32	3.96
San Andreas (Mojave S) [12]		39.94	8.05	2.30	117.738°W	34.397°N	27.13	3.44
Raymond [0]		11.14	7.11	1.58	117.991°W	34.166°N	333.32	3.11
Puente Hills (Coyote Hills) [0]		12.38	7.13	0.89	117.868°W	33.919°N	160.09	3.04
Whittier alt 2 [5]		12.36	7.29	1.08	117.982°W	33.972°N	199.61	2.98
Richfield [1]		14.02	6.17	1.61	117.870°W	33.882°N	164.11	2.56
Elysian Park (Upper) [0]		15.32	6.97	1.89	118.097°W	34.077°N	270.06	1.86
Compton [0]		21.60	7.36	1.64	118.122°W	33.750°N	205.14	1.47
UC33brAvg_FM32 (opt)	Grid							9.96
PointSourceFinite: -117.937, 34.118		6.66	5.73	1.54	117.937°W	34.117°N	0.00	1.93
PointSourceFinite: -117.937, 34.118		6.66	5.73	1.54	117.937°W	34.117°N	0.00	1.93
PointSourceFinite: -117.937, 34.135		7.91	5.77	1.71	117.937°W	34.135°N	0.00	1.04
PointSourceFinite: -117.937, 34.135		7.91	5.77	1.71	117.937°W	34.135°N	0.00	1.04
UC33brAvg_FM31 (opt)	Grid							9.89
PointSourceFinite: -117.937, 34.118		6.65	5.73	1.54	117.937°W	34.117°N	0.00	1.97
PointSourceFinite: -117.937, 34.118		6.65	5.73	1.54	117.937°W	34.117°N	0.00	1.97
PointSourceFinite: -117.937, 34.135		7.93	5.76	1.72	117.937°W	34.135°N	0.00	1.05
PointSourceFinite: -117.937, 34.135		7.93	5.76	1.72	117.937°W	34.135°N	0.00	1.05

Appendix E

Percolation Data Sheet

Project Name: Meritage/1501 Del Norte Street
Project Number: 24082-01
Test Hole Number: P-1
Tested By: PA
Pipe Dia (in): 2
Depth (in): 117

Pipe Area (in^2) per inch: 3.1
Boring Dia. (in.): 9
Boring Area (in^2) per inch: 63.6

Date Excavated: 5/23/24
Date Presoak: 5/23/24
Date Tested: 5/23/24

Sand Backfill Porosity: 0.34

Time	Time Interval (mins.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Δ in Water Level (in.)	Volume of Water (in^3)	Wetted Surface Area (in^2)	Preadjusted Infiltration Rate (in./hr.)
10:03	5	57.0	109.8	52.8	1251.5	1013.6	14.8
10:08							
10:10	5	54.6	108.6	54.0	1280.0	1064.5	14.4
10:15							
10:17	5	55.8	108.6	52.8	1251.5	1047.6	14.3
10:22							
10:24	5	57.0	109.8	52.8	1251.5	1013.6	14.8
10:29							
10:30	5	54.6	107.4	52.8	1251.5	1081.5	13.9
10:35							
10:37	5	78.0	109.2	31.2	739.5	725.2	12.2
10:42							
10:44	5	67.8	109.8	42.0	995.5	861.0	13.9
10:49							
10:51	5	67.8	110.4	42.6	1009.8	852.5	14.2
10:56							
10:59	5	70.2	111.0	40.8	967.1	810.1	14.3
11:04							
11:06	5	64.2	109.9	45.7	1083.7	910.2	14.3
11:11							
11:12	5	63.0	109.8	46.8	1109.3	928.8	14.3
11:17							
11:19	5	79.8	108.6	28.8	682.7	708.3	11.6
11:24							
11:27	5	64.2	109.8	45.6	1080.9	911.8	14.2
11:32							
11:36	5	65.4	109.8	44.4	1052.4	894.9	14.1
11:41							
11:43	5	66.6	108.6	42.0	995.5	894.9	13.3
11:48							

Percolation Data Sheet

Project Name: Meritage/1501 Del Norte Street
Project Number: 24082-01
Test Hole Number: P-1 (Continued)
Tested By: PA
Pipe Dia (in): 2
Depth (in): 117

Pipe Area (in^2) per inch: 3.1
Boring Dia. (in.): 9
Boring Area (in^2) per inch: 63.6

Date Excavated: 5/23/24
Date Presoak: 5/23/24
Date Tested: 5/23/24

Sand Backfill Porosity: 0.34

Time	Time Interval (mins.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Δ in Water Level (in.)	Volume of Water (in^3)	Wetted Surface Area (in^2)	Preadjusted Infiltration Rate (in./hr.)
11:49	5	65.4	109.8	44.4	1052.4	894.9	14.1
11:54							
11:57	5	67.8	107.4	39.6	938.7	894.9	12.6
12:02							
12:03	5	64.2	108.6	44.4	1052.4	928.8	13.6
12:08							
12:09	5	64.2	109.8	45.6	1080.9	911.8	14.2
12:14							
12:15	5	59.4	109.8	50.4	1194.6	979.7	14.6
12:20							
12:23	5	60.6	109.8	49.2	1166.2	962.7	14.5
12:28							
12:29	5	61.8	109.8	48.0	1137.8	945.8	14.4
12:34							
12:38	5	66.6	109.8	43.2	1024.0	877.9	14.0
12:43							
12:45	5	63.0	108.6	45.6	1080.9	945.8	13.7
12:50							
12:52	5	67.8	111.0	43.2	1024.0	844.0	14.6
12:57							
1:01	5	61.8	109.8	48.0	1137.8	945.8	14.4
1:06							

Infiltration Rate (I) = (Preadjusted Infiltration Rate)/(Reduction Factor)
Reduction Factor (Rf) = 3

I= 4.7 in./hr.

Note: Preadjusted infiltration rate uses average of last three readings

Percolation Data Sheet

Project Name: Meritage/1501 Del Norte Street
Project Number: 24082-01
Test Hole Number: P-2
Tested By: PA
Pipe Dia (in): 2
Depth (in): 177

Pipe Area (in^2) per inch: 3.1
Boring Dia. (in.): 9
Boring Area (in^2) per inch: 63.6

Date Excavated: 5/23/24
Date Presoak: 5/23/24
Date Tested: 5/23/24

Sand Backfill Porosity: 0.34

Time	Time Interval (mins.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Δ in Water Level (in.)	Volume of Water (in^3)	Wetted Surface Area (in^2)	Preadjusted Infiltration Rate (in./hr.)
11:17	3	160.2	174.0	13.8	327.1	343.5	19.0
11:20							
11:23	2	157.2	169.8	12.6	298.7	445.3	20.1
11:25							
11:26	2	159.6	167.4	7.8	184.9	445.3	12.5
11:28							
11:30	3	157.2	173.4	16.2	384.0	394.4	19.5
11:33							
11:35	3	158.4	174.6	16.2	384.0	360.5	21.3
11:38							
11:42	3	156.6	174.6	18.0	426.7	385.9	22.1
11:45							
11:47	3	157.8	173.4	15.6	369.8	385.9	19.2
11:50							
11:52	3	157.8	173.4	15.6	369.8	385.9	19.2
11:55							
11:57	3	159.0	174.6	15.6	369.8	352.0	21.0
12:00							
12:02	3	157.8	172.8	15.0	355.5	394.4	18.0
12:05							
12:07	3	157.2	172.8	15.6	369.8	402.9	18.4
12:10							
12:12	3	157.2	172.2	15.0	355.5	411.4	17.3
12:15							
12:17	3	157.2	172.8	15.6	369.8	402.9	18.4
12:20							
12:22	3	159.0	174.6	15.6	369.8	352.0	21.0
12:25							
12:27	3	156.6	171.0	14.4	341.3	436.8	15.6
12:30							

Percolation Data Sheet

Project Name: Meritage/1501 Del Norte Street
Project Number: 24082-01
Test Hole Number: P-2 (Continued)
Tested By: AC
Pipe Dia (in): 2
Depth (in): 177

Pipe Area (in^2) per inch: 3.1
Boring Dia. (in.): 9
Boring Area (in^2) per inch: 63.6

Date Excavated: 5/23/24
Date Presoak: 5/23/24
Date Tested: 5/23/24

Sand Backfill Porosity: 0.34

Time	Time Interval (mins.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Δ in Water Level (in.)	Volume of Water (in^3)	Wetted Surface Area (in^2)	Preadjusted Infiltration Rate (in./hr.)
12:32	3	156.6	172.8	16.2	384.0	411.4	18.7
12:35							
12:37	3	158.4	174.0	15.6	369.8	369.0	20.0
12:40							
12:42	3	157.2	172.8	15.6	369.8	402.9	18.4
12:45							
12:47	3	156.6	173.4	16.8	398.2	402.9	19.8
12:50							
12:53	3	157.2	174.6	17.4	412.4	377.5	21.9
12:56							
12:59	3	158.4	171.6	13.2	312.9	402.9	15.5
13:02							
1:04	3	157.8	172.2	14.4	341.3	402.9	16.9
1:07							
1:09	3	157.2	172.8	15.6	369.8	402.9	18.4
1:12							
1:14	3	156.6	172.2	15.6	369.8	419.9	17.6
1:17							
1:19	3	157.2	173.4	16.2	384.0	394.4	19.5
1:22							
1:24	3	158.4	172.8	14.4	341.3	385.9	17.7
1:27							
1:29	3	157.2	172.8	15.6	369.8	402.9	18.4
1:32							
1:34	3	156.6	171.6	15.0	355.5	428.4	16.6
1:37							
1:39	3	156.6	172.2	15.6	369.8	419.9	17.6
1:42							
1:44	3	157.2	173.4	16.2	384.0	394.4	19.5
1:47							

Percolation Data Sheet

Project Name: Meritage/1501 Del Norte Street
Project Number: 24082-01
Test Hole Number: P-2 (Continued)
Tested By: PA
Pipe Dia (in): 2
Depth (in): 177

Pipe Area (in^2) per inch: 3.1
Boring Dia. (in.): 9
Boring Area (in^2) per inch: 63.6

Date Excavated: 5/23/24
Date Presoak: 5/23/24
Date Tested: 5/23/24

Sand Backfill Porosity: 0.34

Time	Time Interval (mins.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Δ in Water Level (in.)	Volume of Water (in^3)	Wetted Surface Area (in^2)	Preadjusted Infiltration Rate (in./hr.)
1:49	3	158.4	175.2	16.8	398.2	352.0	22.6
1:52							
1:55	3	156.6	172.2	15.6	369.8	419.9	17.6
1:58							
2:00	3	156.6	172.2	15.6	369.8	419.9	17.6
2:03							
2:05	3	156.6	171.6	15.0	355.5	428.4	16.6
2:08							
2:10	3	156.6	172.8	16.2	384.0	411.4	18.7
2:13							
2:15	3	157.2	172.8	15.6	369.8	402.9	18.4
2:18							

Infiltration Rate (I) = (Preadjusted Infiltration Rate)/(Reduction Factor)
Reduction Factor (Rf) = 3

I= 6.0 in./hr.

Note: Preadjusted infiltration rate uses average of last three readings

Percolation Data Sheet

Project Name: Meritage/1501 Del Norte Street
Project Number: 24002-01
Test Hole Number: P-3
Tested By: PA
Pipe Dia (in): 2
Depth (in): 117

Pipe Area (in^2) per inch: 3.1
Boring Dia. (in.): 9
Boring Area (in^2) per inch: 63.6

Date Excavated: 5/23/24
Date Presoak: 5/24/24
Date Tested: 5/24/24

Sand Backfill Porosity: 0.34

Time	Time Interval (mins.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Δ in Water Level (in.)	Volume of Water (in^3)	Wetted Surface Area (in^2)	Preadjusted Infiltration Rate (in./hr.)
8:38	2	90.6	114.6	24.0	568.9	470.8	36.3
8:40							
8:46	2	90.0	114.0	24.0	568.9	487.7	35.0
8:48							
8:53	2	89.4	114.0	24.6	583.1	496.2	35.3
8:55							
9:01	2	90.0	114.0	24.0	568.9	487.7	35.0
9:03							
9:09	2	89.4	113.4	24.0	568.9	504.7	33.8
9:11							
9:17	2	88.2	113.4	25.2	597.3	521.7	34.4
9:19							
9:27	2	88.8	113.4	24.6	583.1	513.2	34.1
9:29							
9:37	2	87.6	112.8	25.2	597.3	538.6	33.3
9:39							
9:46	2	88.2	112.8	24.6	583.1	530.1	33.0
9:48							
10:00	2	87.6	113.4	25.8	611.5	530.1	34.6
10:02							
10:08	2	88.2	112.8	24.6	583.1	530.1	33.0
10:10							
10:19	2	88.2	113.4	25.2	597.3	521.7	34.4
10:21							
10:30	2	87.6	112.8	25.2	597.3	538.6	33.3
10:32							
10:40	2	87.6	113.4	25.8	611.5	530.1	34.6
10:42							
10:50	2	88.2	112.2	24.0	568.9	538.6	31.7
10:52							

Percolation Data Sheet

Project Name: Meritage/1501 Del Norte Street
Project Number: 24002-01
Test Hole Number: P-3 (Continued)
Tested By: PA
Pipe Dia (in): 2
Depth (in): 117

Pipe Area (in^2) per inch: 3.1
Boring Dia. (in.): 9
Boring Area (in^2) per inch: 63.6

Date Excavated: 5/23/24
Date Presoak: 5/24/24
Date Tested: 5/24/24

Sand Backfill Porosity: 0.34

Time	Time Interval (mins.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Δ in Water Level (in.)	Volume of Water (in^3)	Wetted Surface Area (in^2)	Preadjusted Infiltration Rate (in./hr.)
11:00	2	87.0	112.8	25.8	611.5	547.1	33.5
11:02							
11:10	2	87.0	112.2	25.2	597.3	555.6	32.3
11:12							
11:20	2	86.4	112.2	25.8	611.5	564.1	32.5
11:22							
11:30	2	85.8	112.2	26.4	625.8	572.6	32.8
11:32							
11:40	2	86.4	112.2	25.8	611.5	564.1	32.5
11:42							

Infiltration Rate (I) = (Preadjusted Infiltration Rate)/(Reduction Factor)
Reduction Factor (Rf) = 3

I= 10.9 in./hr.

Note: Preadjusted infiltration rate uses average of last three readings

Percolation Data Sheet

Project Name: Meritage/1501 Del Norte Street
Project Number: 24082-01
Test Hole Number: P-4
Tested By: PA
Pipe Dia (in): 2
Depth (in): 177

Pipe Area (in^2) per inch: 3.1
Boring Dia. (in.): 9
Boring Area (in^2) per inch: 63.6

Date Excavated: 5/23/24
Date Presoak: 5/24/24
Date Tested: 5/24/24

Sand Backfill Porosity: 0.34

Time	Time Interval (mins.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Δ in Water Level (in.)	Volume of Water (in^3)	Wetted Surface Area (in^2)	Preadjusted Infiltration Rate (in./hr.)
8:42	2	160.8	177.0	16.2	384.0	292.6	39.4
8:44							
8:50	1	162.0	171.0	9.0	213.3	360.5	35.5
8:51							
8:57	2	161.4	176.4	15.0	355.5	292.6	36.4
8:59							
9:05	2	161.4	175.8	14.4	341.3	301.1	34.0
9:07							
9:13	2	161.4	177.0	15.6	369.8	284.2	39.0
9:15							
9:21	2	160.8	175.8	15.0	355.5	309.6	34.5
9:23							
9:33	2	160.8	175.8	15.0	355.5	309.6	34.5
9:35							
9:42	2	161.4	176.4	15.0	355.5	292.6	36.4
9:44							
9:50	2	161.4	176.4	15.0	355.5	292.6	36.4
9:52							
10:04	2	160.8	175.8	15.0	355.5	309.6	34.5
10:06							
10:12	2	161.4	175.8	14.4	341.3	301.1	34.0
10:14							
10:23	2	160.2	175.8	15.6	369.8	318.1	34.9
10:25							

Percolation Data Sheet

Project Name: Meritage/1501 Del Norte Street
Project Number: 24082-01
Test Hole Number: P-4 (Continued)
Tested By: PA
Pipe Dia (in): 3
Depth (in): 177

Pipe Area (in^2) per inch: 7.1
Boring Dia. (in.): 9
Boring Area (in^2) per inch: 63.6

Date Excavated: 5/23/24
Date Presoak: 5/24/24
Date Tested: 5/24/24

Annular Backfill Porosity: 0.34

Time	Time Interval (mins.)	Initial Depth to Water (in.)	Final Depth to Water (in.)	Δ in Water Level (in.)	Volume of Water (in^3)	Wetted Surface Area (in^2)	Preadjusted Infiltration Rate (in./hr.)
10:35	2	160.2	175.8	15.6	410.2	318.1	38.7
10:37							
10:45	2	160.2	175.2	15.0	394.4	326.6	36.2
10:47							
10:55	2	161.4	175.2	13.8	362.9	309.6	35.2
10:57							
11:05	2	160.2	175.2	15.0	394.4	326.6	36.2
11:07							
11:15	2	159.6	175.8	16.2	426.0	326.6	39.1
11:17							
11:25	2	160.8	175.8	15.0	394.4	309.6	38.2
11:27							
11:35	2	160.2	175.2	15.0	394.4	326.6	36.2
11:37							
11:45	2	159.6	175.2	15.6	410.2	335.1	36.7
11:47							

Infiltration Rate (I) = (Preadjusted Infiltration Rate)/(Reduction Factor)
Reduction Factor (Rf) = 3

I= 12.4 in./hr.

Note: Preadjusted infiltration rate uses average of last three readings

Appendix F

APPENDIX F

GENERAL EARTHWORK AND GRADING SPECIFICATIONS

1.0 GENERAL

1.1 **Intent:** These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these general Specifications. Observations of the earthwork by the project Geotechnical Consultant during grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 **Geotechnical Consultant:** Prior to commencement of work, the project owner shall employ a geotechnical consultant. The geotechnical consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include natural ground after it has been cleared for receiving fill but before fill is placed, bottoms of all "remedial removal" areas, all keyway bottoms, and benches made on sloping ground to receive fill.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of subgrade and fill materials and perform adequate relative compaction testing of fill to determine the attained level of compaction and assess if, in their opinion, if the work was performed in substantial compliance

with the geotechnical report(s) and these specifications. The Geotechnical Consultant shall provide test results to the owner on a routine and frequent basis.

1.3 **The Earthwork Contractor:** The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with applicable grading codes, the project plans, and these specifications.

The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" of work and the estimated quantities of daily earthwork planned for the site prior to commencement of grading. The Contractor shall inform the owner and the Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are corrected.

2.0 PREPARATION OF FILL AREAS

2.1 **Clearing and Grubbing:** Areas to be excavated and filled shall be cleared and grubbed. Vegetation, such as brush, grass, roots, and other deleterious material, man-made structures, and similar debris shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant. Borrow areas shall be cleared and grubbed to the extent necessary to provide a suitable fill material.

Concrete fragments that are free of reinforcing street may be placed in fills, provided they are placed in accordance with Section 3 and 4. Earth fill material

shall not contain more than 1 percent of organic materials (by volume). No fill lift shall contain more than 5 percent organic matter. Nesting of organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area. As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, etc.) have chemical constituents that are considered hazardous waste. As such, the indiscriminate dumping or spillage of such fluids may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

The Geotechnical Consultant shall not be responsible for the identification or analysis of potentially hazardous materials; however, if observations, odors, or soil discoloration are suspect, the Geotechnical Consultant may request from the owner the termination of grading operations until such materials are deemed not hazardous as defined by applicable laws and regulations.

2.2 **Evaluation/Acceptance of Fill Areas:** All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

2.3 **Processing:** Ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Ground that is not satisfactory shall be removed/overexcavated as specified in the following section. Scarification shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction. After scarification, the surface should be moisture conditioned, as necessary, to achieve the proper moisture content and compacted in accordance with Section 4 of these specifications.

2.4 **Overexcavation:** In addition to removals and overexcavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured, or otherwise unsuitable ground shall be overexcavated to competent ground as recommended by the Geotechnical Consultant during grading.

2.5 **Benching:** Fills to be placed on ground sloping steeper than 5H:1V (horizontal to vertical units) shall be stepped or benched. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise overexcavated to provide a flat subgrade for fill placement.

3.0 FILL MATERIAL

3.1 **General:** Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 **Oversize:** Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 12 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or other underground construction.

3.3 **Import:** If importing of fill material is required for grading, proposed import material shall meet the requirements of Section 3.1 and/or requirements defined in the project geotechnical report(s). The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before import begins so that suitability can be determined, and appropriate laboratory tests performed.

4.0 FILL PLACEMENT AND COMPACTION

4.1 **Fill Layers:** Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 **Fill Moisture Conditioning:** Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with ASTM International (ASTM Test Method D1557).

4.3 **Compaction of Fill:** After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction and uniformity.

Compaction of Fill Slopes: In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

4.4 **Compaction Testing:** Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.5 **Frequency of Compaction Testing:** Tests shall be taken at intervals required by the governing agency and as deemed necessary by the Geotechnical Consultant in order to adequately qualify the fill material. In general, it should be anticipated that tests will be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill, unless recommended otherwise by the Geotechnical Consultant. In addition, test(s) shall be taken on slope faces and/or each 10 feet of vertical height of slope as deemed necessary by the Geotechnical Consultant. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.6 **Compaction Test Locations:** The Geotechnical Consultant shall document the approximate elevation and location of each compaction test. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than 5 feet apart from potential test locations shall be provided. Alternatively, GPS units may be used to determine the approximate location/coordinates of the field density tests.

5.0 SUBDRAIN INSTALLATION

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and standard details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys. The Contractor should consider videoing the subdrains shortly after burial to check proper installation and functionality. The Contractor is responsible for the performance of subdrains.

6.0 EXCAVATION

Excavations, including over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical report(s) and plans are estimates. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 TRENCH BACKFILLS

7.1 Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

7.2 Bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum 90 percent of maximum from 1 foot above the top of the conduit to the surface, except in traveled ways (see Section 7.6 below).

7.3 Jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

7.4 Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill, unless required differently by the governing agency or the Geotechnical Consultant.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

7.6 Trench backfill in the upper foot measured from finish grade within existing or future traveled way, shoulder, and other paved areas (or areas to receive pavement) should be placed to a minimum 95 percent relative compaction.

Basemap Source: Google Earth

Legend

H-5 TD: 26.5’ Approximate Hollow Stem Auger Boring Location, Showing Total Depth in Feet

P-4 TD: 15’ Approximate Hollow Stem Auger Boring and Percolation Test Location, Showing Total Depth in Feet

Earth Units
(Circled Where Buried)

Qal Alluvium

Geotechnical Map

Meritage Homes
Proposed Residential Development
1501 Del Norte Street
West Covina, California

Project Number: 24082-01
Date: June 14, 2024
Plate 1

Appendix F

Greenhouse Gas Analysis

1501 DEL NORTE STREET RESIDENTIAL

GREENHOUSE GAS ANALYSIS

Prepared By:

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Reference Number
16435-02 GHG Report

Agency
City of West Covina

Date
June 19, 2025

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LIST OF ABBREVIATED TERMS

%	Percent
°C	Degrees Celsius
°F	Degrees Fahrenheit
(1)	Reference
2017 Scoping Plan	*Final 2017 Scoping Plan Update*
AB	Assembly Bill
AB 32	Global Warming Solutions Act of 2006
AB 1493	Pavley Fuel Efficiency Standards
AB 1881	California Water Conservation Landscaping Act of 2006
Annex I	Industrialized Nations
APN	Assessor Parcel Number
AQIA	*1501 Del Norte Street Residential Air Quality Impact Analysis*
BAU	Business as Usual
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
$C_2H_2F_4$	Tetrafluroethane
$C_2H_4F_2$	Ethylidene Fluoride
CAA	Federal Clean Air Act
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CEC	California Energy Commission
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CEQA Guidelines	*CEQA Statute and Guidelines*
CDFA	California Department of Food and Agriculture
CF_4	Tetrafluoromethane
CFC	Chlorofluorocarbons
CFC-113	Trichlorotrifluoroethane
CH_4	Methane
City	City of West Covina
CNRA	California Natural Resources Agency
CNRA 2009	*2009 California Climate Adaptation Strategy*
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
Convention	United Nation's Framework Convention on Climate Change
COP	Conference of the Parties

CPUC	California Public Utilities Commission
DWR	Department of Water Resources
EAP	Energy Action Plan
EMFAC	Emission Factor Model
EPA	Environmental Protection Agency
EV	Electric Vehicle
GCC	Global Climate Change
Gg	Gigagram
GHGA	Greenhouse Gas Analysis
GWP	Global Warming Potential
H_2O	Water
HFC	Hydrofluorocarbons
HDT	Heavy-Duty Trucks
HFC-23	Fluoroform
HFC-134a	1,1,1,2-tetrafluoroethane
HFC-152a	1,1-difluoroethane
HP	Horsepower
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ITE	Institute of Transportation Engineers
kWh	Kilowatt Hours
lbs	Pounds
LBNL	Lawrence Berkeley National Laboratory
LCA	Life-Cycle Analysis
LCD	Liquid Crystal Display
LCFS	Low Carbon Fuel Standard or Executive Order S-01-07
LEV III	Low-Emission Vehicle
LULUCF	Land-Use, Land-Use Change and Forestry
$MMTCO_2e$	Million Metric Ton of Carbon Dioxide Equivalent
mpg	Miles Per Gallon
MPOs	Metropolitan Planning Organizations
$MMTCO_2e/yr$	Million Metric Ton of Carbon Dioxide Equivalent Per Year
MT/yr	Metric Tons Per Year
$MTCO_2e$	Metric Ton of Carbon Dioxide Equivalent
$MTCO_2e/yr$	Metric Ton of Carbon Dioxide Equivalent Per Year
MW	Megawatts
MWh	Megawatts Per Hour
MWELO	California Department of Water Resources' Model Water Efficient
N_2O	Nitrous Oxide
NDC	Nationally Determined Contributions
NF_3	Nitrogen Trifluoride
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health

NO_X	Nitrogen Oxides
Non-Annex I	Developing Nations
OAL	Office of Administrative Law
OPR	Office of Planning and Research
PFC	Perfluorocarbons
ppb	Parts Per Billion
ppm	Parts Per Million
ppt	Parts Per Trillion
Project	1501 Del Norte Street Residential
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient Vehicles Rule
SB	Senate Bill
SB 32	California Global Warming Solutions Act of 2006
SB 375	Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies
SB 1078	Renewable Portfolio Standards
SB 1368	Statewide Retail Provider Emissions Performance Standards
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
Scoping Plan	California Air Resources Board Climate Change Scoping Plan
SCS	Sustainable Communities Strategy
sf	Square Feet
SF_6	Sulfur Hexaflouride
SLPS	Short-Lived Climate Pollutant Strategy
SP	Service Population
TDM	Transportation Demand Measures
Title 20	Appliance Energy Efficiency Standards
Title 24	California Building Code
U.N.	United Nations
U.S.	United States
UNFCCC	United Nations' Framework Convention on Climate Change
VMT	Vehicle Miles Traveled
WCI	Western Climate Initiative
WRI	World Resources Institute
ZE/NZE	Zero and Near-Zero Emissions
ZEV	Zero-Emissions Vehicles

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this 1501 Del Norte Street Residential Greenhouse Gas Analysis (GHGA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) (1). Table ES-1 shows the findings of significance for potential greenhouse gas (GHG) impacts under the California Environmental Quality Act (CEQA).

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
GHG Impact #1: Would the Project generate GHG emissions either directly or indirectly, that may have a significant impact on the environment?	3.7	*Less Than Significant*	*n/a*
GHG Impact #2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	3.7	*Less Than Significant*	*n/a*

ES.2 REGULATORY REQUIREMENTS

The Project would be required to comply with regulations imposed by the State of California, the South Coast Air Quality Management District (SCAQMD), and the City of West Covina aimed at the reduction of air pollutant emissions. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of GHG emissions include.

- Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) (2).
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (Senate Bill [SB] 375) (3).
- Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles (4).
- California Building Code (Title 24 California Code of Regulations [CCR]). Establishes energy efficiency requirements for new construction (5).
- Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements for appliances (6).
- Low Carbon Fuel Standard (LCFS). Requires carbon content of fuel sold in California to be 10 percent (%) less by 2020 (7).
- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions (8).
- Renewable Portfolio Standards (RPS). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20% by 2010 and 33% by 2020. SB

350 mandated a 50% RPS by 2030. SB 100 increased the RPS requirements to 60% by 2030 with new interim targets of 44% by 2024 and 52% by 2027 (9).

- California Global Warming Solutions Act of 2006 (SB 32). Requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15 (10).

Promulgated regulations that would affect the Project's emissions are accounted for in the Project's GHG calculations provided in this report. In particular, AB 1493, LCFS, and RPS are accounted for in the Project's emission calculations.

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1 INTRODUCTION

This report presents the results of the GHGA prepared by Urban Crossroads, Inc., for the proposed 1501 Del Norte Street Residential Project (Project). The purpose of this GHGA is to evaluate Project-related construction and operational emissions and determine the level of GHG impacts as a result of constructing and operating the Project.

1.1 SITE LOCATION

The Project site is located at 1501 Del Norte Street in the City of West Covina, as shown in Exhibit 1-A. The Project site encompasses approximately 13.56 acres and has an Assessor Parcel Number (APN) of 8458-020-901. The project site is bordered by Del Norte Park to the north and northeast; North Sunset Avenue, one residential building, and one commercial building to the east; West Del Norte Street and residential properties to the south; and North Nora Avenue to the west. The areas beyond these immediately bordering uses can be generally characterized as consisting of residential neighborhoods of mostly one-story single-family homes.

1.2 PROJECT DESCRIPTION

The Project involves the demolition of the existing buildings and structures on the project site, followed by construction of 34 single-family detached homes and 248 attached townhomes, for a total of 282 homes. The Project site is 13.56 acres, of which 13.19 acres would be developed for residential uses, and the additional 0.37 acres would be converted and used as an extension and dedication of Del Norte Street from its current terminus east to Sunset Avenue. The Project will be evaluated in a single phase of development with Project Buildout anticipated in 2028. A preliminary site plan for the proposed Project is shown in Exhibit 1-B.

EXHIBIT 1-A: LOCATION MAP

EXHIBIT 1-B: SITE PLAN

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2 CLIMATE CHANGE SETTING

2.1 INTRODUCTION TO GLOBAL CLIMATE CHANGE (GCC)

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project, like the Project evaluated in this GHGA, cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, Section 3 will evaluate the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

2.2 GLOBAL CLIMATE CHANGE DEFINED

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2, N_2O, CH_4, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

2.3 GHGS

2.3.1 GHGs and Health Effects

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties as discussed in Table 2-1. For the purposes of this analysis, emissions of CO_2, CH_4, and N_2O were evaluated (see Table 3-6 later in this report) because these gases are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

TABLE 2-1: GHGS (1 OF 6)

GHGs	Description	Sources	Health Effects
Water	Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. Climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the earth, thus	The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.	There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.

TABLE 2-1: GHGS (2 OF 6)

GHGs	Description	Sources	Health Effects
Water (Continued)	further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop would continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it would eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up) (11).		
CO_2	CO_2 is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540	CO_2 is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. CO_2 is naturally removed from the air by photosynthesis, dissolution into	Outdoor levels of CO_2 are not high enough to result in negative health effects. According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of CO_2 can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO_2 in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference

TABLE 2-1: GHGS (3 OF 6)

GHGs	Description	Sources	Health Effects
CO_2 (Continued)	ppm by 2100 as a direct result of anthropogenic sources (12).	ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks (13).	exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period (14).
CH_4	CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.	CH_4 in the atmosphere is generated by many different sources, such as fossil fuel production, transport and use, from the decay of organic matter in wetlands, and as a byproduct of digestion by ruminant animals such as cows. Determining which specific sources are responsible for variations in annual increases of CH_4 is complex, but scientists estimate that fossil fuel production and use contributes roughly 30% of the total CH_4 emissions. These industrial sources of CH_4 are relatively simple to pinpoint and control using current technology (15).	CH_4 is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to elevated levels of CH_4 can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.

TABLE 2-1: GHGS (4 OF 6)

GHGs	Description	Sources	Health Effects
N_2O	N_2O, also known as laughing gas, is a colorless GHG. Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb).	N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction (16).	N_2O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage) (16).
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine	CFCs have no natural source. They are found in aerosol	In confined indoor locations, working with CFC-113 or other CFCs is

TABLE 2-1: GHGS (5 OF 6)

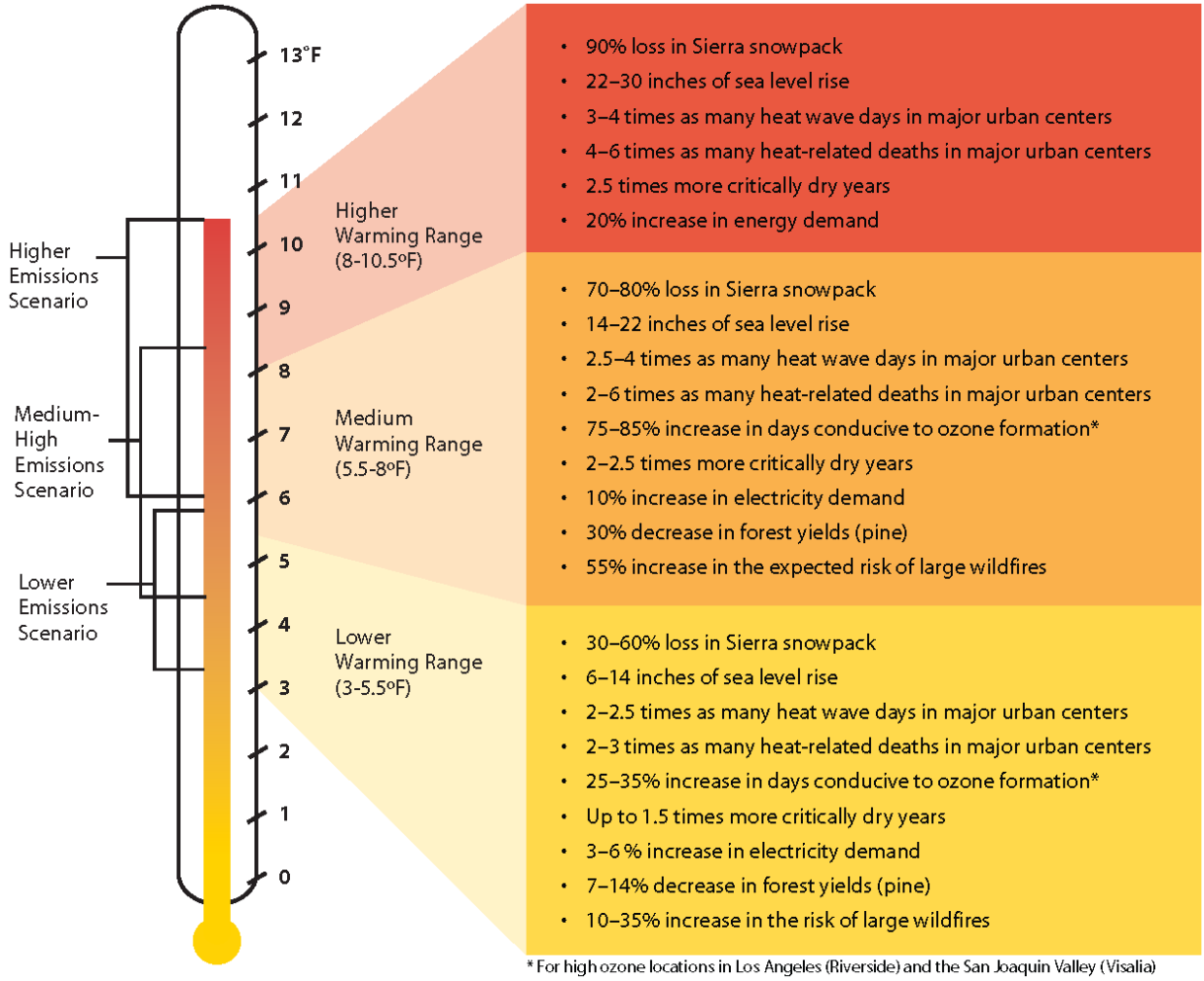
GHGs	Description	Sources	Health Effects
Chlorofluorocarbons (CFCs) (Continued)	and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. (17).	thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.
HFCs	HFCs are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), Fluoroform (HFC-23), 1,1,1,2-tetrafluoroethane (HFC-134a), and 1,1-difluoroethane (HFC-152a). Prior to 1990, the only significant emissions were of HFC-23. HCF-134a emissions are increasing due to its use as a refrigerant.	HFCs are manmade for applications such as automobile air conditioners and refrigerants.	No health effects are known to result from exposure to HFCs.
PFCs	PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have exceptionally long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The EPA estimates that concentrations of CF_4 in the	The two main sources of PFCs are primary aluminum production and semiconductor manufacture.	No health effects are known to result from exposure to PFCs.

TABLE 2-1: GHGS (6 OF 6)

GHGs	Description	Sources	Health Effects
PFCs (Continued)	atmosphere are over 70 parts per trillion (ppt).		
SF_6	SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900) (18). The EPA indicates that concentrations in the 1990s were about 4 ppt.	SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.
Nitrogen Trifluoride (NF_3)	NF_3 is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF_3 has a 100-year GWP of 17,200 (19).	NF_3 is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display (LCD) panels, types of solar panels, and chemical lasers.	Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis (20).

The potential health effects related directly to the emissions of CO_2, CH_4, and N_2O as they relate to development projects, such as the Project, are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Exhibit 2-A presents the potential impacts of global warming (21).

EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT, 2070-2099 (AS COMPARED WITH 1961-1990)



Source: Barbara H. Allen-Diaz. "Climate change affects us all." *University of California, Agriculture and Natural Resources*, 2009.

2.4 GLOBAL WARMING POTENTIAL (GWP)

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas cause over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO_2 is utilized as the reference gas for GWP, and thus has a GWP of 1. CO_2 equivalent (CO_2e) is a term used for describing the different GHGs in a common unit. CO_2e signifies the amount of CO_2 which would have the equivalent GWP.

The Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change. IPCC Assessment Reports cover the full scientific, technical and socio-economic assessment of climate change. The atmospheric lifetime and GWP of selected GHGs are summarized at Table 2-2. As shown in the table below, GWP for the 2nd Assessment Report range from 1 for CO_2 to 23,900 for SF_6 and GWP for the 6th Assessment Report range from 1 for CO_2 to 25,200 for SF_6 (22).

TABLE 2-2: GWP AND ATMOSPHERIC LIFETIME OF SELECT GHGS

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2nd Assessment Report	6th Assessment Report
CO_2	Multiple	1	1
CH_4	11.8	21	28
N_2O	109	310	273
HFC-23	228	11,700	14,600
HFC-134a	14	1,300	1,526
HFC-152a	1.6	140	164
SF_6	3,200	23,900	25,200

Source: IPCC Second Assessment Report, 1995 and IPCC Sixth Assessment Report, 2023

2.5 GHG EMISSIONS INVENTORIES

2.5.1 Global

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2021. Based on the latest available data, the sum of these emissions totaled approximately 28,272,940 gigagram (Gg) CO_2e[1] (23) (24) as summarized on Table 2-3.

2.5.2 United States

As noted in Table 2-3, the United States, as a single country, was the number two producer of GHG emissions in 2021.

2.5.3 State of California

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the United States (U.S.) emissions inventory total (16). The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2024 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2022 GHG emissions period, California emitted an average 371.1 million metric tons of CO_2e per year ($MMTCO_2e/yr$) or 371,100 Gg CO_2e (5.85% of the total United States GHG emissions) (25). Based on data published by the U.S. Energy Information Administration, California's per capita (9.12 metric tons) GHG emissions are much less than the nationwide per capita (15.8 metric ton) average (26).

[1] The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2021 data, the United Nations' Framework Convention on Climate Change (UNFCCC) data for the most recent year were used U.N. Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China and India are from 2014 and 2016, respectively.

TABLE 2-3: TOP GHG PRODUCING COUNTRIES AND THE EUROPEAN UNION

Emitting Countries	GHG Emissions (Gg CO_2e)
China	12,300,200
United States	6,340,228
European Union (27-member countries)	3,468,394
India	2,839,425
Russian Federation	2,156,599
Japan	1,168,094
Total	28,272,940

2.6 EFFECTS OF CLIMATE CHANGE IN CALIFORNIA

2.6.1 Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. Based on *Our Changing Climate Assessing the Risks to California by the California Climate Change Center*, large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced (27).

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a significant increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

2.6.2 Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to

water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

2.6.3 Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

2.6.4 Forests and Landscapes

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks would not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

2.6.5 Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

2.7 REGULATORY SETTING

2.7.1 International

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

IPCC

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nation's Framework Convention on Climate Change (UNFCCC)

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the UNFCCC, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

International Climate Change Treaties

The Kyoto Protocol is an international agreement linked to the UNFCCC. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the UN Climate Change Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings gradually gained consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the UNFCCC reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they would "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly would not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC (C2ES 2015a) (28).

Following President Biden's day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change.

2.7.2 National

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG Endangerment

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (Supreme Court) found that four GHGs, including CO_2, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA). The Supreme Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator's findings (29).

Clean Vehicles

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the U.S. On April 1, 2010, the EPA, and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the U.S.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty (MD) passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). In August 2012, the EPA and the NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025. The new standards apply to passenger cars, light-duty trucks, and MD passenger vehicles. The final standards are projected to result in an average industry fleetwide level

of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20% reduction in CO_2 emissions and fuel consumption by the 2018 model year. For HDT and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12 and 17%, respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10% reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

On April 2, 2018, the EPA signed the Mid-term Evaluation Final Determination, which declared that the MY 2022-2025 GHG standards are not appropriate and should be revised (30). This Final Determination serves to initiate a notice to further consider appropriate standards for MY 2022-2025 light-duty vehicles. On August 2, 2018, the NHTSA in conjunction with the EPA, released a notice of proposed rulemaking, the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule). The SAFE Vehicles Rule was proposed to amend existing Corporate Average Fuel Economy (CAFE) and tailpipe CO_2 standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026. As of March 31, 2020, the NHTSA and EPA finalized the SAFE Vehicle Rule which increased stringency of CAFE and CO_2 emissions standards by 1.5% each year through model year 2026 (31). On December 21, 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalizes the CAFE Preemption rulemaking to withdraw its portions of the so-called SAFE I Rule. The final rule concludes that the SAFE I Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests. The final rule ensures that the SAFE I Rule will no longer form an improper barrier to states exploring creative solutions to address their local communities' environmental and public health challenges (32).

On March 31, 2022, NHTSA finalized CAFE standards for MY 2024-2026. The standards for passenger cars and light trucks for MYs 2024-2025 were increased at a rate of 8% per year and then increased at a rate of 10% per year for MY 2026 vehicles. NHTSA currently projects that the revised standards would require an industry fleet-wide average of roughly 49 mpg in MY 2026 and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings. These standards are directly responsive to the agency's statutory mandate to improve energy conservation and reduce the nation's energy dependence on foreign sources (33).

Mandatory Reporting of GHGs

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000

metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

New Source Review

The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these CAA permitting programs to limit which facilities would be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

> *"This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016."*

The EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources would be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

Standards of Performance for GHG Emissions for New Stationary Sources: Electric Utility Generating Units

As required by a settlement agreement, the EPA proposed new performance standards for emissions of CO_2 for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts (MW) would be required to meet an output-based standard of 1,000 pounds (lbs) of CO_2 per MW-hour (MWh), based on the performance of widely used natural gas combined cycle technology. It should be noted that on February 9, 2016, the Supreme Court issued a stay of this regulation pending litigation. Additionally, the current EPA Administrator has also signed a measure to repeal the Clean Power Plan, including the CO_2 standards. The Clean Power Plan was officially repealed on June 19, 2019, when the EPA issued the final Affordable Clean Energy rule (ACE). Under ACE, new state-specific emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards.

On January 19, 2021, the D.C. Circuit Court of Appeals ruled that the EPA's ACE Rule for GHG emissions from power plants rested on an erroneous interpretation of the CAA that barred EPA from considering measures beyond those that apply at and to an individual source. The court therefore vacated and remanded the ACE Rule and adopted a replacement rule which regulates CO_2 emissions from existing power plants, potentially again considering generation shifting and other measures to more aggressively target power sector emissions.

Cap-and-Trade

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. Successful examples in the U.S. include the Acid Rain Program and the N_2O Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO_2 emissions from power plants, auctions CO_2 emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008 and has retained all participating states as of 2020.

The Western Climate Initiative (WCI) partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015. While the WCI has yet to publish whether it has successfully reached the 2020 emissions goal initiative set in 2007, SB 32 requires that California, a major partner in the WCI, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

Executive Order 13990

On January 20, 2021, Federal agencies were directed to immediately review, and take action to address, Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce GHG emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

2.7.3 California

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

2.7.3.1 Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 and Title 20 energy standards, were originally adopted for other purposes such as energy and water conservation but also provided GHG reductions. This section describes the major provisions of the legislation.

AB 1881

The Water Conservation in Landscaping Act of 2006 requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

SB 1368

California SB 1368 adds Sections 8340 and 8341 to the Public Utilities Code (effective January 1, 2007) with the intent "to prevent long-term investments in power plants with GHG emissions in excess of those produced by a combined-cycle natural gas power plant" with the aim of "reducing emissions of GHGs from the state's electricity consumption, not just the state's electricity production." SB 1368 provides a mechanism for reducing the GHG emissions of electricity providers, both in-state and out-of-state, thereby assisting CARB in meeting its mandate under AB 32, the Global Warming Solutions Act of 2006.

AB 32

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by the year 2020 (this goal has been met[2]). GHGs, as defined under AB 32, include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. Pursuant to AB 32, CARB adopted regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 states the following:

> *"Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems."*

SB 375

On September 30, 2008, SB 375 was signed by Governor Schwarzenegger. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California would not be able to achieve the goals of AB 32." SB 375 does the following: it (1) requires metropolitan planning organizations (MPOs) to include sustainable community strategies in their regional transportation plans for reducing GHG emissions; (2) aligns planning for transportation and housing; and (3) creates specified incentives for the implementation of the strategies.

[2] Based upon the 2024 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2022 GHG emissions period, California emitted an average 371.1 $MMTCO_2e$) (26). This is less than the 2020 emissions target of 431 $MMTCO_2e$. This is less than the 2020 emissions target of 431 $MMTCO_2e$.

SB 375 requires MPOs to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that CARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the MMs required by an applicable prior environmental document.

AB 1493 - Pavley Fuel Efficiency Standards

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars (ACC) program. The ACC program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for MY 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EV and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. On March 9, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards for cars and light trucks, which other states can also adopt and enforce. With this authority restored, EPA will continue partnering with states to advance the next generation of clean vehicle technologies.

Clean Energy and Pollution Reduction Act of 2015 (SB 350)

In October 2015, the legislature approved, and Governor Jerry Brown signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target would be achieved through the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.

- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which would facilitate the growth of renewable energy markets in the western United States.

SB 32

On September 8, 2016, Governor Brown signed SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature (10).

2017 CARB Scoping Plan

In November 2017, CARB released the *Final 2017 Scoping Plan Update* (*2017 Scoping Plan*), which identifies the State's post-2020 reduction strategy. The *2017 Scoping Plan* reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks, and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH_4 emissions from agricultural and other wastes.

The *2017 Scoping Plan* establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (34).

California's climate strategy would require contributions from all sectors of the economy, including the land base, and would include enhanced focus on zero and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH_4, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries would further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the *2017 Scoping Plan* framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero-emission vehicles (ZEV) buses and trucks.
- LCFS, with an increased stringency (18% by 2030).
- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
    - Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH4 and HCF emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
    - Continued implementation of SB 375.

- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Note, however, that the *2017 Scoping Plan* acknowledges that:

> *"[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."*

In addition to the statewide strategies listed above, the *2017 Scoping Plan* also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO_2e ($MTCO_2e$) or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidence-based bright-line numeric thresholds—consistent with the *2017 Scoping Plan* and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and MMs that avoid or minimize project emissions to the degree feasible; or a performance-based metric using a CAP or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that by 2030, emissions could range from 211 to 428 $MTCO_2e$ per year ($MTCO_2e$/yr), indicating that "even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32]." CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the State's 80% reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050 (35) (36).

Cap-and-Trade Program

The *2017 Scoping Plan* identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program would help put California on the path to meet its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap would be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production)

commenced in 2013 and would decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 $MTCO_2e$/yr must comply with the Cap-and-Trade Program. Triggering of the 25,000 $MTCO_2e$/yr "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or "MRR").

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender "compliance instruments" for each $MTCO_2e$ of GHG they emit. There also are requirements to surrender compliance instruments covering 30% of the prior year's compliance obligation by November of each year (37).

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the *First Update to the Climate Change Scoping Plan*:

> *"The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative."* (38)

The Cap-and-Trade Program covers approximately 80% of California's GHG emissions (34). The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported.

2022 CARB Scoping Plan

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) (39). The 2022 Scoping Plan builds on the 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce

GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to "deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor." The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (CAP) consistent with *CEQA Guidelines* section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation - the regulations that will impact this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments. As stated in the Plan's executive summary:

> *"The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon reduction programs that have been in place for a decade and a half. That means rapidly moving to zero-emission transportation; electrifying the cars, buses, trains, and trucks that now constitute California's single largest source of planet-warming pollution."*
>
> *"[A]pproval of this plan catalyzes a number of efforts, including the development of new regulations as well as amendments to strengthen regulations and programs already in place, not just at CARB but across state agencies."*

Under the 2022 Scoping Plan, the State will lead efforts to meet the 2045 carbon neutrality goal through implementation of the following objectives:

- Reimagine roadway projects that increase VMT in a way that meets community needs and reduces the need to drive.
- Double local transit capacity and service frequencies by 2030.
- Complete the High-Speed Rail (HSR) System and other elements of the intercity rail network by 2040.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.
- Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.
- Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.
- Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.
- Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.
- Prevent uncontrolled growth of autonomous vehicle (AV) VMT, particularly zero-passenger miles.
- Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.
- Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.

- Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services.
- Expand universal design features for new mobility services.
- Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.
- Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and RHNA) and local plans (e.g., general plans, zoning, and local transportation plans).
- Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.
- Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.
- Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.

Included in the 2022 Scoping Plan is a set of Local Actions (Appendix D to the 2022 Scoping Plan) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects, in fact CARB states in Appendix D (page 4): "…focuses primarily on climate action plans (CAPs) and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

Additionally on Page 21 in Appendix D, CARB states: "The recommendations outlined in this section apply only to residential and mixed-use development project types. California currently faces both a housing crisis and a climate crisis, which necessitates prioritizing recommendations for residential projects to address the housing crisis in a manner that simultaneously supports the State's GHG and regional air quality goals. CARB plans to continue to explore new approaches for other land use types in the future." As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

2.7.3.2 Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

Executive Order S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that would stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07 (LCFS)

Governor Schwarzenegger signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. CARB adopted the LCFS on April 23, 2009.

After a series of legal changes, in order to address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector (40).

Executive Order S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the *2009 California Climate Adaptation Strategy* (*CNRA 2009*) was adopted, which is the "…first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligned California's GHG reduction targets with those of leading international governments ahead of the U.N. Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the *2017 Scoping Plan* to express the 2030 target in terms of $MMTCO_2e$. The Order also requires the state's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable to local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

Executive Order B-55-18 and SB 100

SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales of electricity are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California EPA (CalEPA), the California Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

2.7.3.3 California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 CCR Sections 1601 et seq. – Appliance Efficiency Regulations

The Appliance Efficiency Regulations regulate the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles (RV) or other mobile equipment (CEC 2012).

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

The 2022 California Title 24 Energy Standards became effective on January 1, 2023, with updates for the 2025 standards set to take effect on January 1, 2026. As the Project is expected to be completed in 2028, it will need to comply with the Title 24 Energy Standards in effect at that time, which may include further updates beyond the 2025 version.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2025 California Green Building Code Standards that go into effect on January 1, 2026. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

CARB Refrigerant Management Program

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, CCR. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

SB 97 and the CEQA Guidelines Update

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research (OPR) shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a)."

In 2012, Public Resources Code Section 21083.05 was amended to state:

> *"The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption, to incorporate new information or criteria established by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code."*

On December 28, 2018, the Natural Resources Agency announced the OAL approved the amendments to the *CEQA Guidelines* for implementing CEQA. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

Section 15064.4 was added to the *CEQA Guidelines* and states that in determining the significance of a project's GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively insignificant compared to statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a

model or methodology to estimate GHG emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use (41).

2.7.4 Regional

The Project site is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD

SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, which could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
  - Residential and commercial land use: 3,000 $MTCO_2e/yr$
  - Industrial land use: 10,000 $MTCO_2e/yr$
  - Based on land use type: residential: 3,500 $MTCO_2e/yr$; commercial: 1,400 $MTCO_2e/yr$; or mixed use: 3,000 $MTCO_2e/yr$
- Tier 4 has the following options:
  - Option 1: Reduce Business-as-Usual (BAU) emissions by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures

- Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$ per SP per year for projects and 6.6 $MTCO_2e$ per SP per year for plans;
- Option 3, 2035 target: 3.0 $MTCO_2e$ per SP per year for projects and 4.1 $MTCO_2e$ per SP per year for plans

- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. At this time, it is unknown if the project would include stationary sources of emissions subject to SCAQMD permits. Notwithstanding, if the Project requires a stationary permit, it would be subject to the applicable SCAQMD regulations.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD would fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

2.7.5 Local

City of West Covina Energy Action Plan

The City of West Covina Energy Action Plan (EAP) outlines strategies to enhance energy efficiency, promote renewable energy, and reduce GHG emissions. By implementing energy efficiency programs in residential and commercial buildings, encouraging renewable energy sources like solar, and setting long-term sustainability goals, the plan aims to mitigate climate change impacts. It also emphasizes community engagement and collaboration with local organizations to foster a culture of energy conservation. Ultimately, the plan directly contributes to reducing GHG emissions, improving air quality, and promoting a healthier, more sustainable environment for residents.

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3 PROJECT GHG IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will result in a significant GHG impact. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the Initial Study Checklist in Appendix G of the State *CEQA Guidelines* (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to GHG if it would (42):

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

The evaluation of an impact under CEQA requires measuring data from a project against both existing conditions and a "threshold of significance." For establishing significance thresholds, the Office of Planning and Research's amendments to the CEQA Guidelines Section 15064.7(c) state *"[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."*

CEQA Guidelines Section 15064.4(a) further states, *". . . A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance-based standards."*

CEQA Guidelines Section 15064.4 provides that a lead agency should consider the following factors, among others, in assessing the significance of impacts from greenhouse gas emissions:

- Consideration #1: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #3: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

3.2.1 Thresholds of Significance

The City of West Covina has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 $MTCO_2e$/yr to determine if additional analysis is required is an acceptable approach for small projects such as the proposed Project. This approach is a widely accepted screening threshold used by the City of West Covina and numerous cities in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required (43). As noted by the SCAQMD:

> *"...the...screening level for stationary sources is based on an emission capture rate of 90% for all new or modified projects...the policy objective of [SCAQMD's] recommended interim GHG significance threshold proposal is to achieve an emission capture rate of 90% of all new or modified stationary source projects. A GHG significance threshold based on a 90% emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90% emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than 1% of future 2050 statewide GHG emissions target (85 [MMTCO2e/yr]). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology] (BACT) for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility."* (44)

Thus, and based on guidance from the SCAQMD, if a non-industrial project would emit GHGs less than 3,000 $MTCO_2e$/yr, the project is not considered a substantial GHG emitter and the GHG impact is less than significant, requiring no additional analysis and no mitigation. On the other hand, if a non-industrial project would emit GHGs in excess of 3,000 $MTCO_2e$/yr, then the project could be considered a substantial GHG emitter, requiring additional analysis and potential mitigation. As previously discussed, a screening threshold of 3,000 $MTCO_2e$/yr is an acceptable approach for small projects to determine if additional analysis is required and is therefore applied for this Project.

3.3 Models Employed To Greenhouse Gases

3.3.1 California Emissions Estimator Model (CalEEMod)

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod

periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (45). Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity for the proposed Project is provided in Appendix 3.1. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, and refrigerants sources.

3.4 LIFE-CYCLE ANALYSIS NOT REQUIRED

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time (46). Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the Project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared.

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood, or documented, and would be challenging to mitigate (47). Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, the SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis.

3.5 CONSTRUCTION EMISSIONS

Project construction activities would generate CO_2, CH_4, N_2O, and refrigerant (R) emissions. The *1501 Del Norte Street Residential Air Quality Impact Analysis* (AQIA) report contains detailed information regarding Project construction activities (48). As discussed in the AQIA, construction-related emissions are expected from the following activities.

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

3.5.1 Construction Duration

For purposes of analysis, construction will begin January 2026 and would last through January 2028. The construction schedule utilized in the analysis, shown in Table 3-1, represents a "conservative" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[3] The duration of construction activity and associated

[3] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offroad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older

equipment represents a reasonable approximation of the expected construction fleet as required per the *CEQA Guidelines* (49).

TABLE 3-1: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Days
Demolition	01/01/2026	02/11/2026	30
Site Preparation	02/12/2026	03/04/2026	15
Grading	03/05/2026	05/06/2026	45
Building Construction	05/07/2026	01/26/2028	450
Paving	12/16/2027	01/26/2028	30
Architectural Coating	12/03/2026	01/26/2028	300

3.5.2 Construction Equipment

Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 3-2 is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City code.

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment	Quantity	Hours
Demolition	Concrete/Industrial Saws	1	8
	Excavators	2	8
	Rubber Tired Dozers	1	8
Site Preparation	Crawler Tractors	1	8
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Crawler Tractors	1	8
Building Construction	Forklifts	1	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	2	8
Paving	Pavers	1	8
	Paving Equipment	1	8
	Rollers	2	8
Architectural Coating	Air Compressors	2	8

3.4.5 Construction Emissions Summary

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions (50). As such, construction

equipment being replaced by newer less polluting equipment and new regulatory requirements.

emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 3-3.

TABLE 3-3: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS

Year	CO_2T	CH_4	N_2O	R	Total CO_2e
2026	534.00	0.02	0.02	0.43	542.00
2027	604.00	0.02	0.03	0.61	613.00
2028	50.60	< 0.005	< 0.005	0.04	51.30
Total	1,188.60	0.04	0.05	1.08	1,206.30
Annual construction emissions amortized over 30 years	39.62	1.33E-03	1.67E-03	0.04	40.21

3.6 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of CO_2, CH_4, N_2O, and Refrigerant emissions from the following primary sources:

- Mobile Source Emissions;
- Area Source Emissions;
- Energy Source Emissions;
- Water Supply, Treatment, and Distribution;
- Solid Waste; and
- Refrigeration.

3.6.1 Mobile Source Emissions

The operational air quality emissions associated with the Project are primarily attributable to vehicle trips generated by the proposed development. In order to develop the traffic characteristics of the proposed Project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for the following land use codes (51):

- Single-Family Detached Housing (ITE Land Use Code 210)
- Multifamily (Low-Rise) Residential (ITE Land Use Code 220)
- Multifamily (Mid-Rise) Residential (ITE Land Use Code 221)

3.6.2 Area Source Emissions

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance equipment

were calculated based on assumptions provided in CalEEMod, and do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

3.6.3 Energy Source Emissions

Combustion Emissions Associated with Electricity and Natural Gas

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting.[4] GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Electricity usage associated with the Project was calculated by CalEEMod using default parameters. Based on information provided by the Project Applicant, no natural gas would be used as a result of the Project, and as such use of natural gas is not considered in the analysis.

3.6.4 Water Supply, Treatment, and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

3.6.5 Solid Waste

The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters.

3.6.6 Refrigerants

Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the USEPA (2016b). CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a GWP of 150 or greater as of January 1, 2022. Additionally, beginning January 1, 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters.

[4] The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

3.6.7 GHG Emissions Summary

The estimated Project-related GHG emissions are summarized in Table 3-4. Detailed operation model outputs for the Project are presented in Appendix 3.1. As shown in Table 3-4, construction and operation of the Project would generate approximately 1,888.88 $MTCO_2e/yr$.

TABLE 3-4: PROJECT GHG EMISSIONS

Source	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2E
Annual construction emissions amortized over 30 years	39.62	1.33E-03	1.67E-03	0.04	40.21
Mobile	1,457.00	0.07	0.06	1.80	1,479.00
Area	16.80	0.00	0.00	0.00	16.90
Energy	220.00	0.02	0.00	0.00	221.00
Water	21.70	0.38	0.01	0.00	33.90
Waste	27.90	2.79	0.00	0.00	97.60
Refrigerants	0.00	0.00	0.00	0.27	0.27
Total CO_2E (All Sources)	1,888.88				
Screening Threshold (CO_2E)	3,000				
Threshold Exceeded?	NO				

3.7 GHG EMISSIONS FINDINGS AND RECOMMENDATIONS

3.7.1 GHG Impact 1

Potential to generate direct or indirect GHG emissions that would result in a significant impact on the environment.

The City of West Covina has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 $MTCO_2e/yr$ to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by the City of West Covina and numerous cities in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required (44).

The Project will result in a net increase of approximately 1,888.88 $MTCO_2e/yr$ as shown on Table 3-4. As such, the Project would not exceed the SCAQMD's recommended numeric threshold of 3,000 $MTCO_2e/yr$ if it were applied. As such, project-related emissions would have a less than significant direct or indirect impact on GHG and climate change, and no mitigation measures are required.

3.7.2 GHG Impact 2

Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

As previously stated, pursuant to 15604.4 of the *CEQA Guidelines*, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions (52). As such, the Project's consistency with the 2022 Scoping Plan, is discussed below. It should be noted that the Project's consistency with the 2022 Scoping Plan also satisfies consistency with AB 32 since the 2022 Scoping Plan is based on the overall targets established by AB 32 and SB 32. Consistency with the 2008 and 2017 Scoping Plan is not necessary since both of these plans have been superseded by the 2022 Scoping Plan. For reasons outlined herein, the proposed Project would result in a less than significant impact with respect to GHG emissions for GHG Impact #1 and GHG Impact #2.

2022 Scoping Plan Consistency

Included in the 2022 Scoping Plan is a set of Local Actions (Appendix D to the 2022 Scoping Plan) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects, in fact CARB states in Appendix D (page 4): "...focuses primarily on climate action plans (CAPs) and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

The 2022 Scoping Plan lays out a framework to determine Project-level consistency when there is not a CEQA-qualified CAP available to tier off of. CARB recommends that the first approach for determining whether a proposed residential or mixed-use residential development would align with the State's climate goals is to examine whether the project includes key project attributes that reduce operational GHG emissions while simultaneously advancing fair housing. The 2022 Scoping Plan goes on to note that Projects that can demonstrate consistency with the priority areas identified on Table 3 *Key Residential and Mixed-Use Project Attributes that Reduce GHGs* from the 2022 Scoping Plan would be aligned with the State's priority GHG reduction strategies and would be deemed consistent with the Scoping Plan. As such, these Projects are considered to be consistent with the Scoping Plan or other plans, policies, or regulations adopted for the purposes of reducing GHGs; therefore, the GHG emissions associated with such projects would result in a less-than-significant GHG impact under CEQA.

The Project's consistency with the *Key Residential and Mixed-Use Project Attributes that Reduce GHGs* is summarized on Table 3-5.

TABLE 3-5: PROJECT POTENTIAL TO CONFLICT WITH KEY ATTRIBUTES IDENTIFIED IN TABLE 3 OF THE 2022 CARB SCOPING PLAN'S APPENDIX D (1 OF 3)

Priority Areas	Key Project Attribute	Potential to Conflict
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval	No Conflict. The Project would meet the most ambitious voluntary EV charging infrastructure standards (Tier 2) required by the most recent CALGreen standards.
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)	No Conflict. The Project site is currently developed with an existing structure that housed the East San Gabriel Valley Regional Occupational Program And Technical Center. The site's surrounding area is urbanized with a variety of residential densities and other uses consistent with these current designations. Specifically, the surrounding area is predominantly developed with residential uses, primarily single-family neighborhood developments. Among these residential neighborhoods lie the Del Norte Park. Existing infrastructure and utilities to serve the site are located within adjacent roadways. The Project would require internal construction of roads for local access, customary extension of water services and facilities, and construction of new sewer lines and stormwater and drainage infrastructure, consistent with existing sewer and stormwater/drainage infrastructure in the area.
	Does not result in the loss or conversion of natural and working lands	No Conflict. The Project would not result in the loss or conversion of natural and working lands, as none exist on the Project site. Therefore, the Project would be consistent with this attribute.
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or Is in proximity to existing transit stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region's SCS	No Conflict. The overall density for the Project would be 21.4 dwelling units per acre. Therefore, the Project is consistent with this attribute.

TABLE 3-5: PROJECT POTENTIAL TO CONFLICT WITH KEY ATTRIBUTES IDENTIFIED IN TABLE 3 OF THE 2022 CARB SCOPING PLAN'S APPENDIX D (2 OF 3)

Priority Areas	Key Project Attribute	Potential to Conflict
VMT Reduction	Reduces parking requirements by: • Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or • Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or • For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	No Conflict. The Project is consistent with this attribute as it will include a reduction in parking requirements below those outlined in the West Covina Municipal Code, as permitted under the Specific Plan provisions.
	At least 20 percent of units included are affordable to lower-income residents	No Conflict. Although the Project does not include 20 percent affordable or low-income units, the VMT analysis found the Project is located in a low VMT-generating area, with 25.5 VMT per service population, below the 15% below-baseline threshold of 27.1. Therefore, the Project is presumed to have a less than significant impact. As such, the Project would not conflict with VMT reductions consistent with the 2022 Scoping Plan.
	Results in no net loss of existing affordable units	No Conflict. The Project site does not contain any existing residences. Project implementation would not displace any existing affordable housing units or necessitate construction of any replacement affordable housing units elsewhere.

TABLE 3-5: PROJECT POTENTIAL TO CONFLICT WITH KEY ATTRIBUTES IDENTIFIED IN TABLE 3 OF THE 2022 CARB SCOPING PLAN'S APPENDIX D (3 OF 3)

Priority Areas	Key Project Attribute	Potential to Conflict
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking	No Conflict. The Project would not be served by natural gas. The single-family detached homes and townhomes proposed as part of the Project would use all-electric appliances without any natural gas connections and would not include the use of propane or other fossil fuels for space heating, water heating, or indoor cooking. Therefore, the Project would not conflict with the CARB 2022 scoping plan according to this attribute.

Consistency with City of West Covina EAP

The City's EAP is not directly applicable to the proposed Project because the goals and policies in the plan are focused on energy efficiency and sustainability of City facilities. However, because the Project is required to comply CALGreen and Title 24 standards, the Project would not conflict with the community-wide energy use goals of the EAP.

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4 REFERENCES

1. **California Natural Resources Agency.** *2023 California Environmental Quality Act (CEQA) Statute and Guidelines.* s.l. : Association of Environmental Professionals, 2023.
2. **California Air Resources Board.** Assembly Bill 32: Global Warming Solutions Act. [Online] 2006. https://ww2.arb.ca.gov/resources/fact-sheets/ab-32-global-warming-solutions-act-2006.
3. **Air Resources Board.** Sustainable Communities. [Online] 2008. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-climate-protection-program/about.
4. —. Clean Car Standards - Pavley, Assembly Bill 1493. [Online] September 24, 2009. http://www.arb.ca.gov/cc/ccms/ccms.htm.
5. **California Building Standards Commission.** California Building Standards Code (Title 24, California Code of Regulations). [Online] http://www.bsc.ca.gov/codes.aspx.
6. **California Energy Commission.** California Code of Regulations, TITLE 20, Division 2. [Online] September 3, 2013. https://www.energy.ca.gov/sites/default/files/2021-07/Title%2020%20Updated%20July%2023%2C%202021.pdf.
7. **California Air Resources Board.** Title 17 - California Code of Regulation. [Online] 2010. https://ww2.arb.ca.gov/sites/default/files/2020-09/basics-notes.pdf.
8. **California Energy Commission.** SB 1368 Emission Performance Standards. [Online] September 29, 2006. http://www.energy.ca.gov/emission_standards/.
9. —. Renewables Portfolio Standard (RPS). [Online] 2002. http://www.energy.ca.gov/portfolio/.
10. **California Legislative Information.** Senate Bill No. 32. [Online] September 8, 2016. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32.
11. **National Environmental Education Foundation.** The Principal Greenhouse Gases and Their Sources. *National Environmental Education Foundation.* [Online] https://www.neefusa.org/weather-and-climate/climate-change/principal-greenhouse-gases-and-their-sources#WaterVapor.
12. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report.* **International Panel on Climate Change.** 4, 2007.
13. *The Carbon Cycle and Climate Change.* **Bennington, Bret J.** 1, s.l. : Brooks/Cole. ISBN 1 3: 978-0-495-73855-8.
14. **The National Institute for Occupational Safety and Health.** Carbon Dioxide. *Centers for Disease Control and Prevention.* [Online] https://www.cdc.gov/niosh/npg/npgd0103.html.
15. **National Oceanic and Atmospheric Administration.** Increase in atmospheric methane set another record during 2021. *National Oceanic and Atmospheric Administration.* [Online] https://www.noaa.gov/news-release/increase-in-atmospheric-methane-set-another-record-during-2021#:~:text=NOAA's%20preliminary%20analysis%20showed%20the,during%202020%20was%2015.3%20ppb..
16. **World Resources Institute.** Climate Analysis Indicator Tool (CAIT). [Online] http://cait.wri.org.
17. **National Oceanic and Atmospheric Administration.** CFCs and their substitutes in stratospheric ozone depletion. *National Oceanic and Atmospheric Administration.* [Online] https://gml.noaa.gov/hats/about/cfc.html.
18. **United States Environmental Protection Agency.** Regulation for Reducting Sulfur Hexafluoride Emissions from Gas Insulated Switchgear. *Environmental Protection Agency.* [Online] May 7, 2014. https://www.epa.gov/sites/production/files/2016-02/documents/mehl-arb-presentation-2014-wkshp.pdf.

19. **World Resources Institute.** Nitrogen Trifluoride Now Required in GHG Protocol Greenhouse Gas Emissions Inventory. [Online] May 22, 2013. https://www.wri.org/blog/2013/05/nitrogen-trifluoride-now-required-ghg-protocol-greenhouse-gas-emissions-inventories.

20. **National Center for Biotechnology Information.** Nitrogen Trifluoride. *PubChem Compound Database.* [Online] https://pubchem.ncbi.nlm.nih.gov/compound/24553 .

21. **Barbara H. Allen-Diaz.** Climate change affects us all. *University of California Agriculture and Natural Resources.* [Online] April 1, 2009. http://calag.ucanr.edu/Archive/?article=ca.v063n02p51.

22. **Intergovernmental Panel on Climate Change.** Climate Change 2021 The Physical Science Basis. *Climate Change 2021 The Physical Science Basis.* [Online] https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/.

23. **United Nations.** Annex 1. [Online] 2023. https://di.unfccc.int/time_series.

24. —. GHG Profiles - Non-Annex I. [Online] 2023. http://di.unfccc.int/ghg_profile_non_annex1.

25. **California Air Resources Board.** 2024 GHG Inventory. *California Greenhouse Gas Emission Inventory 2000-2022 Edition.* [Online] https://ww2.arb.ca.gov/ghg-inventory-data.

26. **Energy Information Administration .** [Online] https://www.eia.gov/state/data.php?sid=US.

27. **California Energy Commission.** *Our Changing Climate Assessing the Risks to California.* 2006.

28. **Center for Climate and Energy Solutions (C2ES).** Outcomes of the U.N. Climate Change Conference. *Center for Climate and Energy Solutions (C2ES).* [Online] 2015. http://www.c2es.org/international/negotiations/cop21-paris/summary.

29. **Agency, United States Environmental Protection.** Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Section 202(a) of the Clean Air Act. *United States Environmental Protection Agency.* [Online] 2020. https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a.

30. **Federal Register.** Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light-Duty Vehicles. [Online] 2018. https://www.federalregister.gov/documents/2018/04/13/2018-07364/mid-term-evaluation-of-greenhouse-gas-emissions-standards-for-model-year-2022-2025-light-duty.

31. **Administration, National Highway Traffic Safety.** SAFE: The Safer Affordable Fuel-Efficient 'SAFE' Vehicle Rule. *National Highway Traffic Safety Administration.* [Online] 2020. https://www.nhtsa.gov/corporate-average-fuel-economy/safe.

32. **National Highway Traffic Safety Administration.** Corporate Average Fuel Economy. [Online] https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy.

33. **United States Department of Transportation.** Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks. [Online] https://www.nhtsa.gov/sites/nhtsa.gov/files/2022-04/Final-Rule-Preamble_CAFE-MY-2024-2026.pdf.

34. **California Air Resources Board.** California's 2017 Climate Change Scoping Plan . [Online] 2017. https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017_es.pdf.

35. **Lawrence Berkeley National Laboratory.** California's Policies Can Significantly Cut Greenhouse Gas Emissions through 2030. *Lawrence Berkeley National Laboratory.* [Online] January 22, 2015. http://newscenter.lbl.gov/2015/01/22/californias-policies-can-significantly-cut-greenhouse-gas-emissions-2030/.

36. **Ernest Orlando Lawrence Berkeley National Laboratory.** Modeling California policy impacts on greenhouse gas emissions. [Online] 2015. https://eaei.lbl.gov/sites/all/files/lbnl-7008e.pdf.

37. **California Air Resources Board.** Legal Disclaimer & User's Notice. [Online] April 2019. https://ww3.arb.ca.gov/cc/capandtrade/capandtrade/ct_reg_unofficial.pdf.

38. —. Climate Change Scoping Plan. [Online] 2014. https://ww3.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

39. —. *2022 Scoping Plan for Achieving Carbon Neutrality.*

40. —. Low Carbon Fuel Standard. [Online] December 2019. https://ww3.arb.ca.gov/fuels/lcfs/lcfs.htm.

41. **California Natural Resources Agency.** *2023 California Environmental Quality Act (CEQA) Statute and Guidelines.* s.l. : Association of Environmental Professionals, 2023.

42. **State of California.** *2024 CEQA California Environmental Quality Act.* 2024.

43. **South Coast Air Quality Management District.** Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. [Online] http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2.

44. —. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. [Online] http://www.aqmd.gov/hb/2008/December/081231a.htm.

45. **California Air Pollution Control Officers Association (CAPCOA).** California Emissions Estimator Model (CalEEMod). [Online] May 2022. www.caleemod.com.

46. **California Natural Resources Agency.** Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97. [Online] December 2009. https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/Final_Statement_of_Reasons.pdf.

47. **South Coast Air Quality Management District.** *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15.* 2008.

48. **Urban Crossroads, Inc.** *1501 Del Norte Street Residential Air Quality Impact Analysis.* 2025.

49. **State of California.** *2020 CEQA California Environmental Quality Act.* 2020.

50. **South Coast Air Quality Management District.** *Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group #13.* [Powerpoint] Diamond Bar : s.n., 2009.

51. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th. 2021.

52. **Association of Environmental Professionals.** *2018 CEQA California Environmental Quality Act.* 2018.

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5 CERTIFICATION

The contents of this GHG study report represent an accurate depiction of the GHG impacts associated with the proposed 1501 Del Norte Street Residential Project. The information contained in this GHG report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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Professional Affiliations

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Professional Certifications

Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – CARB • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

1501 Del Norte Detailed Report

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1.1. Basic Project Information

Data Field	Value
Project Name	1501 Del Norte
Construction Start Date	1/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	22.4
Location	1501 W Del Norte St, West Covina, CA 91790, USA
County	Los Angeles-South Coast
City	West Covina
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4913
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	34.0	Dwelling Unit	1.43	124,148	398,237	—	101	—

Condo/Townhouse	248	Dwelling Unit	9.17	1,387,522	0.00	—	734	—
Parking Lot	77.0	Space	0.69	0.00	0.00	—	—	—
Recreational Swimming Pool	18.0	1000sqft	0.41	18,000	0.00	—	—	—
Other Asphalt Surfaces	64.7	1000sqft	1.48	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	33.4	33.2	27.0	25.4	0.06	1.18	3.34	4.12	1.09	1.07	2.16	—	7,159	7,159	0.30	0.24	12.0	7,229
Mit.	32.9	32.8	17.4	33.0	0.06	0.13	3.34	3.48	0.13	1.07	1.20	—	7,159	7,159	0.30	0.24	12.0	7,229
% Reduced	2%	1%	36%	-30%	—	89%	—	16%	88%	—	45%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.3	33.9	27.1	27.4	0.06	1.18	3.47	4.12	1.09	1.07	2.16	—	7,151	7,151	0.30	0.25	0.34	7,218
Mit.	33.3	33.1	17.5	32.9	0.06	0.21	3.47	3.68	0.19	1.07	1.20	—	7,151	7,151	0.30	0.25	0.34	7,218
% Reduced	3%	2%	35%	-20%	—	82%	—	11%	82%	—	45%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.9	23.7	7.22	15.6	0.02	0.26	2.36	2.49	0.24	0.56	0.71	—	3,648	3,648	0.14	0.17	3.70	3,704
Mit.	23.5	23.4	6.27	15.5	0.02	0.10	2.36	2.45	0.09	0.56	0.65	—	3,648	3,648	0.14	0.17	3.70	3,704
% Reduced	2%	1%	13%	1%	—	63%	—	1%	62%	—	9%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.36	4.33	1.32	2.84	< 0.005	0.05	0.43	0.45	0.04	0.10	0.13	—	604	604	0.02	0.03	0.61	613
Mit.	4.29	4.27	1.14	2.83	< 0.005	0.02	0.43	0.45	0.02	0.10	0.12	—	604	604	0.02	0.03	0.61	613
% Reduced	2%	1%	13%	1%	—	63%	—	1%	62%	—	9%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.60	2.99	27.0	25.4	0.06	1.18	2.94	4.12	1.09	1.07	2.16	—	7,159	7,159	0.30	0.22	11.4	7,229
2027	33.4	33.2	7.32	23.1	0.02	0.17	3.34	3.52	0.16	0.79	0.95	—	5,182	5,182	0.22	0.24	12.0	5,270
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	33.5	33.2	27.1	25.3	0.06	1.18	3.34	4.12	1.09	1.07	2.16	—	7,151	7,151	0.30	0.24	0.34	7,218
2027	34.3	33.9	11.9	27.4	0.03	0.36	3.47	3.83	0.33	0.82	1.15	—	6,041	6,041	0.16	0.25	0.32	6,120
2028	34.2	33.8	11.5	26.6	0.03	0.31	3.47	3.79	0.29	0.82	1.11	—	5,966	5,966	0.15	0.25	0.29	6,044
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.04	2.83	7.22	12.6	0.02	0.26	1.83	2.09	0.24	0.47	0.71	—	3,224	3,224	0.14	0.15	2.61	3,274
2027	23.9	23.7	5.54	15.6	0.01	0.13	2.36	2.49	0.12	0.56	0.68	—	3,648	3,648	0.09	0.17	3.70	3,704

2028	1.74	1.72	0.58	1.38	< 0.005	0.02	0.17	0.19	0.01	0.04	0.06	—	306	306	0.01	0.01	0.25	310
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.55	0.52	1.32	2.30	< 0.005	0.05	0.33	0.38	0.04	0.09	0.13	—	534	534	0.02	0.02	0.43	542
2027	4.36	4.33	1.01	2.84	< 0.005	0.02	0.43	0.45	0.02	0.10	0.12	—	604	604	0.02	0.03	0.61	613
2028	0.32	0.31	0.11	0.25	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	50.6	50.6	< 0.005	< 0.005	0.04	51.3

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.12	0.96	17.4	33.0	0.06	0.13	2.94	3.07	0.13	1.07	1.20	—	7,159	7,159	0.30	0.22	11.4	7,229
2027	32.9	32.8	8.33	22.9	0.02	0.13	3.34	3.48	0.12	0.79	0.92	—	5,182	5,182	0.22	0.24	12.0	5,270
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	33.0	32.8	17.5	32.9	0.06	0.16	3.34	3.48	0.15	1.07	1.20	—	7,151	7,151	0.30	0.24	0.34	7,218
2027	33.3	33.1	13.3	27.6	0.03	0.21	3.47	3.68	0.19	0.82	1.02	—	6,041	6,041	0.16	0.25	0.32	6,120
2028	33.3	33.1	13.2	26.8	0.03	0.21	3.47	3.68	0.19	0.82	1.02	—	5,966	5,966	0.15	0.25	0.29	6,044
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.46	2.38	5.81	13.6	0.02	0.06	1.83	1.89	0.06	0.47	0.53	—	3,224	3,224	0.14	0.15	2.61	3,274
2027	23.5	23.4	6.27	15.5	0.01	0.10	2.36	2.45	0.09	0.56	0.65	—	3,648	3,648	0.09	0.17	3.70	3,704
2028	1.69	1.68	0.67	1.39	< 0.005	0.01	0.17	0.18	0.01	0.04	0.05	—	306	306	0.01	0.01	0.25	310
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.45	0.43	1.06	2.48	< 0.005	0.01	0.33	0.34	0.01	0.09	0.10	—	534	534	0.02	0.02	0.43	542
2027	4.29	4.27	1.14	2.83	< 0.005	0.02	0.43	0.45	0.02	0.10	0.12	—	604	604	0.02	0.03	0.61	613
2028	0.31	0.31	0.12	0.25	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	50.6	50.6	< 0.005	< 0.005	0.04	51.3

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	41.3	40.7	3.23	52.7	0.09	0.06	8.66	8.72	0.06	2.20	2.26	191	11,809	12,000	19.8	0.44	27.3	12,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.7	39.3	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	191	11,383	11,573	19.8	0.46	2.27	12,208
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.6	40.1	3.42	44.9	0.09	0.06	8.35	8.41	0.05	2.12	2.17	191	10,341	10,532	19.7	0.44	12.5	11,169
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.41	7.32	0.62	8.20	0.02	0.01	1.52	1.53	0.01	0.39	0.40	31.6	1,712	1,744	3.26	0.07	2.06	1,849

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.81	4.37	3.08	36.7	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	9,279	9,279	0.43	0.36	25.7	9,424
Area	36.4	36.4	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	1,093	1,093	0.10	0.01	—	1,099
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61

Total	41.3	40.7	3.23	52.7	0.09	0.06	8.66	8.72	0.06	2.20	2.26	191	11,809	12,000	19.8	0.44	27.3	12,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.77	4.32	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	8,896	8,896	0.45	0.38	0.67	9,021
Area	35.0	35.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	39.7	39.3	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	191	11,383	11,573	19.8	0.46	2.27	12,208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.63	4.20	3.32	33.9	0.09	0.05	8.35	8.40	0.05	2.12	2.17	—	8,803	8,803	0.44	0.37	10.8	8,936
Area	36.0	35.9	0.10	11.0	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	101	101	0.01	< 0.005	—	102
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	40.6	40.1	3.42	44.9	0.09	0.06	8.35	8.41	0.05	2.12	2.17	191	10,341	10,532	19.7	0.44	12.5	11,169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.84	0.77	0.61	6.19	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,457	1,457	0.07	0.06	1.80	1,479
Area	6.57	6.56	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	16.8	16.8	< 0.005	< 0.005	—	16.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	220	220	0.02	< 0.005	—	221
Water	—	—	—	—	—	—	—	—	—	—	—	3.67	18.1	21.7	0.38	0.01	—	33.9
Waste	—	—	—	—	—	—	—	—	—	—	—	27.9	0.00	27.9	2.79	0.00	—	97.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	7.41	7.32	0.62	8.20	0.02	0.01	1.52	1.53	0.01	0.39	0.40	31.6	1,712	1,744	3.26	0.07	2.06	1,849

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.81	4.37	3.08	36.7	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	9,279	9,279	0.43	0.36	25.7	9,424
Area	36.4	36.4	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	1,093	1,093	0.10	0.01	—	1,099
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	41.3	40.7	3.23	52.7	0.09	0.06	8.66	8.72	0.06	2.20	2.26	191	11,809	12,000	19.8	0.44	27.3	12,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.77	4.32	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	8,896	8,896	0.45	0.38	0.67	9,021
Area	35.0	35.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	39.7	39.3	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	191	11,383	11,573	19.8	0.46	2.27	12,208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.63	4.20	3.32	33.9	0.09	0.05	8.35	8.40	0.05	2.12	2.17	—	8,803	8,803	0.44	0.37	10.8	8,936
Area	36.0	35.9	0.10	11.0	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	101	101	0.01	< 0.005	—	102
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,328	1,328	0.13	0.02	—	1,335
Water	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Waste	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Total	40.6	40.1	3.42	44.9	0.09	0.06	8.35	8.41	0.05	2.12	2.17	191	10,341	10,532	19.7	0.44	12.5	11,169
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.84	0.77	0.61	6.19	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,457	1,457	0.07	0.06	1.80	1,479
Area	6.57	6.56	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	16.8	16.8	< 0.005	< 0.005	—	16.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	220	220	0.02	< 0.005	—	221
Water	—	—	—	—	—	—	—	—	—	—	—	3.67	18.1	21.7	0.38	0.01	—	33.9
Waste	—	—	—	—	—	—	—	—	—	—	—	27.9	0.00	27.9	2.79	0.00	—	97.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	7.41	7.32	0.62	8.20	0.02	0.01	1.52	1.53	0.01	0.39	0.40	31.6	1,712	1,744	3.26	0.07	2.06	1,849

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52	1.28	11.5	10.9	0.02	0.45	—	0.45	0.42	—	0.42	—	1,906	1,906	0.08	0.02	—	1,913
Demolition	—	—	—	—	—	—	1.04	1.04	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.94	0.90	< 0.005	0.04	—	0.04	0.03	—	0.03	—	157	157	0.01	< 0.005	—	157
Demolition	—	—	—	—	—	—	0.09	0.09	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.9	25.9	< 0.005	< 0.005	—	26.0
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	0.01	< 0.005	0.01	130
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	< 0.005	65.1
Hauling	0.09	0.02	1.63	0.62	0.01	0.02	0.36	0.37	0.02	0.10	0.11	—	1,304	1,304	0.07	0.21	0.08	1,368
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	0.01	5.36
Hauling	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	0.01	0.02	0.10	113

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.89
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.02	18.6

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.24	7.47	10.5	0.02	0.14	—	0.14	0.13	—	0.13	—	1,906	1,906	0.08	0.02	—	1,913
Demolition	—	—	—	—	—	—	1.04	1.04	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.61	0.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	157	157	0.01	< 0.005	—	157
Demolition	—	—	—	—	—	—	0.09	0.09	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	26.0
Demoliti on	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	0.01	< 0.005	0.01	130
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	< 0.005	65.1
Hauling	0.09	0.02	1.63	0.62	0.01	0.02	0.36	0.37	0.02	0.10	0.11	—	1,304	1,304	0.07	0.21	0.08	1,368
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	0.01	5.36
Hauling	0.01	< 0.005	0.14	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	0.01	0.02	0.10	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.89
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.02	18.6

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.40	2.46	< 0.005	0.17	—	0.17	0.15	—	0.15	—	349	349	0.01	< 0.005	—	350
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	14.3	14.3	< 0.005	< 0.005	—	14.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.37	2.37	< 0.005	< 0.005	—	2.38
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.1	32.1	< 0.005	< 0.005	< 0.005	32.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	< 0.005	65.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.34	1.34	< 0.005	< 0.005	< 0.005	1.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.56	2.56	< 0.005	< 0.005	< 0.005	2.68
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.05	0.05	1.42	2.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	349	349	0.01	< 0.005	—	350
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.06	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.3	14.3	< 0.005	< 0.005	—	14.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.37	2.37	< 0.005	< 0.005	—	2.38
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.1	32.1	< 0.005	< 0.005	< 0.005	32.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	< 0.005	65.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.34	1.34	< 0.005	< 0.005	< 0.005	1.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.56	2.56	< 0.005	< 0.005	< 0.005	2.68
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.48	2.93	25.9	24.2	0.06	1.17	—	1.17	1.08	—	1.08	—	6,083	6,083	0.25	0.05	—	6,104
Dust From Material Movement	—	—	—	—	—	—	2.53	2.53	—	0.96	0.96	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.48	2.93	25.9	24.2	0.06	1.17	—	1.17	1.08	—	1.08	—	6,083	6,083	0.25	0.05	—	6,104
Dust From Material Movement	—	—	—	—	—	—	2.53	2.53	—	0.96	0.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	3.19	2.98	0.01	0.14	—	0.14	0.13	—	0.13	—	750	750	0.03	0.01	—	753
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.58	0.54	< 0.005	0.03	—	0.03	0.02	—	0.02	—	124	124	0.01	< 0.005	—	125
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.81	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	169	169	0.01	0.01	0.57	172
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.5	93.5	< 0.005	0.01	0.25	97.9
Hauling	0.06	0.01	0.98	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	813	813	0.05	0.13	1.82	855
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.69	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	161	161	0.01	0.01	0.01	163
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.6	93.6	< 0.005	0.01	0.01	97.7
Hauling	0.06	0.01	1.02	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	814	814	0.05	0.13	0.05	853
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	20.1	20.1	< 0.005	< 0.005	0.03	20.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.0
Hauling	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	100	100	0.01	0.02	0.10	105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.33	3.33	< 0.005	< 0.005	0.01	3.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.91	1.91	< 0.005	< 0.005	< 0.005	1.99
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.02	17.4

3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.72	0.72	16.3	31.8	0.06	0.11	—	0.11	0.11	—	0.11	—	6,083	6,083	0.25	0.05	—	6,104
Dust From Material Movement	—	—	—	—	—	—	2.53	2.53	—	0.96	0.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	16.3	31.8	0.06	0.11	—	0.11	0.11	—	0.11	—	6,083	6,083	0.25	0.05	—	6,104
Dust From Material Movement	—	—	—	—	—	—	2.53	2.53	—	0.96	0.96	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	2.01	3.91	0.01	0.01	—	0.01	0.01	—	0.01	—	750	750	0.03	0.01	—	753
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.37	0.71	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	124	124	0.01	< 0.005	—	125

Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.81	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	169	169	0.01	0.01	0.57	172
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.5	93.5	< 0.005	0.01	0.25	97.9
Hauling	0.06	0.01	0.98	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	813	813	0.05	0.13	1.82	855
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.69	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	161	161	0.01	0.01	0.01	163
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.6	93.6	< 0.005	0.01	0.01	97.7
Hauling	0.06	0.01	1.02	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	814	814	0.05	0.13	0.05	853
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	20.1	20.1	< 0.005	< 0.005	0.03	20.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.0
Hauling	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	100	100	0.01	0.02	0.10	105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.33	3.33	< 0.005	< 0.005	0.01	3.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.91	1.91	< 0.005	< 0.005	< 0.005	1.99
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.02	17.4

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.53	5.37	0.01	0.13	—	0.13	0.12	—	0.12	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.53	5.37	0.01	0.13	—	0.13	0.12	—	0.12	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.65	2.51	< 0.005	0.06	—	0.06	0.06	—	0.06	—	391	391	0.02	< 0.005	—	393
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	64.8	64.8	< 0.005	< 0.005	—	65.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.73	0.77	12.8	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,688	2,688	0.11	0.09	9.09	2,727
Vendor	0.06	0.03	0.93	0.45	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	842	842	0.04	0.12	2.27	881
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.73	0.86	10.9	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,548	2,548	0.12	0.09	0.24	2,579
Vendor	0.06	0.02	0.97	0.46	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	842	842	0.04	0.12	0.06	879
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.44	5.35	0.00	0.00	1.20	1.20	0.00	0.28	0.28	—	1,209	1,209	0.05	0.04	1.84	1,226
Vendor	0.03	0.01	0.46	0.21	< 0.005	0.01	0.11	0.11	< 0.005	0.03	0.03	—	394	394	0.02	0.06	0.46	411
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.98	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	200	200	0.01	0.01	0.30	203
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.2	65.2	< 0.005	0.01	0.08	68.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.23	0.21	3.77	5.65	0.01	0.05	—	0.05	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	3.77	5.65	0.01	0.05	—	0.05	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	1.76	2.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	391	391	0.02	< 0.005	—	393
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.32	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.8	64.8	< 0.005	< 0.005	—	65.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.73	0.77	12.8	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,688	2,688	0.11	0.09	9.09	2,727
Vendor	0.06	0.03	0.93	0.45	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	842	842	0.04	0.12	2.27	881
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.73	0.86	10.9	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,548	2,548	0.12	0.09	0.24	2,579
Vendor	0.06	0.02	0.97	0.46	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	842	842	0.04	0.12	0.06	879
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.44	5.35	0.00	0.00	1.20	1.20	0.00	0.28	0.28	—	1,209	1,209	0.05	0.04	1.84	1,226
Vendor	0.03	0.01	0.46	0.21	< 0.005	0.01	0.11	0.11	< 0.005	0.03	0.03	—	394	394	0.02	0.06	0.46	411
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.98	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	200	200	0.01	0.01	0.30	203
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.2	65.2	< 0.005	0.01	0.08	68.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	3.39	5.38	0.01	0.12	—	0.12	0.11	—	0.11	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.43	0.36	3.39	5.38	0.01	0.12	—	0.12	0.11	—	0.11	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.31	0.26	2.42	3.84	0.01	0.08	—	0.08	0.08	—	0.08	—	598	598	0.02	< 0.005	—	600
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.06	0.05	0.44	0.70	< 0.005	0.02	—	0.02	0.01	—	0.01	—	99.0	99.0	< 0.005	< 0.005	—	99.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.70	0.68	11.9	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,636	2,636	0.11	0.09	8.21	2,675
Vendor	0.05	0.03	0.89	0.42	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	825	825	0.04	0.11	2.15	863
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.69	0.85	10.1	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,499	2,499	0.03	0.09	0.21	2,528
Vendor	0.05	0.02	0.92	0.43	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	826	826	0.04	0.11	0.06	861
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.56	0.49	0.61	7.58	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,811	1,811	0.02	0.07	2.53	1,835
Vendor	0.04	0.02	0.66	0.31	< 0.005	< 0.005	0.16	0.17	< 0.005	0.05	0.05	—	590	590	0.03	0.08	0.66	615
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.38	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	300	300	< 0.005	0.01	0.42	304
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	3.77	5.65	0.01	0.05	—	0.05	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	3.77	5.65	0.01	0.05	—	0.05	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.16	0.15	2.69	4.03	0.01	0.03	—	0.03	0.03	—	0.03	—	598	598	0.02	< 0.005	—	600
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.49	0.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	99.0	99.0	< 0.005	< 0.005	—	99.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.70	0.68	11.9	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,636	2,636	0.11	0.09	8.21	2,675
Vendor	0.05	0.03	0.89	0.42	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	825	825	0.04	0.11	2.15	863
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.69	0.85	10.1	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,499	2,499	0.03	0.09	0.21	2,528
Vendor	0.05	0.02	0.92	0.43	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	826	826	0.04	0.11	0.06	861
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.49	0.61	7.58	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,811	1,811	0.02	0.07	2.53	1,835
Vendor	0.04	0.02	0.66	0.31	< 0.005	< 0.005	0.16	0.17	< 0.005	0.05	0.05	—	590	590	0.03	0.08	0.66	615
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.38	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	300	300	< 0.005	0.01	0.42	304
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.29	5.38	0.01	0.11	—	0.11	0.10	—	0.10	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.27	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	42.6	42.6	< 0.005	< 0.005	—	42.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.05	7.05	< 0.005	< 0.005	—	7.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.67	0.77	9.51	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,455	2,455	0.03	0.09	0.19	2,484
Vendor	0.05	0.02	0.88	0.41	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	807	807	0.03	0.11	0.05	841
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.16	128
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.0	41.0	< 0.005	0.01	0.04	42.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.0	21.0	< 0.005	< 0.005	0.03	21.3
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	0.01	7.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.23	0.21	3.76	5.65	0.01	0.04	—	0.04	0.04	—	0.04	—	837	837	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.19	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.6	42.6	< 0.005	< 0.005	—	42.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.05	7.05	< 0.005	< 0.005	—	7.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.77	0.67	0.77	9.51	0.00	0.00	2.59	2.59	0.00	0.61	0.61	—	2,455	2,455	0.03	0.09	0.19	2,484
Vendor	0.05	0.02	0.88	0.41	0.01	0.01	0.23	0.24	0.01	0.06	0.07	—	807	807	0.03	0.11	0.05	841
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.16	128
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.0	41.0	< 0.005	0.01	0.04	42.8

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.0	21.0	< 0.005	< 0.005	0.03	21.3
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	0.01	7.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	4.34	5.97	0.01	0.18	—	0.18	0.17	—	0.17	—	897	897	0.04	0.01	—	900
Paving	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.65	4.65	< 0.005	< 0.005	—	4.67
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	0.01	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.00	4.00	< 0.005	< 0.005	0.01	4.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	4.70	6.29	0.01	0.07	—	0.07	0.07	—	0.07	—	897	897	0.04	0.01	—	900
Paving	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.15	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.65	4.65	< 0.005	< 0.005	—	4.67
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	0.01	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.00	4.00	< 0.005	< 0.005	0.01	4.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.16	5.94	0.01	0.16	—	0.16	0.15	—	0.15	—	897	897	0.04	0.01	—	900
Paving	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	45.6	45.6	< 0.005	< 0.005	—	45.8
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.56	7.56	< 0.005	< 0.005	—	7.58
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.39	6.39	< 0.005	< 0.005	0.01	6.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	4.70	6.29	0.01	0.07	—	0.07	0.07	—	0.07	—	897	897	0.04	0.01	—	900
Paving	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.24	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.6	45.6	< 0.005	< 0.005	—	45.8
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.56	7.56	< 0.005	< 0.005	—	7.58
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.39	6.39	< 0.005	< 0.005	0.01	6.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.32	2.28	3.02	< 0.005	0.06	—	0.06	0.06	—	0.06	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.2	20.2	< 0.005	< 0.005	—	20.3
Architectural Coatings	1.80	1.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.35	3.35	< 0.005	< 0.005	—	3.36
Architectural Coatings	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.17	2.19	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	510	510	0.02	0.02	0.05	516
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.3	29.3	< 0.005	< 0.005	0.04	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.86	4.86	< 0.005	< 0.005	0.01	4.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.06	2.85	2.57	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.16	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.2	20.2	< 0.005	< 0.005	—	20.3
Architectural Coatings	1.80	1.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.35	3.35	< 0.005	< 0.005	—	3.36
Architectural Coatings	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.17	2.19	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	510	510	0.02	0.02	0.05	516
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.3	29.3	< 0.005	< 0.005	0.04	29.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.86	4.86	< 0.005	< 0.005	0.01	4.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.30	2.22	3.00	< 0.005	0.05	—	0.05	0.05	—	0.05	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.30	2.22	3.00	< 0.005	0.05	—	0.05	0.05	—	0.05	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.58	2.14	< 0.005	0.04	—	0.04	0.03	—	0.03	—	254	254	0.01	< 0.005	—	255
Architectural Coatings	22.6	22.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.29	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.1	42.1	< 0.005	< 0.005	—	42.2
Architectural Coatings	4.12	4.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.14	2.38	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	527	527	0.02	0.02	1.64	535
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.17	2.02	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	500	500	0.01	0.02	0.04	506
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.52	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	362	362	< 0.005	0.01	0.51	367
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.08	60.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.06	0.06	2.85	2.57	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	2.85	2.57	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	2.04	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	254	254	0.01	< 0.005	—	255
Architectural Coatings	22.6	22.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.37	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.1	42.1	< 0.005	< 0.005	—	42.2

Architect Coatings	4.12	4.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.14	2.38	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	527	527	0.02	0.02	1.64	535
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.17	2.02	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	500	500	0.01	0.02	0.04	506
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.52	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	362	362	< 0.005	0.01	0.51	367
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.08	60.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.16	2.98	< 0.005	0.04	—	0.04	0.04	—	0.04	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Architectural Coatings	1.61	1.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.15	1.90	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	491	491	0.01	0.02	0.04	497
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.3	25.3	< 0.005	< 0.005	0.03	25.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.06	2.85	2.57	< 0.005	0.08	—	0.08	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Architectural Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.15	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Architectural Coatings	1.61	1.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.00	3.00	< 0.005	< 0.005	—	3.01
Architectural Coatings	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.15	1.90	0.00	0.00	0.52	0.52	0.00	0.12	0.12	—	491	491	0.01	0.02	0.04	497
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.3	25.3	< 0.005	< 0.005	0.03	25.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.07	0.97	0.68	8.12	0.02	0.01	1.92	1.93	0.01	0.49	0.50	—	2,057	2,057	0.10	0.08	5.69	2,089

Condo/Townhouse	3.74	3.40	2.39	28.5	0.07	0.04	6.74	6.78	0.04	1.71	1.75	—	7,223	7,223	0.34	0.28	20.0	7,335
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.81	4.37	3.08	36.7	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	9,279	9,279	0.43	0.36	25.7	9,424
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.06	0.96	0.75	7.50	0.02	0.01	1.92	1.93	0.01	0.49	0.50	—	1,972	1,972	0.10	0.08	0.15	1,999
Condo/Townhouse	3.71	3.37	2.62	26.3	0.07	0.04	6.74	6.78	0.04	1.71	1.75	—	6,924	6,924	0.35	0.30	0.52	7,021
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.77	4.32	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	8,896	8,896	0.45	0.38	0.67	9,021
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.19	0.17	0.14	1.38	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	325	325	0.02	0.01	0.40	330
Condo/Townhouse	0.66	0.60	0.47	4.81	0.01	0.01	1.18	1.19	0.01	0.30	0.31	—	1,132	1,132	0.06	0.05	1.40	1,150
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.84	0.77	0.61	6.19	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,457	1,457	0.07	0.06	1.80	1,479

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.07	0.97	0.68	8.12	0.02	0.01	1.92	1.93	0.01	0.49	0.50	—	2,057	2,057	0.10	0.08	5.69	2,089
Condo/Townhouse	3.74	3.40	2.39	28.5	0.07	0.04	6.74	6.78	0.04	1.71	1.75	—	7,223	7,223	0.34	0.28	20.0	7,335
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Recreational Swimming	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.81	4.37	3.08	36.7	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	9,279	9,279	0.43	0.36	25.7	9,424
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.06	0.96	0.75	7.50	0.02	0.01	1.92	1.93	0.01	0.49	0.50	—	1,972	1,972	0.10	0.08	0.15	1,999
Condo/Townhouse	3.71	3.37	2.62	26.3	0.07	0.04	6.74	6.78	0.04	1.71	1.75	—	6,924	6,924	0.35	0.30	0.52	7,021
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.77	4.32	3.36	33.8	0.09	0.05	8.66	8.71	0.05	2.20	2.25	—	8,896	8,896	0.45	0.38	0.67	9,021
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.19	0.17	0.14	1.38	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	325	325	0.02	0.01	0.40	330
Condo/Townhouse	0.66	0.60	0.47	4.81	0.01	0.01	1.18	1.19	0.01	0.30	0.31	—	1,132	1,132	0.06	0.05	1.40	1,150
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Recreati Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.84	0.77	0.61	6.19	0.02	0.01	1.52	1.53	0.01	0.39	0.40	—	1,457	1,457	0.07	0.06	1.80	1,479

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	222	222	0.02	< 0.005	—	224
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,080	1,080	0.10	0.01	—	1,086
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,328	1,328	0.13	0.02	—	1,335

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	222	222	0.02	< 0.005	—	224
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,080	1,080	0.10	0.01	—	1,086
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,328	1,328	0.13	0.02	—	1,335
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	36.8	36.8	< 0.005	< 0.005	—	37.0
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	179	179	0.02	< 0.005	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.15	4.15	< 0.005	< 0.005	—	4.18
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	220	220	0.02	< 0.005	—	221

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	222	222	0.02	< 0.005	—	224
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,080	1,080	0.10	0.01	—	1,086
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,328	1,328	0.13	0.02	—	1,335
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	222	222	0.02	< 0.005	—	224
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	1,080	1,080	0.10	0.01	—	1,086

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	25.1	25.1	< 0.005	< 0.005	—	25.2
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,328	1,328	0.13	0.02	—	1,335
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	36.8	36.8	< 0.005	< 0.005	—	37.0
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	179	179	0.02	< 0.005	—	180
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.15	4.15	< 0.005	< 0.005	—	4.18
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	220	220	0.02	< 0.005	—	221

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.60	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.48	1.40	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.9	42.9	< 0.005	< 0.005	—	43.0

Total	36.4	36.4	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	1,093	1,093	0.10	0.01	—	1,099
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.60	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	35.0	35.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	11.9	11.9	< 0.005	< 0.005	—	12.0
Consumer Products	5.91	5.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.47	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.17	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.86	4.86	< 0.005	< 0.005	—	4.88
Total	6.57	6.56	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	16.8	16.8	< 0.005	< 0.005	—	16.9

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.60	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.48	1.40	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.9	42.9	< 0.005	< 0.005	—	43.0
Total	36.4	36.4	0.15	16.1	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	1,093	1,093	0.10	0.01	—	1,099
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Consumer Products	32.4	32.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.60	2.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	35.0	35.0	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	1,050	1,050	0.10	0.01	—	1,056
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	11.9	11.9	< 0.005	< 0.005	—	12.0
Consumer Products	5.91	5.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	0.47	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.17	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.86	4.86	< 0.005	< 0.005	—	4.88
Total	6.57	6.56	0.02	2.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	16.8	16.8	< 0.005	< 0.005	—	16.9

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.43	42.5	45.0	0.25	0.01	—	53.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	17.7	59.7	77.4	1.82	0.04	—	136
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	2.04	6.87	8.91	0.21	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.43	42.5	45.0	0.25	0.01	—	53.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	17.7	59.7	77.4	1.82	0.04	—	136
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	2.04	6.87	8.91	0.21	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.40	7.04	7.45	0.04	< 0.005	—	8.81
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	2.93	9.88	12.8	0.30	0.01	—	22.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.34	1.14	1.48	0.03	< 0.005	—	2.59
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	3.67	18.1	21.7	0.38	0.01	—	33.9

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.43	42.5	45.0	0.25	0.01	—	53.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	17.7	59.7	77.4	1.82	0.04	—	136
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	2.04	6.87	8.91	0.21	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.43	42.5	45.0	0.25	0.01	—	53.2
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	17.7	59.7	77.4	1.82	0.04	—	136

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	2.04	6.87	8.91	0.21	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	22.2	109	131	2.28	0.06	—	205
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.40	7.04	7.45	0.04	< 0.005	—	8.81
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	2.93	9.88	12.8	0.30	0.01	—	22.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.34	1.14	1.48	0.03	< 0.005	—	2.59
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.67	18.1	21.7	0.38	0.01	—	33.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	98.8	0.00	98.8	9.88	0.00	—	346
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	193
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	98.8	0.00	98.8	9.88	0.00	—	346
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	193

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.39	0.00	2.39	0.24	0.00	—	8.36
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	16.4	0.00	16.4	1.64	0.00	—	57.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	9.15	0.00	9.15	0.91	0.00	—	32.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	27.9	0.00	27.9	2.79	0.00	—	97.6

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	98.8	0.00	98.8	9.88	0.00	—	346

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	193
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.4	0.00	14.4	1.44	0.00	—	50.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	98.8	0.00	98.8	9.88	0.00	—	346
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	55.3	0.00	55.3	5.53	0.00	—	193
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	169	0.00	169	16.8	0.00	—	590
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.39	0.00	2.39	0.24	0.00	—	8.36

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	16.4	0.00	16.4	1.64	0.00	—	57.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	9.15	0.00	9.15	0.91	0.00	—	32.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	27.9	0.00	27.9	2.79	0.00	—	97.6

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.46	1.46
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.46	1.46
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.46	1.46
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.46	1.46
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.61	1.61
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24

Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	2/11/2026	5.00	30.0	—

Site Preparation	Site Preparation	2/12/2026	3/4/2026	5.00	15.0	—
Grading	Grading	3/5/2026	5/6/2026	5.00	45.0	—
Building Construction	Building Construction	5/7/2026	1/26/2028	5.00	450	—
Paving	Paving	12/16/2027	1/26/2028	5.00	30.0	—
Architectural Coating	Architectural Coating	12/3/2026	1/26/2028	5.00	300	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Interim	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Tier 4 Interim	1.00	8.00	87.0	0.43
Grading	Graders	Diesel	Tier 4 Interim	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Interim	2.00	8.00	423	0.48
Grading	Crawler Tractors	Diesel	Tier 4 Interim	1.00	8.00	87.0	0.43
Building Construction	Forklifts	Diesel	Tier 4 Interim	1.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	2.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Interim	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	2.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	10.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	2.00	10.2	HHDT,MHDT
Demolition	Hauling	19.2	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	2.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	12.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	3.00	10.2	HHDT,MHDT
Grading	Hauling	12.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	198	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	27.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	39.7	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—

Demolition	Worker	10.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	2.00	10.2	HHDT,MHDT
Demolition	Hauling	19.2	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	2.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	12.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	3.00	10.2	HHDT,MHDT
Grading	Hauling	12.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	198	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	27.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	39.7	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,061,132	1,020,377	950	317	5,692

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	2,300	—
Site Preparation	—	—	7.50	0.00	—
Grading	4,301	—	158	0.00	—
Paving	0.00	0.00	0.00	0.00	2.55

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

Single Family Housing	0.37	0%
Condo/Townhouse	—	0%
Parking Lot	0.69	100%
Recreational Swimming Pool	0.00	0%
Other Asphalt Surfaces	1.48	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	322	322	288	115,791	2,703	2,706	2,420	972,005
Condo/Townhouse	1,132	1,131	947	403,448	9,502	9,491	7,953	3,386,747
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Single Family Housing	322	322	288	115,791	2,703	2,706	2,420	972,005
Condo/Townhouse	1,132	1,131	947	403,448	9,502	9,491	7,953	3,386,747
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	32
No Fireplaces	3
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	248

No Fireplaces	25
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	32
No Fireplaces	3
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	248
No Fireplaces	25
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3061131.75	1,020,377	950	317	5,692

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	234,435	346	0.0330	0.0040	0.00
Condo/Townhouse	1,138,857	346	0.0330	0.0040	0.00
Parking Lot	26,444	346	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	234,435	346	0.0330	0.0040	0.00
Condo/Townhouse	1,138,857	346	0.0330	0.0040	0.00
Parking Lot	26,444	346	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,267,309	6,826,243
Condo/Townhouse	9,243,902	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	1,064,577	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,267,309	6,826,243
Condo/Townhouse	9,243,902	0.00
Parking Lot	0.00	0.00
Recreational Swimming Pool	1,064,577	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	26.8	—
Condo/Townhouse	183	—
Parking Lot	0.00	—
Recreational Swimming Pool	103	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	26.8	—
Condo/Townhouse	183	—
Parking Lot	0.00	—
Recreational Swimming Pool	103	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0

Condo/Townhouse	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Recreational Swimming Pool	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	User Defined	750	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	User Defined	150	0.12	0.60	0.00	1.00
Recreational Swimming Pool	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	User Defined	150	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	23.4	annual days of extreme heat
Extreme Precipitation	6.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	76.9
AQ-PM	77.8
AQ-DPM	68.3
Drinking Water	78.8
Lead Risk Housing	86.7
Pesticides	0.00
Toxic Releases	77.2
Traffic	84.0
Effect Indicators	—
CleanUp Sites	68.9
Groundwater	22.7
Haz Waste Facilities/Generators	10.5
Impaired Water Bodies	33.2
Solid Waste	0.00

Sensitive Population	—
Asthma	60.3
Cardio-vascular	43.2
Low Birth Weights	85.2
Socioeconomic Factor Indicators	—
Education	66.5
Housing	50.3
Linguistic	46.0
Poverty	64.7
Unemployment	48.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	55.11356345
Employed	47.8121391
Median HI	56.30694213
Education	—
Bachelor's or higher	23.67509303
High school enrollment	100
Preschool enrollment	75.20852047
Transportation	—
Auto Access	84.51174131
Active commuting	40.06159374
Social	—
2-parent households	68.61285769
Voting	28.92339279

Neighborhood	—
Alcohol availability	48.67188503
Park access	7.237264211
Retail density	45.60503016
Supermarket access	48.91569357
Tree canopy	22.25073784
Housing	—
Homeownership	57.19235211
Housing habitability	74.07930194
Low-inc homeowner severe housing cost burden	48.51790068
Low-inc renter severe housing cost burden	96.09906326
Uncrowded housing	30.86102913
Health Outcomes	—
Insured adults	19.41485949
Arthritis	59.3
Asthma ER Admissions	49.8
High Blood Pressure	74.3
Cancer (excluding skin)	55.0
Asthma	72.9
Coronary Heart Disease	47.4
Chronic Obstructive Pulmonary Disease	59.8
Diagnosed Diabetes	31.9
Life Expectancy at Birth	15.4
Cognitively Disabled	35.0
Physically Disabled	55.6
Heart Attack ER Admissions	40.9
Mental Health Not Good	46.4
Chronic Kidney Disease	55.3

Obesity	42.9
Pedestrian Injuries	45.8
Physical Health Not Good	39.2
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	50.7
Current Smoker	52.6
No Leisure Time for Physical Activity	40.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	69.7
Elderly	66.3
English Speaking	47.5
Foreign-born	73.6
Outdoor Workers	23.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	52.1
Traffic Density	85.2
Traffic Access	58.4
Other Indices	—
Hardship	54.8
Other Decision Support	—
2016 Voting	28.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	77.0

Healthy Places Index Score for Project Location (b)	48.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Net area is 13.19 acres
Construction: Construction Phases	Construction based on consultation with Applicant
Construction: Off-Road Equipment	Equipment list based on consultation with the Applicant
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction.
Construction: Architectural Coatings	Rule 1113
Operations: Vehicle Data	Trip rates based on ITE 11th Edition
Operations: Hearths	All electric
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. Further, R-404A (the CalEEMod default) is unacceptable for new supermarket and cold storage systems as of 1 January 2019 and 2023, respectively. Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.
Operations: Energy Use	No natural gas will be used

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Appendix G

Cultural Resources Technical Report

1501 Del Norte Street Residential Project

Cultural Resources Technical Report

prepared for

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May 2025

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Executive Summary

Rincon Consultants, Inc. (Rincon) was retained by MLC Holdings to conduct a cultural resources assessment for the 1501 Del Norte Street Residential Project (project) in West Covina, Los Angeles County, California. Totaling 13.56-acres, the project encompasses 1501 Del Norte Street (Assessor's Parcel Number (APN) 8458-020-901) in West Covina. The project involves the demolition of the former Del Norte intermediate school and construction of 282 home , including 34 single-family detached homes and 248 attached townhomes. The project is subject to the California Environmental Quality Act (CEQA). The City of West Covina (City) is the lead agency under CEQA.

This assessment included a cultural resources records search of the California Historical Resources Information System (CHRIS), a Sacred Lands File (SLF) search, a pedestrian survey of the project site, and the preparation of this report to summarize the results of these activities.

The built environment survey identified one property on the project site that is more than 45 years old: the Del Norte School at 1501 West Del Norte Street (subject property). The property was recorded and evaluated for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and for designation as City of West Covina Historic Landmark. The property was recommended ineligible for the NRHP, CRHR, and local designation and is not considered a historical resource pursuant to the CEQA, as a result. The demolition of the subject properties therefore would not result in a substantial adverse change to historical resources.

No archaeological resources were identified within or adjacent to the APE by the current study, which included a records search, SLF search, Native American consultation support, and a cultural resources survey. The lack of surface evidence of archaeological materials does not preclude their subsurface existence. However, the absence of substantial prehistoric or historic-period archaeological remains within the immediate vicinity, along with the existing level of disturbance in the project site, suggest there is a low potential for encountering intact subsurface archaeological deposits. Rincon presents the following recommended mitigation measure for unanticipated discoveries during construction. With adherence to this measure, Rincon recommends a finding of ***less-than-significant impact with mitigation for archaeological resources*** under CEQA.

1 Introduction

MLC Holdings retained Rincon Consultants Inc. (Rincon) to conduct a cultural resources study for the 1501 Del Norte Street Residential Project (project) in West Covina, Los Angeles County, California. This technical report documents the results of the study and tasks conducted by Rincon, specifically, a cultural resources records search, Sacred Lands File (SLF) search, and a field survey. This study has been completed pursuant to the requirements of the California Environmental Quality Act (CEQA). The City of West Covina (City) is the lead agency under CEQA.

1.1 Project Site and Description

The project site is located at 1501 Del Norte Street (Los Angeles County Assessor's Parcel Number (APN) 8458-020-901) in West Covina (Figure 1). Specifically, the project encompasses portions of Sections 16 and 21 of Township 01 South, Range 10 West on the *Baldwin Park*, *California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 2). The project site encompasses approximately 13.56 acres, and is identified as Assessor Parcel Number (APN) 8458-020-901. The project site is bordered by Del Norte Park to the north, followed by West Rowland Avenue, recreational and commercial uses to the east, followed by North Sunset Avenue, West Del Norte Street to the south, followed by single-story single-family homes and North Nora Avenue to the west, followed by single-story single family homes. Figure 1 shows the regional location of the project site and Figure 2 shows the location of the site in its neighborhood context. The project site is in an urban area, and has been previously graded and developed, and is surrounded by roads and residential buildings.

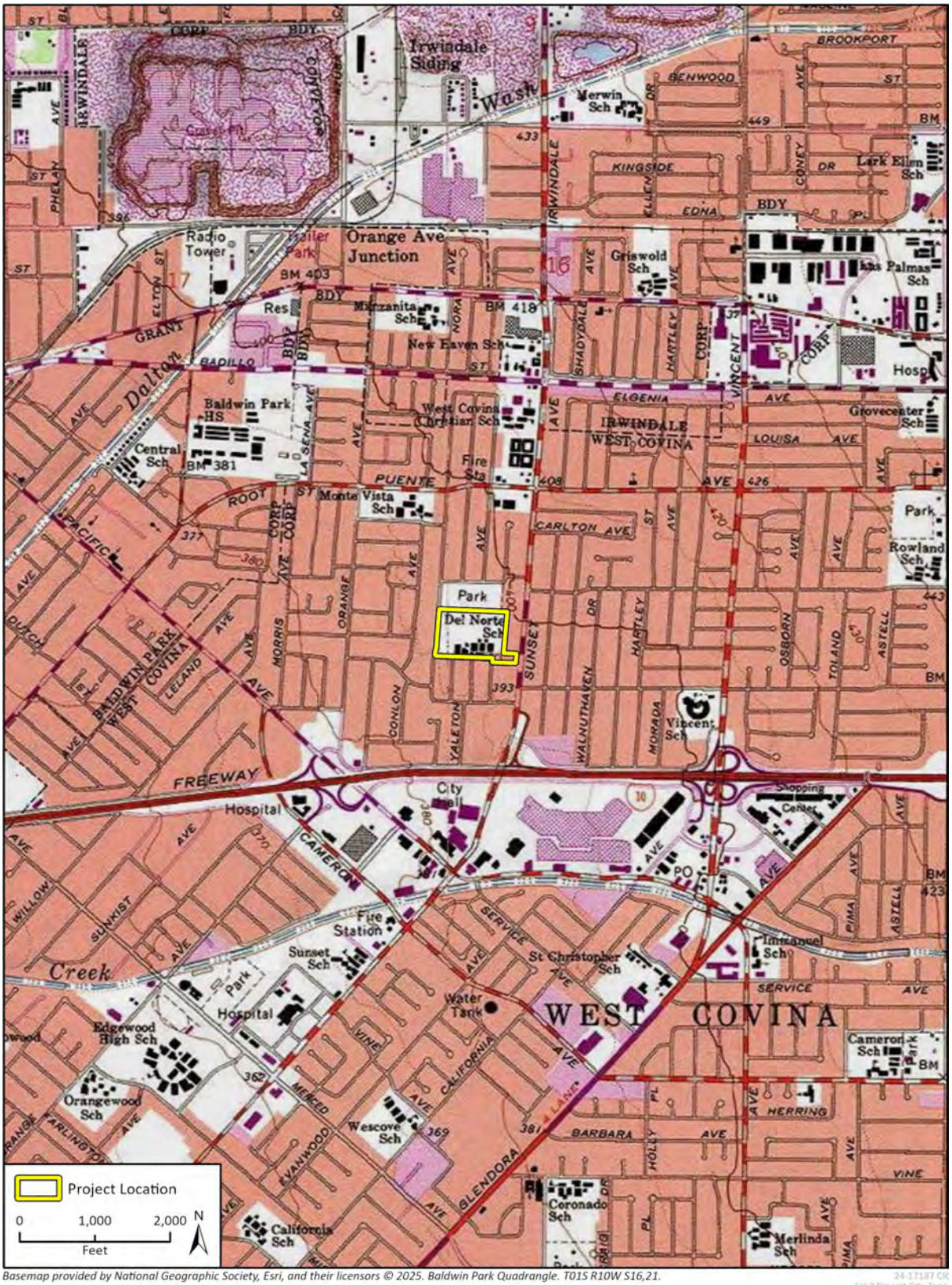
The 1501 Del Norte Street Residential Project involves the demolition of the existing buildings and structures on the project site associated with the previously Del Norte Intermediate School, which closed in 1989, and the East San Gabriel Valley Regional Occupation Program (ROP) Technical Center, which has since relocated, leaving the existing structures on the project site vacant. Following demolition, 34 single-family detached homes and 248 attached townhomes, for a total of 282 homes, would be constructed on the 13.56-acre site (Figure 3). Upon implementation of the proposed project, the net site area would be 13.19 acres, assuming the extension and full dedication of Del Norte Street to Sunset Avenue.

The proposed project would also provide approximately 120,891 square feet (sf) of common open space, which includes an 18,000 sf central area, which provides amenities such as BBQ with shade structure and seating, and a turf area for passive lawn play. In addition, private open space in the form of a porch and/or deck would be provided for each townhome unit, totaling approximately 15,587 sf of open space. Fencing and walls would be used throughout the project site along its border to define private and semi-private spaces and would serve as a unifying design element. In addition, the project approvals include establishing a new Specific Plan for the site, which would provide land use and development standards for the proposed project, and would allow the proposed net density of 21.4 dwelling units per acre (du/ac). The project involves ground disturbance with a depth of disturbance of 5 to 7 feet.

1.2 Personnel

Rincon Senior Architectural Historian JulieAnn Murphy, MHP, provided management oversight for this cultural resources study. Architectural Historian Ashley Losco, MHP, is the primary author of this report. Archaeologist Andrea Ogaz MA, Registered Professional Archaeologist (RPA), conducted the cultural resources records search at the South Central Coastal Information Center. Archaeologist/ Assistant Project Manager Pedro Gonzalez, BA, conducted the field survey and was a contributing author to the report. Principal Chris Duran, RPA reviewed this report for quality control. Ms. Murphy, Ms. Losco, Ms. Ogaz, Mr. Gonzalez, and Mr. Duran meet the Secretary of the Interior's Professional Qualifications Standards for their respective fields in history, architectural history, and archaeology (National Park Service 1983). Geographic Information Systems Kaylee Herbold prepared the figures found in this report.

Figure 1 Regional Location



Basemap provided by National Geographic Society, Esri, and their licensors © 2025. Baldwin Park Quadrangle. T01S R10W S16,21.
The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Figure 2 Project Site

Imagery provided by Microsoft Bing and its licensors © 2025.

24-17187 CR
Fig 2 Project Site

Figure 3 Conceptual Site Plan

2 Regulatory Setting

This section includes a discussion of the applicable state and local laws, ordinances, regulations, and standards governing cultural resources, which must be adhered to before and during implementation of the project.

2.1 California Environmental Quality Act

California Public Resources Code (PRC) Section 21084.1 requires lead agencies determine if a project could have a significant impact on historical or unique archaeological resources. As defined in PRC Section 21084.1, a historical resource is a resource listed in, or determined eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or identified in a historical resources survey pursuant to PRC Section 5024.1(g), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. PRC Section 21084.1 also states resources meeting the above criteria are presumed to be historically or cultural significant unless the preponderance of evidence demonstrates otherwise. Resources listed in the National Register of Historic Places (NRHP) are automatically listed in the CRHR, as are California Historical Landmarks 770 and above; both are therefore historical resources under CEQA. Historical resources may include eligible built environment resources and archaeological resources of the precontact or historic periods.

CEQA Guidelines Section 15064.5(c) provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a “unique archaeological resource” as identified in PRC Section 21083.2. PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: 1) it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information, 2) has a special and particular quality such as being the oldest of its type or the best available example of its type, or 3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource does not qualify as a historical or unique archaeological resource, the impacts of a project on those resources will be less than significant and need not be considered further (CEQA Guidelines Section 15064.5[c][4]). CEQA Guidelines Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during the implementation of a project.

According to CEQA, an impact that results in a substantial adverse change in the significance of a historical resource is considered a significant impact on the environment. A substantial adverse change could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (CEQA Guidelines Section 15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register (CEQA Guidelines Section 15064.5[b][2][A]).

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a][b]).

The requirements for mitigation measures under CEQA are outlined in CEQA Guidelines Section 15126.4(a)(1). In addition to being fully enforceable, mitigation measures must be completed within a defined time period and be roughly proportional to the impacts of the project. Generally, a project which is found to comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (the Standards) is considered to be mitigated below a level of significance (CEQA Guidelines Section 15126.4 [b][1]). For historical resources of an archaeological nature, lead agencies should also seek to avoid damaging effects where feasible. Preservation in place is the preferred manner to mitigate impacts to archaeological sites; however, data recovery through excavation may be the only option in certain instances (CEQA Guidelines Section 15126.4[b][3]).

2.1.1 National Register of Historic Places

Although the project does not have a federal nexus, properties which are listed in or have been formally determined eligible for listing in the NRHP are automatically listed in the CRHR. The following is therefore presented to provide applicable regulatory context. The NRHP was authorized by Section 101 of the National Historic Preservation Act and is the nation's official list of cultural resources worthy of preservation. The NRHP recognizes the quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects. Per 36 CFR Part 60.4, a property is eligible for listing in the NRHP if it meets one or more of the following criteria:

Criterion A: Is associated with events that have made a significant contribution to the broad patterns of our history

Criterion B: Is associated with the lives of persons significant in our past

Criterion C: Embodies the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction

Criterion D: Has yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined as follows:

Location: The place where the historic property was constructed or the place where the historic event occurred

Design: The combination of elements that create the form, plan, space, structure, and style of a property

Setting: The physical environment of a historic property

Materials: The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property

Workmanship: The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory

Feeling: A property's expression of the aesthetic or historic sense of a particular period of time

Association: The direct link between an important historic event or person and a historic property

Certain properties are generally considered ineligible for listing in the NRHP, including cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions, relocated structures, or commemorative properties. Additionally, a property must be at least 50 years of age to be eligible for listing in the NRHP. The National Park Service states that 50 years is the general estimate of the time needed to develop the necessary historical perspective to evaluate significance (National Park Service 1997:41). Properties which are less than 50 years must be determined to have "exceptional importance" to be considered eligible for NRHP listing.

2.1.2 California Register of Historical Resources

The CRHR was established in 1992 and codified by PRC Sections 5024.1 and Title 14 Section 4852. The CRHR is an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (Public Resources Code, 5024.1(a)). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (Public Resources Code, 5024.1(b)). Unlike the NRHP however, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance (California Office of Historic Preservation 2011). Furthermore, resources may still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (California Office of Historic Preservation 2011). Generally, the California Office of Historic Preservation recommends resources over 45 years of age be recorded and evaluated for historical resources eligibility (California Office of Historic Preservation 1995:2).

A property is eligible for listing in the CRHR if it meets one of more of the following criteria:

Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage

Criterion 2: Is associated with the lives of persons important to our past

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history

2.1.3 California Assembly Bill 52 of 2014

As of July 1, 2015, Assembly Bill (AB) 52 was enacted and expands CEQA by defining a new resource category, "tribal cultural resources". AB 52 establishes, "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the CEQA lead

agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) define tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and that meets at least one of the following criteria, as summarized in CEQA Guidelines Appendix G:

1) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k)
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process with California Native American tribes that must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." California Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

2.2 California Senate Bill 18 of 2004

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill [SB] 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005); "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places." SB 18 refers to PRC Section 5097.9 and 5097.995 to define cultural places as:

- A Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9)
- A Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (PRC Section 5097.995).

2.3 California Health and Safety Code

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined if the remains are subject to the Coroner's authority. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification.

2.4 California Public Resources Code §5097.98

Section 5097.98 of the California Public Resources Code states that the NAHC, upon notification of the discovery of Native American human remains pursuant to Health and Safety Code §7050.5, shall immediately notify those persons (i.e., the Most Likely Descendant [MLD]) that it believes to be descended from the deceased. With permission of the landowner or a designated representative, the MLD may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition of the remains and associated grave goods. The MLD shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

2.5 Local Regulations

2.5.1 City of West Covina Historic Resource Preservation Ordinance

The City of West Covina Historic Resource Preservation Ordinance (Ordinance No. 2173, § 1 [Exh. A], March 2008) authorizes the Planning Commission of the City of West Covina to designate local landmarks and historic districts by the procedures outlined in the ordinances. An eligible property may be nominated and designated as a landmark or historic district if it satisfies the requirements set forth below.

Landmark

"Landmark": Any improvement, building, structure, landscape, sign, feature, site, or place that has historical, cultural, aesthetic, or architectural character or value, or which represents one or more architectural periods or styles typical to the history of the city and that has been designated as a landmark pursuant to this chapter, and:

(a) It exemplifies or reflects special elements of the city's cultural, social, economic, political, aesthetic, engineering, or architectural history; or

(b) It is identified with persons or events significant in local, regional, state or national history; or

(c) It embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship; or

(d) It is representative of the notable work of a builder, designer, or architect; or

(e) It has unique location or physical characteristic(s) or represents an established and familiar visual feature or landmark of a neighborhood, community, or the city.

Historic District

"Historic district": Any area containing a concentration of improvements which have a special character, historical interest, or aesthetic value; which possess integrity of location, design, setting, materials, workmanship, feeling, and association; or which represent one or more architectural periods or styles typical to the history of the city; and that has been designated a historic district pursuant to this article. The designation criteria for a historic district are the same as those for historic landmarks above.

3 Natural and Cultural Setting

This section provides background information pertaining to the natural and cultural context of the project site. It places the project site within the broader natural environment which has sustained populations throughout history. This section also provides an overview of regional indigenous history, local ethnography, and post-contact history. This background information describes the distribution and type of cultural resources documented within the vicinity of the project site to inform the cultural resources sensitivity assessment and the context within which resources have been evaluated.

3.1 Natural Setting

The project is located in the Los Angeles Basin, approximately 3.5 miles east of the San Gabriel River, and approximately 5.75 miles east of the Rio Hondo River. The elevation for the project site is between 390 and 450 feet above mean sea level. The native vegetation of the region would have primarily consisted of riparian vegetation, riparian woodland, and alluvial sage scrub. Prior to the development of this area, the region would have been a prime corridor for a large range of fauna due to the presence of the freshwater sources, including the rivers mentioned above. The fauna would have included deer, big horn sheep (at higher elevations to the north), jackrabbit, cottontail, and a wide variety of birds, rodents, reptiles, and insects.

The project site is located in a residential area characterized by single-family homes in the surrounding area. As a result, the surrounding area does not retain its natural setting. Vegetation within the vicinity of the project site consists of manicured landscapes including ornamental trees and low ground cover, consistent with urban environmental settings.

3.2 Cultural Setting

3.2.1 Indigenous History

The project site is located in what is generally described as the Northern Bight archaeological region, one of eight organizational divisions of California designated by Jones and Klar (2007). The California Bight is bounded by the southern California coastline and encompasses the previously designated Southern Coast archaeological region described by Moratto (1984). The Northern Bight archaeological region primarily includes the counties of Santa Barbara, Ventura, and portions of Los Angeles, extending from the coastline at Vandenberg Air Force Base inland to the Cuyama River Valley and south to the Santa Monica Mountains and the Los Angeles Basin. Following Glassow et al. (2007), the prehistoric cultural chronology for the Northern Bight is generally divided into six periods: Paleo-Indian (circa 10,000 to 7000 before common era [BCE]), Millingstone Horizon (7000 to 5000 BCE), Early Period (5000 BCE to 2000 BCE), Middle Period (2000 BCE to 1 common era [CE]), Middle-Late Transition Period (1 to 1000 CE), and Late Period (1000 CE to Historic Contact). These periods are discussed in further detail below.

Paleo-Indian Period (circa 10,000 to 7000 BCE)

The Paleo-Indian Period describes the earliest evidence of human occupation of the Northern Bight and includes the cultural trends and subsistence strategies of contemporary populations from approximately 10,000 to 7000 BCE (Glassow et al. 2007). Archaeologists largely define the Paleo-Indian Period in North America by projectile points associated with extinct large mammal remains, such as mammoth, bison, and dire wolves in the Southwest and Plains regions (Erlandson et al. 1987, Huckell 1996). These projectile points have been classified as the Clovis style, which exhibit a lanceolate shape with a flute initiated from the base that extends as far as the midline (Justice 2002).

The earliest accepted dates for human occupation in California were recovered from archaeological sites on two of the Northern Channel Islands, located off the southern coast of Santa Barbara County. Over 90 paleo-coastal sites dating between 13,000 to 8200 years before present (BP) have been documented in the Northern Channel Islands (McLaren et al. 2019). Archaeological deposits from the Daisy Cave site on San Miguel Island establishes the presence of people in this area approximately 10,000 BP (Erlandson 1991, Erlandson et al. 2007), and the Arlington Springs Woman (CA-SRI-173) has a calibrated date approximately 11,000 BP derived from the human remains and rodent bones recovered from within the same deposits on Santa Rosa Island (Erlandson et al. 2007, Glassow et al. 2007, Johnson et al. 2002). Shell middens identified on the mainland of California have yielded dates from 8000 to 7000 BCE (Erlandson et al. 2007).

Recent data from Paleo-Indian shell middens, bone middens, lithic scatters, and quarry workshops on the Channel Islands indicate that the area supported substantial human populations during later paleo-coastal times (McLaren et al. 2019). Data from the last 20 years also suggests that the economy was a diverse mixture of hunting, fishing, and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones and Ferneau 2002, Erlandson et al. 2007). Shellfish are particularly prevalent, suggesting a heavy reliance on this resource, with varying intensities of reliance on fish, marine mammals, seabirds, and waterfowl (McLaren et al. 2019).

Assemblages on the Channel Islands include chipped-stone bifaces, cores and flake tools, ground-stone artifacts, bone gorges, Olivella shell beads, woven sea grass cordage, and red ochre. While no fluted points have been found on the Channel Islands, a few have been found along California's mainland coast (McLaren et al. 2019). One fluted projectile point fragment was recovered from site CA-SBA-1951 on the Santa Barbara Channel coastal plain (Erlandson 1994, Erlandson et al. 1987). Archaeological deposits at the Daisy Cave site further yielded an assemblage of "the oldest known fishhooks in the Americas" (Erlandson et al. 2007).

Millingstone Horizon (7000 to 5000 BCE)

Originally identified in 1929, the Millingstone Horizon, as described by Wallace (1955, 1978) and Warren (1968), is characterized by an ecological adaptation to collecting plant resources, such as seeds and nuts. This identification was suggested by the appearance and abundance of well-made milling implements (e.g., metates, milling slabs, and hand stones like manos and mullers) in the archaeological record, particularly in areas along the coast of California. Archaeologists generally accept that human occupation of California during the Paleo-Indian period originated from small, dispersed occupations. With milling implements occurring in high frequencies for the first time, archaeologists infer the Millingstone Horizon experienced a significant population increase in the Central Coast region (Glassow et al. 2007). Excavations at the Tank Site (CA-LAN-1) in Topanga

Canyon from 1947 to 1948 (Treganza and Bierman 1958), for example, confirmed the presence of over 2000 milling implements that correspond with the Millingstone Horizon.

Flaked stone assemblages, which include crude core and cobble-core tools, flake tools, large side-notched projectile points, and pitted stones (Glassow et al. 2007, Jones et al. 2007), and shell middens in coastal sites suggest that contemporary people in the Northern Bight practiced a mixed food procurement strategy. Faunal remains identified at Millingstone Horizon sites point to a broad-spectrum of hunting and gathering of shellfish, fish, birds, and mammals, though large faunal assemblages are uncommon. This mixed food procurement strategy demonstrates adaptation to regional and local environments.

Along the Northern Bight, Millingstone Horizon sites are most common on terraces and knolls, typically set back from the current coastline (Erlandson 1994). However, 40 sites dating to this period have been identified in various settings, including rocky coasts, estuaries, and nearshore interior valleys (Glassow et al. 2007). The larger sites usually contain extensive midden deposits, possible subterranean house pits, and cemeteries. Most of these sites probably reflect intermittent use over many years of local cultural habitation and resource exploitation.

Early Period (5000 BCE to 2000 BCE)

The Early Period of the Northern Bight is marked by a lower frequency of radiocarbon dated archaeological sites as well as changes in artifact forms. Differences in artifact forms, and particularly in ground stone implements, likely represent changes in subsistence (Glassow et al. 2007). The material culture recovered from Early Period sites within the Northern Bight provides evidence for continued exploitation of inland plant and coastal marine resources as well as the incorporation of “newly important food resources” found in specific habitats (Glassow et al. 2007). In addition to the use of metates and manos, prehistoric populations began to use mortars and pestles, such as those recovered from the Sweetwater Mesa (CA-LAN-267) and Aerophysics (CA-SBA-53) sites (Glassow et al. 2007).

Artifact assemblages recovered from Early Period sites also include bipointed bone gorge hooks used for fishing, Olivella beads, bone tools, and pendants made from talc schist. The frequency of projectile points in Early Period assemblages also increased, while the style began to change from lanceolate forms to side-notched forms (Glassow et al. 2007). The projectile point trend has become apparent at numerous sites along the Northern Bight coastal regions as well as a few inland sites (e.g., CA-SBA-210 and CA-SBA-530). In many cases, manifestations of this trend are associated with the establishment of new and larger settlements, such as at the Aerophysics site (Glassow et al. 2007, Jones et al. 2007).

Middle Period (2000 BCE to 1 CE)

The remains of fish, land mammals, and sea mammals are increasingly abundant and diverse in archaeological deposits along the coastal Northern Bight during the Middle Period, suggesting a pronounced trend toward greater adaptation to regional or local resources as well as the development of socioeconomic and political complexity in prehistoric populations (Glassow et al. 2007). Shell fishhooks were introduced, as opposed to the bone fishhooks found in earlier assemblages, and projectile points changed from side-notched dart points to contracting stem styles.

Flaked stone tools used for hunting and processing—such as large side-notched, stemmed, lanceolate or leaf-shaped projectile points, large knives, edge modified flakes, and drill-like

implements—occurred in archaeological deposits in higher frequencies and are more morphologically diversified during the Middle Period. Bone tools, including awls, are more numerous than in the preceding period, and the use of asphaltum adhesive became common. Circular fish hooks that date from between 1000 and 500 BCE, compound bone fish hooks that date between CE 300 and 900, notched stone sinkers, and the tule reed or balsa raft, indicative of major developments in maritime technology, became common during this period (Arnold 1995, Glassow et al. 2007, Jones and Klar 2005, King 1990).

Populations continued to follow a seasonal settlement pattern until the end of the Middle Period; large, permanently occupied settlements with formal architecture, particularly in coastal areas, appear to have been the norm by the end of the Middle Period (Glassow et al. 2007). Prehistoric populations began to bury the deceased in formal cemeteries with artifacts that may represent changes in ideology and the development of ritual practices (Glassow et al. 2007).

Middle-Late Transition Period (1 CE to 1000 CE)

The Middle-Late Transition period is marked in the archaeological record by major changes in settlement patterns, diet, and interregional exchange. Contemporary populations of the Northern Bight continued to occupy more permanent settlements with the continued use of formal cemeteries and burial of goods. The manufacture of the plank canoe, or tomol, allowed contemporary populations to catch larger fish that occupied deeper sea waters (Glassow et al. 2007). Following the introduction of the plank canoe, harpoons make a more pronounced appearance as their use increases. The plank canoe also appears to have influenced commerce between the mainland Northern Bight coastal regions and the Channel Islands (Glassow et al. 2007). Evidence at Middle-Late Transition Period sites in the Northern Bight indicate that populations replaced atlatl (dart) technologies with the bow and arrow, which required smaller projectile points.

Late Period (1,000 CE to Historic Contact)

Archaeologists distinguish Late Period sites in the Northern Bight with small, finely worked projectile points and temporally diagnostic shell beads. Although shell beads were typical of coastal sites, trade brought many of these maritime artifacts to inland locations, especially during the latter part of the Late Period. Projectile points diagnostic of both the Middle and Late periods found within the Northern Bight region and down the central and southern coasts of California include large, contracting-stemmed types typical of the Middle Period, as well as small, leaf-shaped Late Period projectile points (Jones and Ferneau 2002). The small, finely worked projectile points typically associated with bow and arrow technology are believed to have been introduced to the area by the Takic migration from the deserts into Southern California.

Other common artifacts identified at Late Period sites in the Northern Bight include bifacial bead drills, bedrock mortars, hopper mortars, lipped and cupped Olivella shell beads, and steatite disk beads. The presence of beads and bead drills suggests that low-level bead production was widespread throughout the region (Glassow et al. 2007). Unlike the large Middle period shell middens, Late Period sites are more frequently single-component deposits with evidence for only one period of occupation or use. There are also more inland sites, with fewer and less visible sites along the Pacific shore during the Late Period.

3.2.2 Ethnographic Setting

Gabrielino (Gabrieleño)/Tongva

The project site lies in the traditional territory of the Gabrielino (Gabrieleño)/Tongva (some Gabrielino prefer the term “Kizh”). The name "Gabrielino” or “Gabrieleño” denotes those people who were administered by the Spanish Missionaries from the San Gabriel Mission. It includes people from the Gabrielino area proper as well as other social groups nearby (Kroeber 1925, Bean and Smith 1978). The term Gabrieleño was imposed upon the Tribe by Spanish Missionaries. Many modern Gabrielino identify themselves as descendants of the indigenous people living across the plains of the Los Angeles Basin and refer to themselves as the Tongva (King 1994). This term is used in the remainder of this section to refer to the pre-colonized inhabitants of the Los Angeles Basin and their descendants.

Archaeological evidence points to the Tongva arriving in the Los Angeles Basin sometime around 500 BCE, and the Tongva note their presence in the area going back thousands of years (Villa 2017). Today, the Tongva people are active in protecting their Tribal cultural resources in the greater Los Angeles Basin and three Channel Islands: present-day San Clemente, San Nicolas, and Santa Catalina.

The Tongva language belongs to the Takic branch of the Uto-Aztecan language family, which can be traced to the Great Basin region (Mithun 2001). This language family includes dialects spoken by the nearby Juaneño and Luiseño to the southeast, the Serrano and Cahuilla to the northeast, and the Tataviam to the northwest, yet it is considerably different from the Chumash people living to the northwest and the Diegueño people (including the Ipai, Tipai, and Kumeyaay) to the south.

The Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast. The tribal population is estimated to have been at least 5,000 in 1770 (Bean and Smith 1978), but recent ethnohistoric work suggests a number closer to 10,000 (O’Neil 2002). Political organization followed a patrilocal and patrilineal pattern. Typically, the oldest son would lead a family. Chieftainship was also passed down patrilineally. A *Chari*, or chief of a village or political grouping, was separate from religious leadership (King 2011).

At the time of Spanish colonization, the basis of Tongva religious life was the Chinigchinich religion, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions, and taught people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws (Kroeber 1925). The Chinigchinich religion seems to have been relatively new when the Spanish arrived. It was spreading south into the Southern Takic groups as Christian missions were being built. Elements of Chinigchinich beliefs suggest it was a syncretic mixture of Christianity and native religious practices (McCawley 1996).

Houses constructed by the Tongva were large, circular, domed structures made of willow poles, thatched with tule, and sheltered up to 50 people (Bean and Smith 1978). Other structures served as sweathouses, menstrual huts, ceremonial enclosures, and probable communal granaries. Cleared fields for races and games, such as lacrosse and pole throwing, were created adjacent to Tongva villages (McCawley 1996).

The Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the Tribe exploited the mountains, foothills, valleys, deserts, including riparian and estuarine areas, as well as open and rocky coastal ecological niches. Like most

Native Californians, acorns were the staple food. By the time of the early Intermediate Period, acorn processing was an established industry. Acorns were supplemented by the roots, leaves, seeds, and fruits of a wide variety of flora (e.g., islay, cactus, yucca, sages, and agave). Freshwater and saltwater fish, shellfish, birds, reptiles, insects, and large and small mammals were also consumed (Kroeber 19252, Bean and Smith 1978, McCawley 1996).

The Tongva used a wide variety of tools and implements to gather food resources. These included the bow and arrow, traps, digging sticks, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. The Tongva made oceangoing plank canoes (known as a ti'at) capable of holding six to 14 people and used for fishing, travel, and trade between the mainland and the Channel Islands. Tule reed canoes were employed for near-shore fishing (McCawley 1996). Tongva people processed food with a variety of tools, including hammerstones and anvils, mortars, and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels. Catalina Island steatite was used to make ollas and cooking vessels (Kroeber 1925, McCawley 1996).

Deceased Tongva were either buried or cremated. Inhumation was more common on the Channel Islands and the neighboring mainland coast, and cremation was more predominate on the remainder of the coast and in the interior (Harrington 1942, McCawley 1996). At the behest of the Spanish missionaries, cremation essentially ceased during the Post-Colonization Period (McCawley 1996).

Today, the Tongva people continue to inhabit the Los Angeles Basin (Tongvar) and continue to advocate for the preservation and continued practice of their cultural heritage and language. At least five groups tie their ancestral lineage to the Gabrieleño/Tongva people: the Gabrieleño Band of Mission Indians - Kizh Nation, the Gabrieleño/Tongva San Gabriel Band of Mission Indians, the Gabrieleño/Tongva Nation of the Greater Los Angeles Basin, the Gabrielino-Tongva Tribe, and the Gabrielino Tongva Indians of California Tribal Council.

3.2.3 Post-Contact Setting

Post-contact history for the state of California is generally divided into three periods: the Spanish Period (1769 to 1822), Mexican Period (1822 to 1848), and American Period (1848 to present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, signals the beginning of the American Period when California became a territory of the United States.

Spanish Period (1769 to 1822)

Spanish explorers made sailing expeditions along the coast of California between the mid-1500s and mid-1700s. Juan Rodriguez Cabrillo in 1542 led the first European expedition to observe what was known by the Spanish as Alta (upper) California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta California coast and made limited inland expeditions, but they did not establish permanent settlements (Rawls and Bean 1968, Rolle 2003). The Spanish crown laid claim to Alta California based on the surveys conducted by Cabríllo and Vizcaíno (Bancroft 1885, Gumprecht 1999).

By the eighteenth century, Spain developed a three-pronged approach to secure its hold on the territory and counter against other foreign explorers. The Spanish established military forts known as presidios, as well as missions and pueblos (towns) throughout Alta California. The 1769 overland expedition by Captain Gaspár de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. Portolá established the Presidio of San Diego as the first Spanish settlement in Alta California in 1769. Franciscan Father Junípero Serra also founded Mission San Diego de Alcalá that same year, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823 (Library of Congress n.d.a).

Construction of missions and associated presidios was a major emphasis during the Spanish Period in California with the purpose of integrating the Native American population into Christianity and communal enterprise (Livingston 1914). In addition to the missions, three pueblos, or towns, were established during this period, two of which, San José and Los Angeles remain as California cities. Incentives were provided to bring settlers to these pueblos.

Spain began making land grants in 1784, typically to retiring soldiers, although the grantees were only permitted to inhabit and work the land. The land titles technically remained property of the Spanish king (Livingston 1914).

Mexican Period (1822 to 1848)

Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts (Livingston 1914). The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos (Library of Congress n.d.b). Commonly, former soldiers and well-connected Mexican families were the recipients of these land grants, which now included the title to the land.

During the supremacy of the ranchos (1834 to 1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary Southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities (Zappia 2012).

American Period (1848 to Present)

The United States went to war with Mexico in 1846. During the first year of the war, John C. Fremont traveled from Monterey to Los Angeles with reinforcements for Commodore Stockton and evaded Californian soldiers in Santa Barbara's Gaviota Pass by taking the route over the San Marcos grade instead (Kyle 2002). The war ended in 1848 with the Treaty of Guadalupe Hidalgo, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as United States territories (Waugh 2003). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the Southern California economy through the 1850s. The discovery of gold in the northern part of the state led to the Gold Rush beginning in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from Southern to Northern California to feed that region's burgeoning mining and commercial boom (Waugh 2003).

A severe drought in the 1860s decimated cattle herds and drastically affected rancheros' source of income. In addition, property boundaries that were loosely established during the Mexican era led to disputes with new incoming settlers, problems with squatters, and lawsuits. Rancheros often were encumbered by debt and the cost of legal fees to defend their property. As a result, much of the rancho lands were sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns (Dumke 1994).

Local History – City of West Covina

The following context on the city of West Covina was excerpted from the *City Of West Covina Historic Context Statement, 1945-1978 & Historic Resource Inventory Update* prepared by GPA Consulting in 2019:

> [Don Pio] Pico sold the [La Puente R]anch to William Workman and John Rowland in 1854. Thirty years later, Workman's portion was sold to E.J. "Lucky" Baldwin. During this period, growth occurred across the San Bernardino Valley, fueled by the arrival of the Southern Pacific Railroad in 1869 and later, the Santa Fe Railroad in 1887. The West Covina area grew mostly as an agricultural community during this time. Wheat and walnuts were the primary crops, but walnuts emerged as dominant. By 1905, the area was known as "Walnut Center"...
>
> In 1901, the Pacific Electric Railway established a commuter rail line through the area, along what had been the Southern Pacific line (parallel to present-day San Bernardino Road)... The City of West Covina incorporated on February 5, 1923. At the time, its boundaries were limited to six-and-a-half square miles, though the City would expand substantially in acreage over the next 50 years. It was not until 1935, when Highway 99 was constructed through West Covina, that the city began to develop into a place with urban amenities as gas stations and motels were constructed along the highway.
>
> The residential growth of West Covina was slow until the 1940s. In 1940, the population had risen to only 1,077, barely doubling since incorporation in 1923. The first signs of major residential growth began in 1941, when West Covina's first residential subdivision, Sunkist Village, was developed. Further residential development stalled with the onset of World War II at the end of 1941…
>
> While its roots as an agricultural community date back to the mid-nineteenth century, West Covina is essentially a post-World War II city. Three elements made the area attractive to the real estate developers responsible for the city's growth. First, former agricultural land was available for the development of large housing tracts. Second, the city was centrally located in the San Gabriel Valley. Finally, following the construction of Highway 99, with a route that followed Garvey Avenue and later became the route of the San Bernardino Freeway (a segment of I-10), the city was well-connected to employment and commercial centers throughout the region. The postwar growth of the city required the local government to assume a more active

role in community development… During this transitional period from an agricultural community to a growing suburb, there was a need for the City to assume a larger role, providing public services and taking an active role in urban planning. West Covina benefited from leaders who commissioned planning studies that identified thoughtful and long-term planning strategies to ensure growth would continue…

The plots of land that became available in West Covina with the decline of agriculture, particularly walnut production, in the 1930s and 1940s created an enormous inventory of developable land ideal for the large-scale commercial and housing tract developments… With the labor shortage during World War II, many walnut growers transitioned to the citrus industry or sold their land to real estate developers. Internment of West Covina's Japanese community also influenced the decline. Japanese farmers controlled a large amount of land west of Glendora Avenue. It is unclear how many Japanese families were able to maintain ownership and production of their land during internment and how many sold or lost their land…

Unlike many cities in the San Gabriel Valley, West Covina did not have a main street where early commercial development concentrated. The historic town center of the early twentieth century was south of Orange Avenue and Garvey Boulevard (present day I-10) and consisted only of a blacksmith shop and general store. Most shopping was done in the adjacent towns of Covina, Baldwin Park, and La Puente. There was little demand for commercial development in West Covina through the 1920s. No plans for a commercial business district were made, even following incorporation in 1923… After Highway 99 became the primary thoroughfare through West Covina in 1935, residential and commercial buildings were constructed sporadically along Highway 99 without any zoning regulations or planning policies.

In the postwar era, federal programs stimulated a demand for single-family homes, but not commercial districts. When the first wave of largescale residential developments on former agricultural land took place, builders attempted to regulate themselves. The first subdivisions built between 1945 and 1952 were typically smaller developments compared to later years… The scale of development increased substantially in the early 1950s and the federal government's standards began to influence the shape of West Covina's residential neighborhoods. Builders followed the guidelines set forth by the Federal Housing Administration (FHA) program created before the war by the National Housing Act of 1934… Many of the new residents who came to West Covina after World War II were veterans using the G.I. Bill to purchase homes. The homes were marketed as affordable family homes, typically designed in Minimal Traditional, and later, Ranch styles…

Residential development drew new families to the area and triggered an urgent need to build community services and commercial areas to accommodate future population growth. This was immediately apparent in the sudden rise in the school-age population that could not be accommodated in the prewar school buildings. The elementary school, the West Covina School, had been constructed in 1909 on Sunset Avenue between Service Avenue (north) and Merced Avenue (south). The original schoolhouse reached capacity as an influx of children from Sunkist Village, a residential development from 1941, enrolled in school. From 1945 to 1949, student enrollment in grades kindergarten through eighth grew from 186 to 479, causing classrooms at the school in West Covina to reach capacity. The short-term solution was to create "annex" classrooms at the Japanese-American Clubhouse. By 1947, it was clear that the City needed to prepare for a growing school-age population. In 1951, a new school, the Sunset School (demolished) was constructed on the site of the original school. A second school, the Cameron School (1225 E. Cameron Ave., extant) opened in 1952. West Covina High School opened in

1956, using an older building that had belonged to Covina. The school moved to a new campus on Cameron Ave and Fernwood in 1957…

The City began expanding with the first of a series of annexations in 1947. Between 1947 and 1958, 44 annexations took place and the city grew by 2,700 acres. The City formed the West Covina Planning Commission in 1947 to address the impacts of an ongoing postwar building boom and outward growth… Institutional development that occurred in the late 1940s and early 1950s primarily supported an expected influx of residents and home buyers. The groundbreaking for the first church in West Covina, Community First Presbyterian Church, occurred in 1949. The first medical center, West Covina Medical Center, was announced in 1949. Voters created the West Covina Fire Department in 1950…

Planning for a civic center and business district near Orange Avenue and Garvey Boulevard began in 1948. Preliminary plans were completed by Robert Alexander, a Los Angeles-based architect known for designing institutional buildings and planning government centers… West Covina Center, the City's first planned shopping district, was completed by 1952. There was limited commercial development elsewhere in West Covina at the time. Due to the City's eastward growth, West Covina Center and the City Hall were no longer centrally located, but in the northwestern portion of the City… Development was concentrated north of Highway 99, closer to the more densely developed cities of Baldwin Park and Covina. With Baldwin Park to the northwest, Irwindale to the north, and Covina to the northeast, West Covina quickly grew to the south and east along Highway 99 in the following years. Much vacant land remained, particularly in the areas south of Walnut Creek, and would quickly be developed in the boom period of 1952 to 1956. More than 25,000 people moved to West Covina in the short span of four years between 1952 and 1956, increasing the population by more than 500 percent from what it was in 1950… With its proximity to employment centers in Los Angeles and low-cost, spacious, housing, the area was very attractive to veterans looking to purchase single-family homes…

The houses constructed during the boom years were larger than the tract housing of the late 1940s… While the houses were larger, more land was also available for development; a devastating disease attacked the walnut groves, compelling most remaining farmers to sell their land to developers… The Recreation and Parks Commission opened the first municipal park in 1954. Other institutional development included a second fire station, opened in a converted horse barn on Cortez Avenue, west of Citrus Avenue, in 1954. Automobile traffic was the primary mode of transportation and the matrix around which the city developed, influencing everything from the location of new commercial shopping centers to the proliferation of sound walls surrounding residential developments… In 1955, Highway 99 was changed with the San Bernardino Freeway segment of I-10… The major interstate traversing West Covina ensured the city's continued growth as a commuter bedroom community. Along with more residential development, new shopping and commercial centers emerged along the freeway and major boulevards… Despite the increase in commercial development, when West Covina was ranked the fastest growing city in the United States in 1955, the growth was primarily residential and most working residents were commuters. Industries around West Covina employed very few of its residents…

After the astronomical growth of the Boom Years, West Covina continued to grow, but at a much slower pace. From 1950 to 1957, the average rate of population growth per year ranged from 10 to 50 percent. In 1958, the percentage gain in population dipped below ten percent for the first time in almost a decade. Annexations to the City continued. Land area increased

twenty-five percent, from 6,592 acres in 1958 to 8,224 acres in 1961. Though the city included a diverse range of commercial, institutional, and recreational land uses and property types, by the end of the boom, West Covina remained a bedroom community… This balance began to shift after the boom - the construction of single-family homes decreased, and more multi-family housing development began… As growth slowed, city leaders shifted their focus from short-term issues, such as overflowing schools and insufficient infrastructure, to long-term planning and investments, such as attracting people to West Covina when it was no longer a boomtown. In 1958, the West Covina City Council hired a new city manager, George Aiassa, to lead this long-term planning outlook. Aiassa served as city manager for eighteen years from 1958 to 1976 and had a profound influence on the shape of West Covina during later phases of the city's development.

In 1962, a new city slogan, "Headquarters City," was adopted to align with a new vision for the City of West Covina as center for shopping, business, medical, and government services. As earlier city officials had done in the 1940s, Aiassa and other city leaders brought in consultants, Charles B. Bennett and Associates, to make recommendations on the best planning practices for the future. Bennett and Associates prepared the City's first comprehensive Land Use Analysis in 1958. Using the results from the Land Use Analysis, a master plan was completed by Simon Eisner and Associates in 1961…. Some of the first projects in line with the Eisner recommendations took shape under city manager Aiassa's leadership. The first project completed was a bridge betterment program that involved the building or rebuilding of fourteen bridges over Walnut Creek Wash and flood control improvements, such as construction of a storm drain inlet system and installation of sewers throughout the city. New entertainment and retail centers were completed as residents became more secure middle-class consumers…

The culmination of West Covina's mission to become the "Headquarters City" was the construction of West Covina's Civic Center.64 Completed in 1969, the new City Hall was highly visible from the freeway and created a unified image and physical center for the city. The Civic Center was completed as a partnership between the local and county governments, the Joint Powers Authority consisted of the County of Los Angeles and the City of West Covina. In addition to City Hall, the Civic Center included a new police station, a three-level parking structure, a branch of the Los Angeles County Regional Library, and the Citrus Municipal Court building.

In 1973, West Covina celebrated its fiftieth birthday as a City. As small infrastructure improvements were completed, the City began to revisit larger, long-term planning needs. These included a $19.7 million expansion project to widen the I-10 from six to eight lanes with other improvements; and construction of the West Covina Fashion Plaza, planning for which had begun a year earlier, in the 1950s.65

As single-family home building slowed in the 1970s, city leaders focused on stimulating commercial development, which would create jobs and generate tax revenue to support city services needed by residents. A joint effort to encourage commercial development was led by public and private organizations, including the West Covina Economic Development Program, West Covina Chamber of Commerce, and Redevelopment Agency (created earlier in 1971). As a result, sales tax revenue nearly doubled in a short period during the mid-1970s, increasing from $1.6 million in 1974 to $2.9 million in 1978.66

Among the major commercial developments of the mid-1970s were large, enclosed shopping malls. The Redevelopment Agency was established for the sole purpose of redeveloping a

> portion of the city's first shopping center, West Covina Center, along Garvey Avenue (demolished) and the adjacent free-standing Broadway department store (1209 Plaza Dr., extant) into the West Covina Fashion Plaza. Construction of the West Covina Fashion Plaza (112 Plaza Dr., altered) began in 1973. An expansion was completed in 1975. Because of its success and contribution to the community's economic health, the Redevelopment Agency continued as an organization with the goals of "rehabilitating existing development, attracting additional businesses and expanding the public's benefits through increased tax revenue and more jobs."… In 1975, construction began on a master-planned community development called Woodside Village, located in the San Jose Hills straddling West Covina and the adjacent city of Walnut… In addition to increased tax revenue, a local public works bill helped fund the construction of public institutions and infrastructure, opening up new areas of the city for development. West Covina Fire Station No. 5 (2560 Shadow Oak Dr., extant) was completed in 1978. The southernmost area of West Covina developed during this time. Shadow Oak Road, and Shadow Oak Park were constructed, stimulating the development of vacant land in the South San Jose Hills at the southernmost boundary of West Covina…

City of West Covina – Educational Development

The following context on the city of West Covina's educational development was excerpted from the *City Of West Covina Historic Context Statement, 1945-1978 & Historic Resource Inventory Update* prepared by GPA Consulting in 2019:

> When West Covina incorporated in the 1920s, one of the priorities for its citizens was to improve its already existing school, the Irwindale School. The Irwindale School had been completed around 1909 for eleven students on donated land along what is now Sunset Avenue. The building was expanded over the next few years and its name was changed to the West Covina School. The West Covina School served as a clubhouse for residents as well as a school for students in kindergarten through eighth grade. In 1924, after the new City of West Covina collected its first property taxes, the school grounds were improved with outdoor lighting, tennis courts, and a water tank.
>
> Between 1945 to 1949, student enrollment in kindergarten through eighth grade grew from 186 to 479 pupils. In an effort to accommodate the growing school-age population, the single West Covina School created double school days and held classes in the Japanese-American Clubhouse. Older students attended high schools in adjacent cities. However, these stopgap measures were not enough. In 1951, enrollment climbed to 749. Using state funds, the West Covina School District demolished the original West Covina School schoolhouse and constructed classrooms and buildings on the same site for a new grade school, the Sunset School (851 S. Sunset Ave., demolished). A second school, Cameron Elementary School (1225 E. Cameron Ave.), opened its doors in 1952 as enrollment reached 1,570 students, more than doubling the number of students from the previous year. Seven additional schools were built by 1959 as the number of students reached more than 5,000 near the end of the decade.
>
> Though the school system did not have an official architect, two firms were responsible for the designs of most schools constructed in the postwar period. Many of the schools were designed by architects Ralph C. Flewelling and Walter L. Moody of the firm Flewelling & Moody. The firm was one of prominent Southern California firms specializing in architectural design for public schools and higher education facilities during the postwar baby boom. Districts such as West Covina hired the firm to design multiple schools of a similar, yet innovative design. Flewelling & Moody's work achieved statewide visibility after the completion of West Covina's third school,

the Del Norte School (1501 W. Del Norte St.), constructed in 1953. Their "school plant" design was featured at the annual convention of the California Association of School Administrators, and "incorporated a number of new features, including space saving economy in construction and new concepts of earthquake resistance for schools, controlled lighting with even distribution of light in the classrooms obtained by roof skylights and a luminous plastic ceiling which will diffuse light evenly throughout the classroom area."

Other schools, such as West Covina Union High School (1609 E. Cameron Ave., built 1955) and Edgewood High School (1625 W. Durness St., built 1958) were designed by the firm of Kistner, Wright, and Wright. Kistner, Wright & Wright was based in San Diego and known for a number of Mid-Century Modern civic center and school campus projects in Southern California. Theodore C. Kistner, a partner in the firm along with H.F. Wright and W.T. Wright, was the official architect for the San Diego School Board.

Throughout the postwar period, the City struggled to construct enough schools to keep pace with the population boom. As a bedroom community with comparatively little business or industry, the majority of the City's taxable property was residential, and residential property taxes alone could not provide the City with enough funding for the schools it needed. Thus, the City relied heavily on State funding, which was obtained based on the estimated number of future enrollments using a formula that counted less than the City's own projection. The ongoing need for additional funding would be at the root of continued discussions to unite West Covina neighboring school districts and agencies for financial support.

In the early 1960s, the State of California began providing incentives to eliminate small school districts by offering additional state funding for the first five years after a unified school district formed. Unified school districts included grade schools and high schools under a single administrative umbrella. In 1960, voters approved the creation of the West Covina Unified School District, which was established with thirteen elementary schools and two high schools.136

Associated Property Types

Property types associated with the subtheme of Education include individual public school buildings and larger public school campuses composed of numerous buildings and related features, like playgrounds and stadiums. Some public schools have been renamed or converted for use as charter schools. West Covina's schools are typically located along major cross-streets in otherwise residential areas. Mid-Century Modern is the dominant architectural style for schools in West Covina. Common materials and features include brick masonry, stucco, low-pitched gabled and flat roofs, large groups of steel sash windows, clerestory windows, and covered outdoor walkways. Site planning was often emphasized over the architectural details in the design of schools. Campuses typically have modular or radial site planning, consisting of multiple identical, or nearly identical, buildings that are regularly arranged and connected by covered outdoor walkways.

4 Methods

This section presents the methods for each task completed during the preparation of this study.

4.1 Background and Archival Research

4.1.1 Archival Research

Rincon completed background and archival research in support of this study in March 2025. A variety of primary and secondary source materials were consulted. Sources included, but were not limited to, historical maps, aerial photographs, and written histories of the area. The following sources were utilized to develop an understanding of the project site and its context:

- Los Angeles County Assessor's Office
- Historical aerial photographs accessed via NETR Online
- Historical aerial photographs accessed via University of California, Santa Barbara Library FrameFinder
- Historical U.S. Geological Survey topographic maps
- Historical newspaper clippings obtained from Newspapers.com, ProQuest Historical Newspapers.com, and the California Digital Newspaper Collection
- Various historical records via Ancestry.com
- Geologic Maps via USGS National Geologic Map Database
- USDA Web Soil Survey

4.1.2 California Historical Resources Information System Records Search

On March 14, 2025, Rincon received California Historical Resources Information System (CHRIS) records search results from the South Central Coastal Information Center (SCCIC) (Appendix A). The SCCIC at California State University Fullerton is the official state repository for cultural resources records and reports for the county in which the project falls. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. Rincon also reviewed the NRHP, the CRHR, the California Historical Landmarks list, and the Built Environment Resources Directory (BERD), as well as its predecessor the California State Historic Property Data (HPD) File. Additionally, Rincon reviewed the Archaeological Determination of Eligibility (ADOE) list.

4.1.3 Sacred Lands File Search

Rincon contacted the NAHC on March 7, 2025, to request a search of the Sacred Lands File (SLF), as well as a contact list of Native Americans culturally affiliated with the project area (Appendix B).

4.2 Field Survey

Archaeologist Pedro Gonzalez, BA conducted a pedestrian survey of the project site on March 21, 2025. A pedestrian survey was conducted using transect intervals spaced 15 meters and oriented generally from east to west. Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historical debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning Satellite unit and a georeferenced map of the project site. Site characteristics and survey conditions were documented using field records and a digital camera.

Under the direction of Rincon Senior Architectural Historian JulieAnn Murphy, Mr. Gonzalez also conducted a built environment survey of the APE on March 21, 2025. Built environment resources within the project site, including buildings, structures and associated landscape elements. Pursuant to OHP Guidelines (California OHP 1995:2), properties over 45 years of age were evaluated for listing in the NRHP and recorded on California Department of Parks (DPR) 523 series forms. Overall condition and integrity of these resources were documented and assessed. Site characteristics and conditions were documented using notes and digital photographs which are maintained at the Rincon Los Angeles office.

5 Findings

5.1 Known Cultural Resources Studies

The CHRIS records search and background research identified seven cultural resources studies within 0.5 mile of the project site (Appendix A). Of these studies, one study includes areas directly adjacent to the project site, LA-11501. The project site has not been previously studied or surveyed. Known studies that occurred within or adjacent to the project site are discussed in further detail below.

5.1.1 Study LA-11501

In 2010, EBI Consulting prepared an archaeological sensitivity assessment, *Cultural Resources Analysis: CA-LOS4406B North Sunset Avenue & West Rowland Avenue West Covina,* Study LA-11501, for Clearwire Corporation, LLC in accordance with the requirements of Section 106 of the National Historic Preservation Act (Perez 2010). The project included construction of a new stealth pine tree-style communications tower at North Sunset Avenue and West Rowland Avenue in West Covina, California. The project included a CHRIS records search, an archaeological field survey, a historic map and aerial photograph review, and recommendations within the prepared sensitivity report. The project recommended that the Area of Potential Effects was not sensitive for the presence of significant precontact or historical archaeological resources. Study LA-11501 sits adjacent to the current project site to the northeast, along Sunset Avenue.

5.2 Known Cultural Resources

The CHRIS records search and background research identified one cultural resource within a 0.5 mile of the project site. Resources recorded in the search radius are listed in Table 1 below. No resources are recorded within or adjacent to the project site.

Table 1 Known Cultural Resources

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	Eligibility Status	Relationship to Project Site
19-187977	-	HP16	Historic Building – Foxdale Bethany Baptist Church	D. Supernowicz 2005	6Y2; Determined ineligible for NR by consensus through Section 106 process -Not evaluated for CR or local listing	Outside

Source: SCCIC 2025

5.3 Previous Evaluation

As described above, one built environment resource has been identified within the project site, the Del Norte School at 1501 West Del Norte Street. The property, known as the Del Norte Intermediate School, was previously surveyed and evaluated as part of West Covina's Historic Context Statement and Historic Resource Inventory Update completed by GPA Consulting in December 2019. The previous recording was prepared by Amanda Duane of GPA Consulting who documented the building's appearance in 2019 through a physical description and photographs. Ms. Duane recommended the property ineligible for listing in the NRHP, CRHR, and for local listing under City of West Covina criteria (Duane 2019).

5.4 Aerial Imagery and Historical Topographic Maps Review

Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the project site. Historical topographic maps and aerials from 1897 to 1946 depict the project site as undeveloped land west of an unnamed paved road and a single building or structure (NETR Online 2025; USGS 2025; UCSB 1928). An aerial from 1948 depicts buildings and structures and agricultural fields within the project site, and the project site is surrounded by agricultural fields and associated single-family residences and structures (NETR Online 2025). Historical aerials from 1952 and 1953 depict the surrounding agricultural fields to the west, south, and east were replaced by single-family residential developments but the project site was still developed with the buildings and structures depicted in 1948 (NETR Online 2025). An aerial from 1964 depicts the extant buildings and structures and baseball fields within the project site; the agriculture fields to the north were replaced with single-family residences (NETR Online 2025). Between 1965 and 2022, the project site was depicted as it appeared in 1964 and the surrounding area developed with infill development (NETR Online 2025; UCSB 1968 and 1976).

5.5 Geoarchaeological Review

According to published geologic mapping, the project site is underlain by Young Quaternary alluvium (Qyfa) consisting of unconsolidated to slightly consolidated sediments —such as boulder, cobble, gravel, sand, and silt — deposited by rivers, such as the San Gabriel River and the Rio Hondo River to the east (National Geologic Map Database 2025). This geologic unit was deposited during the Holocene (beginning approximately 11,700 years ago). The Holocene dates to human occupation of the region, and these types of alluvial deposits are generally conductive to the natural burial and preservation of archaeological deposits.

The soil within the project site consists of an Urban land—Palmview—Tujunga complex. This complex consists of very deep, well drained to somewhat excessively drained soils that formed in alluvium from granitic or related rock sources (California Soil Resources Lab 2025). Found on alluvial fans and floodplains, including urbanized areas, this complex reflects environments where sediments accumulate over time. Urban land, typically associated with highly developed areas, comprises 45 percent of the soil complex within the project site. Urban land may contain transported and artificial fill, which are often highly disturbed and have a low likelihood of encountering intact archaeological deposits.

Although the geologic unit identified within the project site was deposited during the Holocene on alluvial fans and floodplains, indicating an elevated sensitivity for buried archaeological resources, the Urban land—Palmview—Tujunga complex does not contain buried A-horizons, which are generally indicative of natural burial and preservation of archaeological deposits. As such, the geoarchaeological sensitivity is considered moderate.

5.6 Sacred Land File Search

On March 24, 2025, the NAHC responded to Rincon's AB 52 and SB 18 contacts request and SLF request, stating that the results of the SLF search were negative. See Appendix B for the NAHC response, including Tribal contacts list(s).

5.7 Survey Results

5.7.1 Built Environment Resources

The following section summarizes the results of all background research and fieldwork as they pertain to built environment resources that may qualify as historical resources. The field work and background research resulted in the identification of one historic-age property within the project site, Del Norte School at 1501 West Del Norte Street, built in 1953. This property was recorded and an evaluation for historical resources eligibility, updating the previously prepared 2019 evaluation was completed on DPR series forms, which are included in Appendix D and summarized below.

The following property history and historical resources evaluation was derived from the assessment prepared by GPA Consulting in 2019. See Appendix D for a copy of the evaluation.

Physical Description – Del Norte School

As described in the 2019 assessment prepared by GPA Consulting and confirmed by Rincon in March 2025, 1501 West Del Norte Street, also known as the Del Norte School, is a former middle school with nine buildings sited along West Del Norte Street, a paved parking lot, paved drop off loop, and a large recreational field at the rear (Figure 4). The property was constructed in 1953 and expresses characteristics of the Mid-Century Modern style and post-World War II school plant designs.

The one-story buildings are constructed of wood framing clad in brick and either express a shed roof with an overhanging eave on the primary elevations or low-pitched side-gabled roofs (Figure 5). One of the buildings has a domed roof with overhanging eaves creating a covered entrance on each elevation. Adjacent to this building is a former furnace and smokestack, all constructed of brick (Figure 6). The classroom buildings are divided into four classrooms each with a flush metal door at the entrance and five large, rolled steel frame fixed pane windows, four by six panes each. Some of the windows are blacked out, some replaced with vinyl units, and some the former transoms are now boarded above each entrance.

In between the buildings are covered walkways constructed of corrugated metal roofs supported by metal framing and paved courtyards for picnic tables or play areas (Figure 7). There are mature trees throughout the property which provide shade over wood benches. The rear recreational field has two former baseball diamonds, basketball courts, and cracked foundations (Figure 8).

Figure 4 Del Norte School Primary (South) Elevation, View Northeast

Figure 5 Del Norte School Buildings Clad in Brick with Flat or Gabled Roofs, View North

Figure 6 Del Norte School Domed Roof Building and Furnace, View Southeast

Figure 7 Del Norte School Covered Walkway and Classrooms, View North

Figure 8 Del Norte School Recreational Field, View North

Property History –Del Norte School

The subject property was constructed in 1953 as a middle school campus during the post-World War II era population boom in West Covina. The campus was designed by Flewelling & Moody, who were hired by the City of West Covina School District to complete plans for several schools in the city. The campus was designed with characteristics of the Mid-Century Modern style and is an example of post-World War II school design and construction (GPA Consulting 2019). Their "school plant" design was featured at the annual convention of the California Association of School Administrators, and "incorporated a number of new features, including space saving economy in construction and new concepts of earthquake resistance for schools, controlled lighting with even distribution of light in the classrooms obtained by roof skylights and a luminous plastic ceiling which will diffuse light evenly throughout the classroom area" (GPA Consulting 2019).

Del Norte Intermediate School closed in 1989, and the East San Gabriel Valley Regional Occupation Program (ROP) Technical Center occupied the space until circa 2019. The existing buildings and structures are currently vacant.

Historical Resources Evaluation

As previously described, Del Norte School was most recently evaluated as part of the City of West Covina's Historic Context Statement and Historic Resource Inventory Update in 2019. The intensive-level survey evaluation by GPA Consulting found the property ineligible for listing in the NRHP, CRHR, and for local listing due to the lack of architectural and historical significance. Rincon surveyed the property in March 2025 and noted no visible alterations to the Mid-Century style school campus since 2019 that would suggest the property is now eligible for national, state, or local

listing. In concurrence with the 2019 evaluation, this study recommends that the property is ineligible for listing in the NRHP, CRHR, and for local listing due to lack of historical or architectural significance.

5.7.2 Archaeological Resources

Due to the mostly developed nature of the northern half of the project stie, including the existing parking lot, buildings and structures, and associated hardscaping, there was almost no ground surface visibility (Figure 9). In unpaved and/or undeveloped areas of the northern half of the project site, consisting primarily of landscaped areas, ground surface visibility was poor (0 to 15 percent).Grass, low lying plants, and duff obstructed the ground surface. In the undeveloped northern half of the project site, ground surface visibility was also poor (0 to 35 percent) due to the presence of mature trees, bushes, plants, grass and weeds throughout this portion of the project site (Figure 10). The opportunistic survey consisted of examining all landscaped areas and exposed ground surfaces within the project site. The visible soil within the project site consisted of light brown to brown sand intermixed with coarse sand and gravel. In addition, the project site and its vicinity exhibited signs of subsurface disturbances as suggested by the presence of utility poles and subsurface utilities lines, manholes, smaller underground utility boxes, and irrigation systems. No archaeological resources were identified during the field survey.

Figure 9 Overview of Southern Portion of the Project Area, View South

Figure 10 Overview of Northern Portion of the Project Site, View Northwest

6 Impacts Analysis and Conclusions

6.1 Historical Built Environment Resources

The field survey and background research identified one built environment historical resource in the project site, the Del Norte School. As detailed above in Section 5.9, the resource was previously evaluated for listing in the NRHP, CRHR, and local listing in 2019 by Amanda Duane of GPA Consulting. As part of this study, Rincon concurs with the findings from 2019 that the resource is ineligible for NRHP, CRHR, and local listing; therefore, the property does not qualify as a historical resource as defined by CEQA. The project would result in ***no impact to historical resources*** pursuant to CEQA.

6.2 Historical and Unique Archaeological Resources

No archaeological resources were identified within or adjacent to the project site by the current study, which included a records search, SLF search, Native American consultation support, and a cultural resources survey. The lack of surface evidence of archaeological materials does not preclude their subsurface existence. However, the absence of substantial prehistoric or historic-period archaeological remains within the immediate vicinity, along with the existing level of disturbance in the project site, suggests that there is a low potential for encountering intact subsurface archaeological deposits. Rincon presents the following recommended mitigation measure for unanticipated discoveries during construction. With adherence to this measure, Rincon recommends a finding of ***less-than-significant impact with mitigation for archaeological resources*** under CEQA.

6.2.1 Recommended Mitigation

Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of the California Code of Regulations (CCR) Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The City shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional

repository of the California Historical Resources Information System, per CCR Guidelines Section 15126.4(b)(3)(C).

6.3 Human Remains

No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify an MLD. The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, Rincon recommends a finding of ***less-than-significant impact to human remains*** under CEQA.

7 References

Arnold, Jeanne E.

1995 "Transportation Innovation and Social Complexity among Maritime Hunter-Gatherer Societies". *American Anthropologist* 97(4): 733–747.

Bancroft, Hubert How

1885 *History of California, Volume III: 1825-1840*. San Francisco, California: A.L. Bancroft & Co.

Bean, Lowell John and Charles R. Smith

1978 "Gabrielino." *California*, edited by Robert F. Heizer, pp. 538–549. *Handbook of North American Indians,* Vol. 8, W.C. Sturtevant, general editor. Washington, D.C.: Smithsonian Institution.

California Office of Historic Preservation

1995 *Instructions for Recording Historical Resources*. Department of Parks and Recreation, Sacramento, California.

2006 "California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register)," *California Office of Historic Preservation Technical Assistance Series #10*. Department of Parks and Recreation, Sacramento, California

2011 "California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register)," *California Office of Historic Preservation Technical Assistance Series #6*. Department of Parks and Recreation, Sacramento, California

California Soil Resources Lab

2023 Soil Data Explorer – Urban land-Montebello Complex. https://casoilresource.lawr.ucdavis.edu/gmap/ (Accessed April 2025).

Dallas, S.F.

1955 *The Hide and Tallow Trade in Alta California 1822-1848*. PhD dissertation. Bloomington, Indiana: Indiana University.

Duane, Amanda

2019 DPR Form for the Del Norte School. Prepared as part of "City of West Covina Historic Context Statement, 1945-1978 & Historic Resource Inventory Update," 2019. GPA Consulting. Accessed March 2025 https://www.westcovina.org/home/showpublisheddocument/17765/637121055490270000/.

Dumke, Glenn S.

1994 "The Boom of the 1880s in Southern California." *Southern California Quarterly* 76(1): 99–114.

Erlandson, Jon M.

1991 "Early Maritime Adaptations on the Northern Channel Islands in Hunter-Gatherers of Early Holocene Coastal California." Volume 1: Perspectives in California Archaeology. J. M. Erlandson and R. Colten, eds. Pp. 101–111. Los Angeles, California: Costen Institute of Archaeology Press.

1994 *Early Hunter-Gatherers of the California Coast*. New York, New York: Plenum Press.

Erlandson, Jon M., Theodore Cooley, and Richard Carrico

1987 "A Fluted Projectile Point Fragment from the Southern California Coast: Chronology and Context at CA-SBA-1951." *Journal of California and Great Basin Anthropology* 9: 120–128.

Glassow, Michael A., Lynn H. Gamble, Jennifer E. Perry, and Glenn S. Russell

2007 "Prehistory of the Northern California Bight and the Adjacent Transverse Ranges" in *California Prehistory: Colonization, Culture, and Complexity*. Terry L. Jones and Kathryn A. Klar, eds. Pp. 191–213. Lanham, Maryland: AltaMira Press.

GPA Consulting

2019 *City Of West Covina Historic Context Statement, 1945-1978 & Historic Resource Inventory Update*. Prepared for the City of West Covina. Accessed March 2025. https://www.westcovina.org/home/showpublisheddocument/17755/637121051571830000.

Gumprecht, Blake

1999 *The Los Angeles River: Its Life, Death, and Possible Rebirth*. Baltimore, Maryland: Johns Hopkins University Press.

Harrington, John P.

1942 "Cultural Element Distributions: XIX Central California Coast." *University of California Anthropological Records* 7(1): 1–46.

Huckell, Bruce B.

1996 "The Archaic Prehistory of the North American Southwest." *Journal of World Prehistory* 10(3): 305-373.

Johnson, J. R., T. W. Stafford, Jr., H. O. Ajie, and D. P. Morris

2002 "Arlington Springs Revisited". *Proceedings of the Fifth California Islands Symposium*, edited by D. Browne, K. Mitchell, and H. Chaney, pp. 541–545. USDI Minerals Management Service and The Santa Barbara Museum of Natural History, Santa Barbara, California.

Jones, Terry L. and Jennifer A. Ferneau

2002 "Deintensification along the Central California Coast" in *Catalysts to Complexity, Late Holocene Societies of the California Coast*. Volume 6: Perspectives in California Archaeology. Jon M. Erlandson and Terry L. Jones, eds. Pp. 205-232. Los Angeles, California: Costen Institute of Archaeology, University of California, Los Angeles.

Jones, Terry L. and Kathryn A. Klar

2005 "Diffusionism Reconsidered: Linguistic and Archaeological Evidence for Prehistoric Polynesian Contact with Southern California." *American Antiquity*. 70(3): 457–484.

2007 *California Prehistory: Colonization, Culture, and Complexity*. Berkeley, California: AltaMira Press.

Jones, Terry L., Nathan E. Stevens, Deborah A. Jones, Richard T. Fitzgerald, and Mark G. Hylkema

2007 "The Central Coast: A Midlatitude Milieu". *California Prehistory: Colonization, Culture, and Complexity*. Terry L. Jones and Kathryn A. Klar, eds. Pp. 125–146. Lanham, Maryland: AltaMira Press.

Justice, Noel D.

2002 *Stone Age Spear and Arrow Points of California and the Great Basin*. Bloomington, Indiana: Indiana University Press.

King, Chester D.

1990 "Evolution of Chumash Society: A Comparative Study of Artifacts Used in Social System Maintenance in the Santa Barbara Channel Region Before A.D. 1804". *The Evolution of North American Indians*. David Hurst Thomas, ed. New York, New York: Garland Publishing.

1994 *Native American Placenames in the Santa Monica Mountains National Recreation Area, Agoura Hills*. Topanga Anthropological Consultants, California.

2011 "Overview of the History of American Indians in the Santa Monica Mountains." *Topanga Anthropological Consultants*. Prepared for the National Park Service Pacific West Region. Topanga, California.

Kroeber, Alfred J.

1925 *Handbook of the Indians of California. Bureau of American Ethnology, Bulletin 78*. Originally published 1925, Smithsonian Printing Office, Washington, D.C. Unabridged reprint 1976, Dover Publications, Inc. New York.

Kyle, Douglas E.

2002 *Historic Spots in California*. Stanford, California: Stanford University Press.

Library of Congress

n.d. a *Spanish California*. Accessed March 2024. https://www.loc.gov/collections/california-first-person-narratives/articles-and-essays/early-california-history/spanish-california/.

n.d. b *Mexican California*. Accessed March 2024. https://www.loc.gov/collections/california-first-person-narratives/articles-and-essays/early-california-history/spanish-california/.

Livingston, M.M.

1914 "The Earliest Spanish Land Grants in California." *Annual Publication of the Historical Society of Southern California* 9(3): 195–199.

McCawley, William

1996 *The First Angelinos: The Gabrielino Indians of Los Angeles.* Banning or Novato, California: Malki Museum/Ballena Press Cooperative Publication.

McLaren, Duncan, Daryl Fedje, Quentin Mackie, Loren Davis, Jon Erlandson, Alisha Gauvreau, and Colton Vogelaar

2019 "Late Pleistocene Archaeological Discovery Models on the Pacific Coast of North America". *PaleoAmerica* 6(1): 43–63.

Mithun, Marianne

2001 *The Languages of Native North America.* Reprinted. Cambridge University Press, Cambridge, Massachusetts. Originally published 1999, Cambridge University Press, Cambridge.

Moratto, Michael J.

1984 *California Archaeology*. Academic Press, New York.

National Geologic Map Database

2025 *Geologic map of the Baldwin Park 7.5 quadrangle, Los Angeles County, California* by Tan, S.S., 2000. https:// https://ngmdb.usgs.gov/Prodesc/proddesc_44880.htm. Accessed April 2025.

National Park Service

1983 *Secretary of the Interior's Standards and Guidelines for Professional Qualifications in Archaeology and Historic Preservation*. Washington D.C.: Department of the Interior. Accessed March 2025. https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf.

1997 *National Register Bulletin-How to Apply the National Register Criteria for Evaluation.* Accessed online at https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf. October 2022.

NETR Online

2025 Historic Aerials and Topographic Maps of the surrounding area and project site. Accessed March 2025. https://www.historicaerials.com/viewer.

Perez, Don C.

2010 *Cultural Resources Analysis: CA-LOS4406B North Sunset Avenue & West Rowland Avenue West Covina Los Angeles County, California 91790.* EBI Project No. 61105641. Prepared for Clearwire Corporation, LLC. On file with the SCCIC as Study LA-11501.

Treganza, Adan E. and Agnes Bierman

1958 "The Topanga Culture: Final Report on Excavations, 1948." *University of California Anthropological Records* 20(2): 45–86.

United States Department of Agriculture

2019 Urban Soils pamphlet. https://www.nrcs.usda.gov/sites/default/files/2022-11/Urban-Soils-Fact-Sheet.pdf (Accessed April 2025).

United States Geological Survey (USGS)

2025 *TopoViewer*. Historic topographic maps of the project site and surrounding area. Accessed March 2025. https://ngmdb.usgs.gov/topoview/viewer/#4/40.01/-100.06.

University of California Santa Barbara (UCSB)

1928 Flight C_300, Frame L-95. Fairchild Aerial Surveys. January 1, 1928. Accessed March 2025. https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=C-300.

1968 Flight TG_2400, Frame 1-229. Teledyne Geotronics. March 1, 1968. Accessed March 2025. https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=TG-2400.

1976 Flight TG_7600, Frame 11-14. Teledyne Geotronics. February 1, 1976. Accessed March 2025. https://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=TG-7600.

Villa, Sam

2017 "Tongva People: Introduction." Electronic document. Accessed October 2021. Tongvapeople.org.

Wallace, William J.

1955 "A Suggested Chronology for Southern California Coastal Archaeology." *Southwestern Journal of Anthropology* 11(3): 214–230.

1978 "Post-Pleistocene Archaeology, 9000 to 2000 B.C." *California, Volume 8. Handbook of North American Indians*. Robert F. Heizer, ed. and William C. Sturtevant, general ed. Pp. 25-36. Washington, D.C.: Smithsonian Institution Scholarly Press.

Warren, Claude N.

1968 "Cultural Tradition and Ecological Adaptation on the Southern California Coast." *Archaic Prehistory in the Western United States*. C. Irwin-Williams, ed. Eastern New Mexico University Contributions in *Anthropology* 1(3): 1–14.

Waugh, John C.

2003 *On the Brink of Civil War: The Compromise of 1850 and How it Changed the Course of American History*. Wilmington, DE: Scholarly Resources Inc.

Zappia, Natalie A.

2012 "Indigenous Borderlands: Livestock, Captivity, and Power in the Far West." *Pacific Historical Review* 81(2): 193–220.

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Appendix A

CHRIS Search Results

Resource List

24-17187 1501 Del Norte

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-19-187977		Resource Name - Foxdale Bethany Baptist Church	Building	Historic	HP16		LA-10268

Report List

24-17187 1501 Del Norte

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-02872		1993	Wlodarski, Robert J. and Dan Larson	Department of Transportation Negative Archaeological Survey Report Dpd-ep-25 (revised 2/83) Interstate 10 (i-10) Between Puente Avenue in the City of Baldwin Park on the West, and the Interchange Between I-10 and State Routes 57 (sr 71/interstate 210	Historical, Environmental, Archaeological, Research, Team	
LA-06272		2001	Duke, Curt	Cultural Resource Assessment Cingular Wireless Facility No. Vy 127-01 Los Angeles County, California	LSA Associates, Inc.	
LA-07098		2003	Dice, Michael H.	Records Search Results and Site Visit for Sprint Telecommunications Facility Candidate La59xc009b (car Quest) 1705 Garvey Avenue, West Covina, Los Angeles County, California	Michael Brandman Associates	
LA-10190		2002	Harbert, Claudia	Supplemental Historic Property Survey Report for the I-10 HOV Lane Between I-605 and the SR-57/SR-71/I-210 Interchange in the Cities of Los Angeles, Baldwin Park, West Covina, Covina, San Dimas, and Pomona in Los Angeles County, CA	Caltrans	19-188913, 19-188914, 19-188915, 19-188916, 19-188917, 19-188918, 19-188919, 19-188920, 19-188921, 19-188922, 19-188923, 19-188924, 19-188925, 19-188926, 19-188927, 19-188928, 19-188929, 19-188930, 19-188931, 19-188932, 19-188933, 19-188934, 19-188935, 19-188936, 19-188937, 19-188938, 19-188939, 19-188940, 19-188941, 19-188942, 19-188943, 19-188944, 19-188945, 19-188946, 19-188947, 19-188948, 19-188949, 19-188950, 19-188951, 19-188952, 19-188953, 19-188954, 19-188955, 19-188956, 19-188957, 19-188958, 19-188959, 19-188960, 19-188961, 19-188962, 19-188963, 19-188964, 19-188965, 19-188966, 19-188967, 19-188968, 19-188969, 19-188970, 19-188971, 19-188972, 19-188973, 19-188974, 19-188975, 19-188976, 19-188977, 19-188978, 19-188979, 19-188980, 19-188981, 19-188982
LA-11501		2010	Perez, Don	Cultural Resource Analysis CA-LOS4406B North Sunset Avenue & West Rowland Avenue West Covina Los Angeles County, California 91790	EBI Consulting	

Report List

24-17187 1501 Del Norte

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
LA-12797		2014	Tang, Tom, Terri Jacquemain, and Daniel Ballester	Mitigative Historical Resource Recordation Lang Farm Sheds Assesor's Parcel No. 8454-027-034 Near 243 N. Lang Avenue, City of West Covina Los Angeles County, California	CRM Tech	
LA-12985		2016	O'Neil, Stephen	Negative Phase I Cultural Resources Survey for the Portos Bakery & Café Project, in the City of West Covina, Los Angeles County, CA	UltraSystems	

Appendix B

SLF Results

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

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Luiseño

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COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

ACTING EXECUTIVE SECRETARY
Steven Quinn

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

March 24, 2025

Ashley Losco
Rincon Consultants, Inc.

Via Email to: alosco@rinconconsultants.com

Re: 1501 Del Norte, West Covina Project, Los Angeles County

To Whom It May Concern:

As requested, a record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed based on information submitted for the above referenced project. The results were negative. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. As such, a SLF search is not a substitute for consultation with all tribes that are traditionally and culturally affiliated with a project's geographic area.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. If within two weeks of notification, a response has not been received, the Commission requests that you follow-up with a telephone call or email to ensure that the project information was received.

If you receive notification of a change of address or phone number from a tribe, please notify the NAHC so that we can assure that our lists contain current information.

In addition to engaging in tribal consultation, you should consult the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center to determine whether it has information regarding the presence of recorded archaeological sites within the project area.

If you have any questions or need additional information, please contact me at Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Los Angeles County
3/24/2025

Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Cahuilla Band of Indians	F	BobbyRay Esparza, Cultural Director	52701 CA Highway 371 Anza, CA, 92539	(951) 763-5549		besparza@cahuilla-nsn.gov	Cahuilla	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	6/28/2023
Cahuilla Band of Indians	F	Erica Schenk, Chairperson	52701 CA Highway 371 Anza, CA, 92539	(951) 590-0942	(951) 763-2808	chair@cahuilla-nsn.gov	Cahuilla	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	2/1/2024
Cahuilla Band of Indians	F	Anthony Madrigal, Tribal Historic Preservation Officer	52701 CA Highway 371 Anza, CA, 92539	(951) 763-5549		anthonymad2002@gmail.com	Cahuilla	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	6/28/2023
Gabrieleno Band of Mission Indians - Kizh Nation	N	Christina Swindall Martinez, Secretary	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	8/18/2023
Gabrieleno Band of Mission Indians - Kizh Nation	N	Andrew Salas, Chairperson	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	8/18/2023
Gabrieleno/Tongva San Gabriel Band of Mission Indians	N	Anthony Morales, Chairperson	P.O. Box 693 San Gabriel, CA, 91778	(626) 483-3564	(626) 286-1262	GTTribalcouncil@aol.com	Gabrieleno	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	12/4/2023
Gabrielino Tongva Indians of California Tribal Council	N	Christina Conley, Cultural Resource Administrator	P.O. Box 941078 Simi Valley, CA, 93094	(626) 407-8761		christina.marsden@alumni.usc.edu	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	3/16/2023
Gabrielino Tongva Indians of California Tribal Council	N	Robert Dorame, Chairperson	P.O. Box 490 Bellflower, CA, 90707	(562) 761-6417	(562) 761-6417	gtongva@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	3/16/2023
Gabrielino/Tongva Nation	N	Sandonne Goad, Chairperson	106 1/2 Judge John Aiso St., #231 Los Angeles, CA, 90012	(951) 807-0479		sgoad@gabrielino-tongva.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	3/28/2023
Gabrielino-Tongva Tribe	N	Charles Alvarez, Chairperson	23454 Vanowen Street West Hills, CA, 91307	(310) 403-6048		Chavez1956metro@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	5/30/2023
Gabrielino-Tongva Tribe	N	Sam Dunlap, Cultural Resource Director	P.O. Box 3919 Seal Beach, CA, 90740	(909) 262-9351		tongvatcr@gmail.com	Gabrielino	Los Angeles,Orange,Riverside,San Bernardino,Santa Barbara,Ventura	5/30/2023
Santa Rosa Band of Cahuilla Indians	F	Vanessa Minott, Tribal Administrator	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	vminott@santarosa-nsn.gov	Cahuilla	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	4/8/2024
Santa Rosa Band of Cahuilla Indians	F	Steven Estrada, Tribal Chairman	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	sestrada@santarosa-nsn.gov	Cahuilla	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	4/8/2024

Native American Heritage Commission
Native American Contact List
Los Angeles County
3/24/2025

Soboba Band of Luiseno Indians	F	Joseph Ontiveros, Tribal Historic Preservation Officer	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-5279	(951) 654-4198	jontiveros@soboba-nsn.gov	Cahuilla Luiseno	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	7/14/2023
Soboba Band of Luiseno Indians	F	Jessica Valdez, Cultural Resource Specialist	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-6261	(951) 654-4198	jvaldez@soboba-nsn.gov	Cahuilla Luiseno	Imperial,Los Angeles,Orange,Riverside,San Bernardino,San Diego	7/14/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 1501 Del Norte, West Covina Project, Los Angeles County.

Record: PROJ-2025-001532
Report Type: List of Tribes
Counties: Los Angeles
NAHC Group: All

Appendix C

DPR Forms

***Recorded by:** Ashley Losco, Rincon Consultants, Inc. ***Date**: 3/26/2025 ☐ Continuation ☒ Update

The recorded resource is the Del Norte School at 1501 West Del Norte Street in West Covina, Los Angeles County California. The property, known as the Del Norte Intermediate School, was previously surveyed and evaluated as part of West Covina's Historic Context Statement and Historic Resource Inventory Update completed by GPA Consulting in December 2019 (GPA Consulting 2019). The previous recording was prepared by Amanda Duane of GPA Consulting who documented the building's appearance in 2019 through a physical description and photographs. Ms. Duane recommended the property ineligible for listing in the NRHP, CRHR, and for local listing under City of West Covina criteria (Duane 2019).

Physical Description – Del Norte School
As described in the 2019 assessment prepared by GPA Consulting and confirmed by Rincon in March 2025, 1501 West Del Norte Street, also known as the Del Norte School, is a former middle school with nine buildings sited along West Del Norte Street, a paved parking lot, paved drop off loop, and a large recreational field at the rear (Figure 1). The property was constructed in 1953 and expresses characteristics of the Mid-Century Modern style and post-World War II school plant designs.

The one-story buildings are constructed of wood framing clad in brick and either express a shed roof with an overhanging eave on the primary elevations or low-pitched side-gabled roofs (Figure 2). One of the buildings has a domed roof with overhanging eaves creating a covered entrance on each elevation. Adjacent to this building is a former furnace and smokestack, all constructed of brick (Figure 3). The classroom buildings are divided into four classrooms each with a flush metal door at the entrance and five large, rolled steel frame fixed pane windows, four by six panes each. Some of the windows are blacked out, some replaced with vinyl units, and some of the former transoms are now boarded above each entrance.

In between the buildings are covered walkways constructed of corrugated metal roofs supported by metal framing and paved courtyards for picnic tables or play areas (Figure 4). There are mature trees throughout the property which provide shade over wood benches and courtyards. The rear recreational field has two former baseball diamonds, basketball courts, and cracked foundations from former play areas (Figure 5).

Figure 1 Del Norte School Primary (South) Elevation, View Northeast

Figure 2 Del Norte School Buildings Clad in Brick with Flat or Gabled Roofs, View North

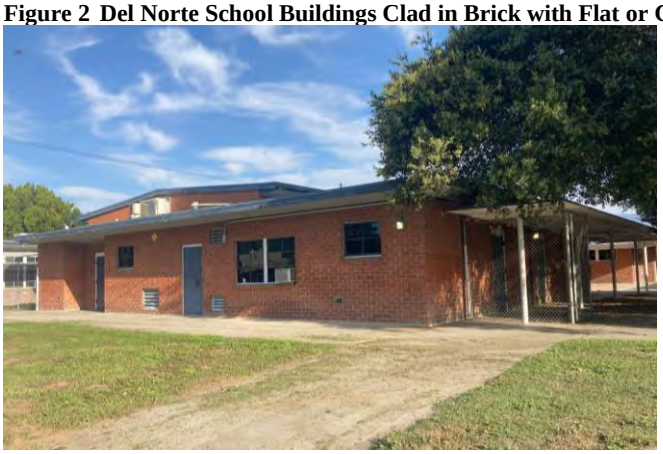

Figure 3 Del Norte School Domed Roof Building and Furnace, View Southeast

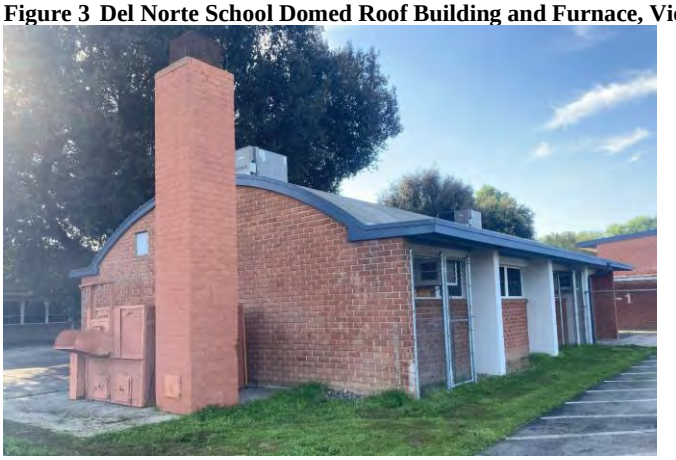

Figure 4 Del Norte School Covered Walkway and Classrooms, View North

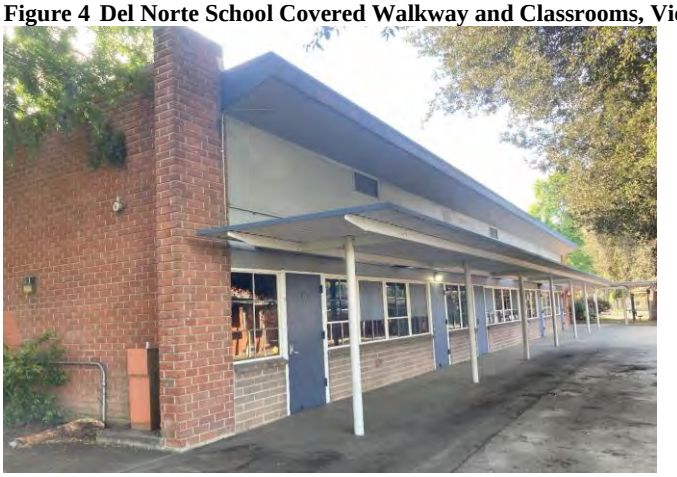

Figure 5 Del Norte School Recreational Field, View North

***Recorded by:** Ashley Losco, Rincon Consultants, Inc. ***Date**: 3/26/2025 ☐ Continuation ☒ Update

***B10. Significance:**

Property History –Del Norte School

The subject property was constructed in 1953 as a middle school campus during the post-World War II era population boom in West Covina. The campus was designed by Flewelling & Moody, who were hired by the City of West Covina school district to complete plans for several schools in the city. The campus was designed with characteristics of the Mid-Century Modern style and is an example of post-World War II school design and construction (GPA Consulting 2019). Their "school plant" design was featured at the annual convention of the California Association of School Administrators and "incorporated a number of new features, including space saving economy in construction and new concepts of earthquake resistance for schools, controlled lighting with even distribution of light in the classrooms obtained by roof skylights and a luminous plastic ceiling which will diffuse light evenly throughout the classroom area" (GPA Consulting 2019). Del Norte Intermediate School closed in 1989, and the East San Gabriel Valley Regional Occupation Program (ROP) Technical Center occupied the space until circa 2019. The existing buildings and structures are currently vacant.

Historical Resources Evaluation

As previously described, Del Norte School was most recently evaluated as part of the City of West Covina's Historic Context Statement and Historic Resource Inventory Update in 2019. The intensive-level survey evaluation by GPA Consulting found the property ineligible for listing in the NRHP, CRHR, and for local listing due to the lack of architectural and historical significance. Rincon surveyed the property in March 2025 and noted no visible alterations to the Mid-Century style school campus since 2019 that would suggest the property is now eligible for national, state, or local listing. In concurrence with the 2019 evaluation, this study recommends that the property is ineligible for listing in the NRHP, CRHR, and for local listing due to lack of historical or architectural significance.

***B12. References:**

Duane, Amanda
2019 DPR Form for the Del Norte School. Prepared as part of "City of West Covina Historic Context Statement, 1945-1978 & Historic Resource Inventory Update." GPA Consulting. Accessed March 2025 https://www.westcovina.org/home/showpublisheddocument/17765/637121055490270000/.

GPA Consulting
2019 *City Of West Covina Historic Context Statement, 1945-1978 & Historic Resource Inventory Update*. Prepared for the City of West Covina. Accessed March 2025. https://www.westcovina.org/home/showpublisheddocument/17755/637121051571830000.

Appendix H

Noise Impact Analysis

NOISE IMPACT ANALYSIS

1501 DEL NORTE STREET RESIDENTIAL PROJECT

CITY OF WEST COVINA

Lead Agency:

City of West Covina
1444 West Garvey Avenue South
West Covina, CA 91790

Prepared by:

Vista Environmental
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Laguna Beach, CA 92651
949 510 5355
Greg Tonkovich, INCE

Project No. 24042

October 1, 2025

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ACRONYMS AND ABBREVIATIONS

ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
City	City of West Covina
cmu	concrete masonry unit
CNEL	Community Noise Equivalent Level
dB	Decibel
dBA	A-weighted decibels
DOT	Department of Transportation
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
EPA	Environmental Protection Agency
Hz	Hertz
Ldn	Day-night average noise level
Leq	Equivalent sound level
Lmax	Maximum noise level
OSB	oriented strand board
OSHA	Occupational Safety and Health Administration
PPV	Peak particle velocity
RMS	Root mean square
SEL	Single Event Level or Sound Exposure Level
STC	Sound Transmission Class
VdB	Vibration velocity level in decibels

1.0 INTRODUCTION

1.1 Purpose of Analysis and Study Objectives

This Noise Impact Analysis has been prepared to determine the potential noise impacts associated with the proposed 1501 Del Norte Street Residential project (proposed project). The following is provided in this report:

- A description of the study area and the proposed project;
- Information regarding the fundamentals of noise;
- Information regarding the fundamentals of vibration;
- A description of the local noise guidelines and standards;
- An evaluation of the current noise environment;
- An analysis of the potential short-term construction-related noise and vibration impacts from the proposed project; and
- An analysis of long-term operations-related noise and vibration impacts from the proposed project.

1.2 Site Location and Study Area

The project site is located at 1501 Del Norte Street in the northwestern portion of the City of West Covina (City). The 13.56-acre project site was previously utilized for the Del Norte Intermediate School Site, which closed in 1989 and was then utilized for the East San Gabriel Valley Regional Occupational Program and Technical Center. This facility has since relocated and the existing structures on the project site are currently vacant. The project site is bounded by Del Norte Park to the north and east (north portion), single-family homes and Sunset Avenue to the east (south portion), Del Norte Street and single-family homes to the south, and Nora Avenue and single-family homes to the west side of the project site. The project study area is shown in Figure 1.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptors to the project site are the single-family homes located as near as eight (8) feet south of the southeastern portion of the project site and mixed-use office professional (zoned OPMU) structures as near as four (4) feet north of the southeastern portion of the project site. There are also single-family homes located on the west side of Nora Avenue, which are as near as 90 feet west of the project site. In addition, Del Norte Park is adjacent to the north and east sides of the project site, where the nearest picnic table area (passive recreation area) is located as near as 150 feet north of the project site. The nearest school is Monte Vista Elementary School that is located as near as 1,200 feet northwest of the project site.

1.3 Proposed Project Description

The proposed project would consist of demolition of the existing school structures and parking areas and construction of a residential community with 282 homes that consist of 34 single-family detached homes, 138 3-story townhomes, and 110 4-story stacked flats. The proposed residential community would include a community space area with a pool, BBQ area and shade structures near the center of the development,

an onsite road system and approximately 120,891 square feet of paseos and common areas that would be landscaped. The proposed site plan is shown in Figure 2 and the proposed wall plan is shown in Figure 3.

1.4 Executive Summary

Standard Noise Regulatory Conditions

The proposed project will be required to comply with the following regulatory conditions from the City and State of California (State).

City of West Covina Noise Regulations

The following lists the noise and vibration regulations from the *Code of Ordinances Supplement 93 Municipal Code,* February 27, 2024..

- Section 15-85 – Operational Noise Limits; and
- Section 15-95(a) – Construction Noise Limits.

State of California Noise Regulations

The following lists the State of California noise regulations that are applicable, but not limited to the proposed project.

- California Vehicle Code Section 27200-27207 – On Road Vehicle Noise Limits
- California Vehicle Code Section 38365-38350 – Off-Road Vehicle Noise Limits

Summary of Analysis Results

The following is a summary of the proposed project's impacts with regard to the State CEQA Guidelines noise checklist questions.

Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially significant impact. Implementation of Mitigation Measures 1 and 2 would reduce this impact to less than significant levels.

Generation of excessive groundborne vibration or groundborne noise levels?

Potentially significant impact. Implementation of Mitigation Measure 2 would reduce this impact to less than significant levels.

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less than significant impact.

1.5 Mitigation Measures for the Proposed Project

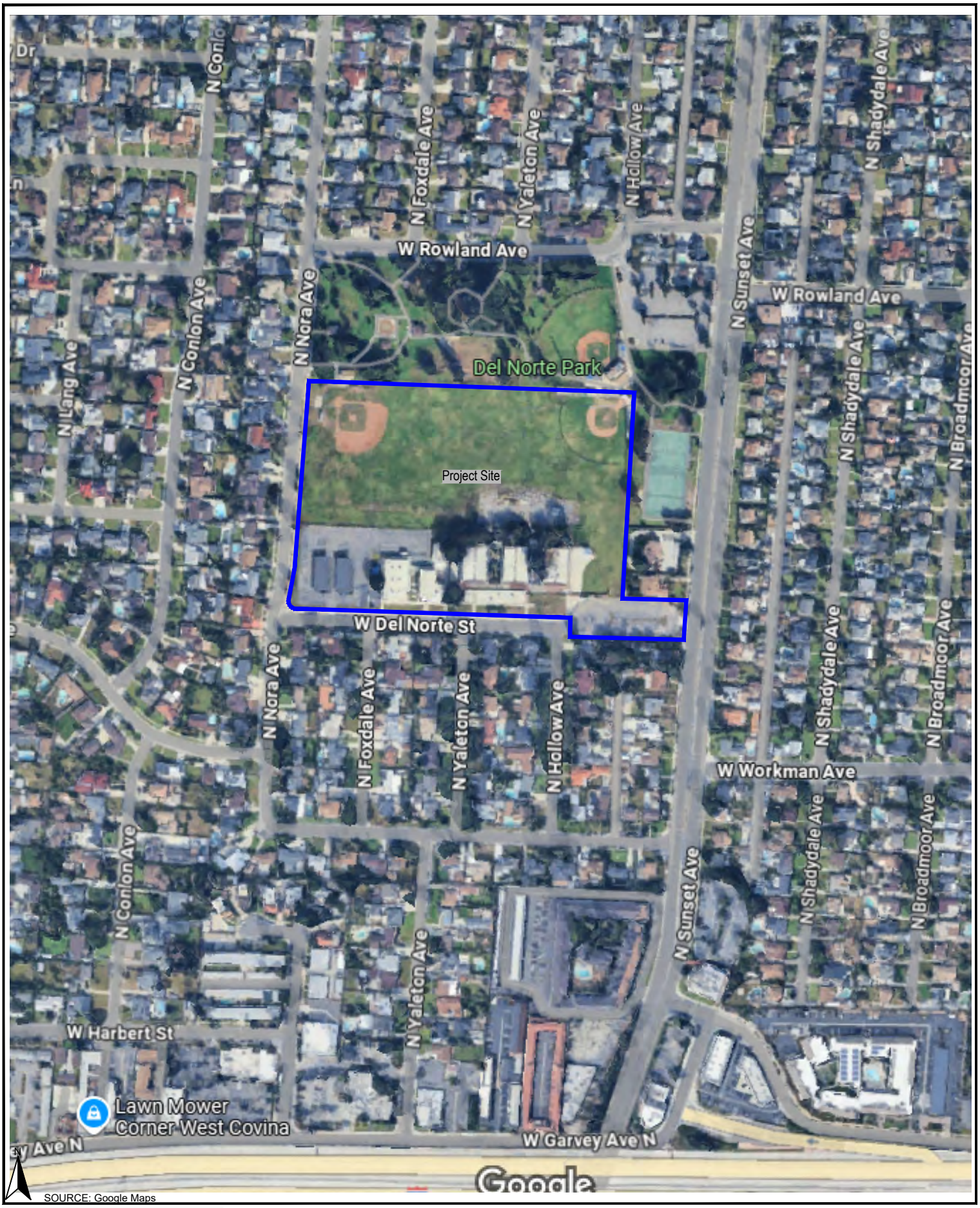
This analysis found that through adherence to the noise and vibration regulations detailed in Section 1.4 above and through implementation of the following mitigation all noise and vibration impacts would be reduced to less than significant levels.

Mitigation Measure 1:

The project applicant shall require the installation of a minimum 12-foot high temporary noise barrier on the portion of the east side of the project site that is adjacent to the homes as well as the entire south side of the project site. The project applicant shall also require the installation of minimum 8-foot high temporary noise barriers around all stationary equipment and concrete saws that are operated within 30 feet of the homes located on the east and south sides of the project site. The temporary noise barriers shall be constructed with either minimum 5/8" thick plywood or oriented strand board (OSB) or sound blankets that have a minimum Sound transmission class (STC) rating of 15 STC.

Mitigation Measure 2:

The project applicant shall require that all construction contractors restrict the operation of any large bulldozers that is powered by a greater than 150 horsepower engine from operating within 20 feet of any off-site structure. The grading contractor shall use a small bulldozer (i.e., D1, D2, or D3 dozers) or other type of equipment that is less than 150 horsepower to perform all demolition and grading activities that are located within 20 feet of any off-site structure.



SOURCE: Google Maps

VISTA ENVIRONMENTAL

Figure 1
Project Location Map

SOURCE: Meritage Homes.

VISTA ENVIRONMENTAL

Figure 2
Proposed Site Plan

SOURCE: Meritage Homes.

VISTA ENVIRONMENTAL

Figure 3
Proposed Wall Plan

2.0 NOISE FUNDAMENTALS

Noise is defined as unwanted sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit which expresses the ratio of the sound pressure level being measured to a standard reference level. A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear.

2.1 Noise Descriptors

Noise Equivalent sound levels are not measured directly, but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The worst-hour traffic Leq is the noise metric used by California Department of Transportation (Caltrans) for all traffic noise impact analyses.

The Day-Night Average Level (Ldn) is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of ten decibels to sound levels at night between 10 p.m. and 7 a.m. While the Community Noise Equivalent Level (CNEL) is similar to the Ldn, except that it has another addition of 4.77 decibels to sound levels during the evening hours between 7 p.m. and 10 p.m. These additions are made to the sound levels at these time periods because during the evening and nighttime hours, when compared to daytime hours, there is a decrease in the ambient noise levels, which creates an increased sensitivity to sounds. For this reason the sound appears louder in the evening and nighttime hours and is weighted accordingly. The City of West Covina relies on the CNEL noise standard to assess transportation-related impacts on noise sensitive land uses.

2.2 Tone Noise

A pure tone noise is a noise produced at a single frequency and laboratory tests have shown that humans are more perceptible to changes in noise levels of a pure tone. For a noise source to contain a “pure tone,” there must be a significantly higher A-weighted sound energy in a given frequency band than in the neighboring bands, thereby causing the noise source to “stand out” against other noise sources. A pure tone occurs if the sound pressure level in the one-third octave band with the tone exceeds the average of the sound pressure levels of the two contiguous one-third octave bands by:

- 5 dB for center frequencies of 500 hertz (Hz) and above
- 8 dB for center frequencies between 160 and 400 Hz
- 15 dB for center frequencies of 125 Hz or less

2.3 Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in level of noise as the distance from the source increases. The manner in which the noise level reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features.

Sound from point sources, such as air conditioning condensers, radiate uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD) between source and receiver. Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA/DD.

2.4 Ground Absorption

The sound drop-off rate is highly dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models, soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA/DD is typically observed over soft ground with landscaping, as compared with a 6.0 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. For line sources a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3.0 dBA/DD drop-off rate for hard-site conditions. Caltrans research has shown that the use of soft-site conditions is more appropriate for the application of the Federal Highway Administration (FHWA) traffic noise prediction model used in this analysis.

3.0 GROUND-BORNE VIBRATION FUNDAMENTALS

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

3.1 Vibration Descriptors

There are several different methods that are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Due to the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels and is denoted as (L_v) and is based on the rms velocity amplitude. A commonly used abbreviation is "VdB", which in this text, is when L_v is based on the reference quantity of 1 micro inch per second.

3.2 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration.

3.3 Vibration Propagation

The propagation of ground-borne vibration is not as simple to model as airborne noise. This is due to the fact that noise in the air travels through a relatively uniform medium, while ground-borne vibrations travel through the earth which may contain significant geological differences. There are three main types of vibration propagation; surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or "side-to-side and perpendicular to the direction of propagation."

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

4.0 REGULATORY SETTING

The project site is located in the City of West Covina. Noise regulations are addressed by various federal, state, and local government agencies. The agencies responsible for regulating noise are discussed below.

4.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce
- Assisting state and local abatement efforts
- Promoting noise education and research

The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency prohibits exposure of workers to excessive sound levels. The Department of Transportation (DOT) assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration (FAA) regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA), which regulates transit noise, while freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being sited adjacent to a highway or, alternately that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Although the proposed project is not under the jurisdiction of the FTA, the *Transit Noise and Vibration Impact Assessment Manual* (FTA Manual), prepared by the FTA, September 2018, is a guidance document from a government agency that has defined what constitutes a significant noise impact from implementing a project. The FTA standards are based on extensive studies by the FTA and other governmental agencies on the human effects and reaction to noise and a summary of the FTA findings are provided below in Table A.

Table A – FTA Project Effects on Cumulative Noise Exposure

Existing Noise Exposure (dBA Leq or Ldn)	Allowable Noise Impact Exposure dBA Leq or Ldn		
	Project Only	Combined	Noise Exposure Increase
45	51	52	+7
50	53	55	+5
55	55	58	+3
60	57	62	+2
65	60	66	+1
70	64	71	+1
75	65	75	0

Source: Federal Transit Administration, 2018.

The FTA also provides guidance on construction noise and recommends developing construction noise criteria on a project-specific basis that utilizes local noise ordinances if possible. However, local noise ordinances, including the City of San Dimas Municipal Code, only limit the time of day when construction activities may occur and for the times when construction activities are allowed, no construction noise level limits are provided. The FTA construction noise criteria has been utilized in this analysis to determine if the project would create a significant substantial temporary noise increase to the nearby sensitive receptors, which is a CEQA requirement. The FTA standards are based on extensive studies by the FTA and other governmental agencies on the human effects and reaction to noise and a summary of the FTA findings for a general construction noise assessment are provided below in Table B.

Table B – FTA Construction Noise Criteria

Land Use	Day (dBA Leq(8-hour))	Night (dBA Leq(8-hour))	30-day Average (dBA Ldn)
Residential	80	70	75
Commercial	85	85	80*
Industrial	90	90	85*

Notes:
* 24-hour Leq not Ldn.
Source: Federal Transit Administration, 2018.

The FTA also provides guidance on analyzing vibration impacts that details how vibration should be assessed on the anticipated frequency of events, where frequent events consist of more than 70 events per day, occasional events consist of 30 to 70 events per day, and infrequent events consist of fewer than 30 events per day. The FTA standards also vary based on the receiving land use type, with institutions that have vibration-sensitive equipment the most sensitive and residential buildings where people normally sleep the second most sensitive land use. Places where people normally stand, such as parks are not consider vibration sensitive land uses. The FTA general assessment vibration impact criteria for assessing human annoyance for frequent events at buildings where people normally sleep is 72 VdB, which is based on the daily average vibration level.

4.2 State Regulations

Noise Standards

California Department of Health Services Office of Noise Control

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix," which allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise. The City of West Covina Land Use/Noise Compatibility Matrix is shown below in Figure 4.

California Noise Insulation Standards

Title 24, Chapter 1, Article 4 of the California Administrative Code (California Noise Insulation Standards) requires noise insulation in new hotels, motels, apartment houses, and dwellings (other than single-family detached housing) that provides an annual average noise level of no more than 45 dBA CNEL. When such structures are located within a 60-dBA CNEL (or greater) noise contour, an acoustical analysis is required

Table 6.4. City of West Covina Land Use/Noise Compatibility Matrix

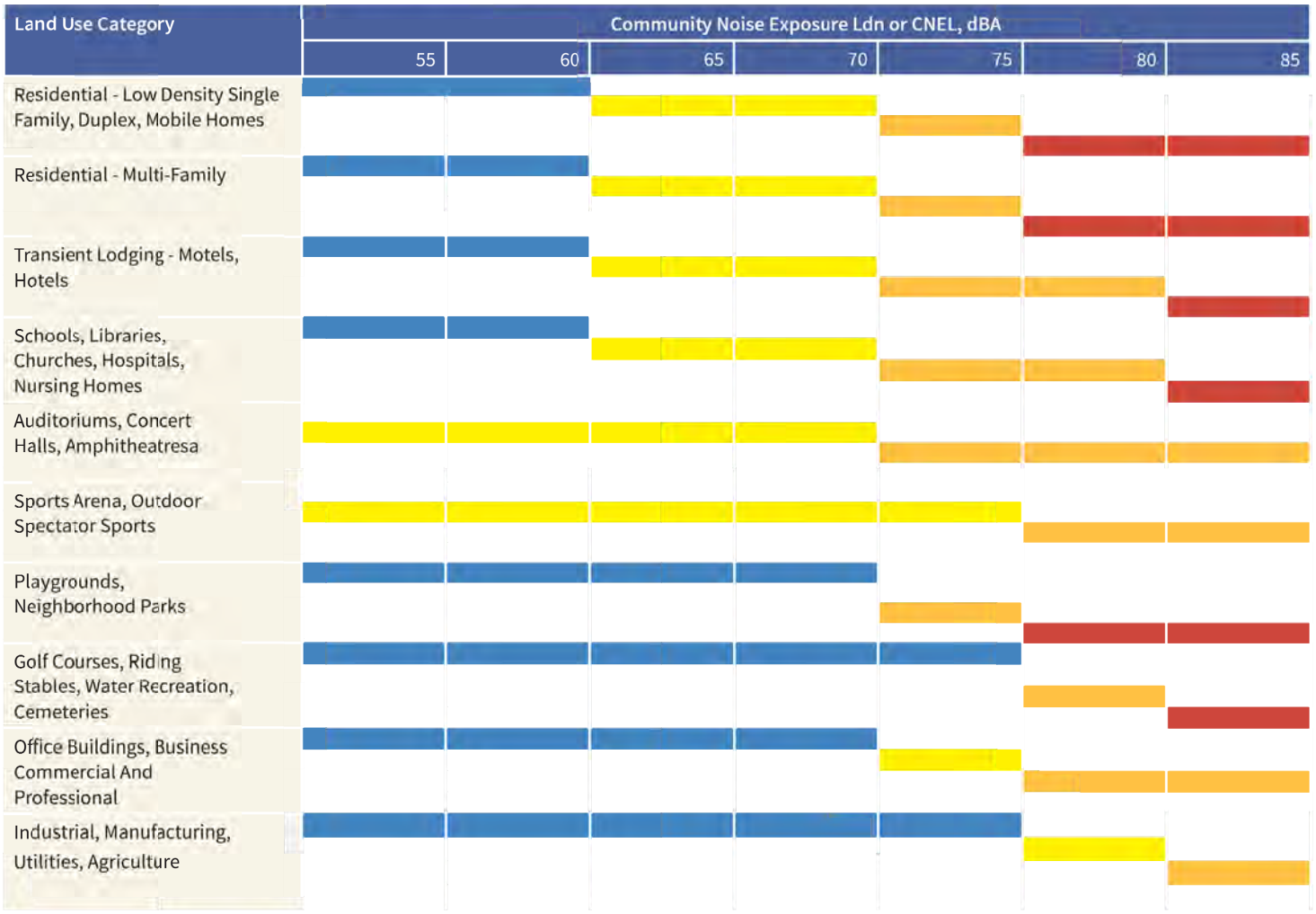


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Figure 4
City of West Covina Land Use/Noise Compatibility Matrix

to ensure that interior levels do not exceed the 45-dBA CNEL annual threshold. In addition, Title 21, Chapter 6, Article 1 of the California Administrative Code requires that all habitable rooms, hospitals, convalescent homes, and places of worship shall have an interior CNEL of 45 dB or less due to aircraft noise.

Government Code Section 65302

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

California Vehicle Code Section 27200-27207 – On-Road Vehicle Noise

California Vehicle Code Section 27200-27207 provides noise limits for vehicles operated in California. For vehicles over 10,000 pounds noise is limited to 88 dB for vehicles manufactured before 1973, 86 dB for vehicles manufactured before 1975, 83 dB for vehicles manufactured before 1988, and 80 dB for vehicles manufactured after 1987. All measurements are based at 50 feet from the vehicle.

California Vehicle Section 38365-38380 – Off-Road Vehicle Noise

California Vehicle Code Section 38365-38380 provides noise limits for off-highway motor vehicles operated in California. 92 dBA for vehicles manufactured before 1973, 88 dBA for vehicles manufactured before 1975, 86 dBA for vehicles manufactured before 1986, and 82 dBA for vehicles manufactured after December 31, 1985. All measurements are based at 50 feet from the vehicle.

Vibration Standards

Title 14 of the California Administrative Code Section 15000 requires that all state and local agencies implement the California Environmental Quality Act (CEQA) Guidelines, which requires the analysis of exposure of persons to excessive groundborne vibration. However, no statute has been adopted by the state that quantifies the level at which excessive groundborne vibration occurs.

The *Transportation and Construction Vibration Guidance Manual*, prepared by Caltrans, April 2020, provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. However, this manual is also used as a reference point by many lead agencies and CEQA practitioners throughout California, as it provides numeric thresholds for vibration impacts. Thresholds are provided for both transient (mobile equipment) and continuous (pile driving) sources of vibration. The Guidance Manual provides thresholds for building damage, where continuous or frequent vibration sources may start to create damage to older residential buildings at 0.3 inch per second PPV.

4.3 Local Regulations

The City of West Covina General Plan and Municipal Code establishes the following applicable policies related to noise and vibration.

City of West Covina General Plan

The following applicable policies and actions to the proposed project are from the Noise Element of the General Plan.

Policy P6.23

Ensure that new development is not exposed to excessive noise.

Actions

A 6.23a Require new developments to reduce exterior noise levels for any usable outdoor area to the "normally acceptable" range in the City's land use/noise compatibility matrix shown in Table 6.4 (see Figure 4, above) of the Noise Element.

A 6.23c Require any residential component of all new buildings to comply with the requirements of the residential noise insulation standards of the most recent edition of the California Building code.

Policy P6.24

Ensure that new development does not expose surrounding land uses to excessive noise.

Actions

A 6.24 Through the environmental review process, require applicants for new development proposals to analyze potential noise impacts on nearby noise-sensitive receivers before project approval. As feasible, require appropriate noise mitigation to address any identified significant noise impacts.

Policy P6.25

Minimize noise conflicts between local noise generators and sensitive receivers.

Actions

A 6.25a Continue to enforce the City's existing Noise Ordinance.

City of West Covina Municipal Code

The City of West Covina Municipal Code establishes the following applicable standards related to noise.

Section 15-85 Loud, Unnecessary Noises Prohibited Generally

Notwithstanding any other provision of this article, it shall be unlawful for any person within any residential zone of the city to willfully make or continue or cause to be made or continued, any loud, unnecessary or unusual noise which unreasonably disturbs the peace and quiet of any residential neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. If the noise which is being created is plainly audible at a distance of fifty (50) feet from the property line of any property (or if a condominium or apartment house, within any adjoining unit or apartment), building, structure or vehicle in which it is located, it shall be presumed that the noise being created is in violation of the provisions of this section.

Section 15-95 Construction and building projects

(a) *Regulation.* Between the hours of 8:00 p.m. of one day and 7:00 a.m. of the next day, it shall be unlawful for any person within a residential zone, or within a radius of five hundred (500) feet therefrom, to operate equipment or perform any outside construction or repair work on

buildings, structures, or projects or to operate any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist, or other construction type device in such manner as to create any noise which causes the noise level at the property line to exceed the ambient noise level by more than five (5) decibels unless a permit therefor has been duly obtained in accordance with paragraph (b) of this section. No permit shall be required to perform emergency work as defined in section 15-83 of this article.

(b) *Permit procedure.* A permit may be issued authorizing noises prohibited by this section whenever it is found that the public interest will be served thereby. Applications for permits shall be in writing, shall be accompanied by an application fee in the amount of five dollars ($5.00), and shall set forth in detail facts showing that the public interest will be served by the issuance of such permit. Applications shall be made to the building director; provided, however, that, with respect to work upon or involving the use of a public street, alley, building, or other public place under the jurisdiction of the engineering department, applications shall be made to the city engineer. Anyone dissatisfied with the denial of a permit may appeal to the council.

(c) *Unloading and Loading.* Between the hours of 8:00 p.m. of one day and 6:00 a.m. of the next day, it shall be unlawful for any person within the radius of five hundred (500) feet of generally occupied residences to unload, load or otherwise perform duties preparatory to the commencement of construction or repair work on buildings and structures. Generally occupied residences shall include, but not limited to, areas which there is a reasonable probability of occupancy in the area.

5.0 EXISTING NOISE CONDITIONS

To determine the existing noise levels, noise measurements have been taken in the vicinity of the project site. The field survey noted that noise within the proposed project area is generally characterized by vehicle traffic on Sunset Avenue that is adjacent to the east side of the project site and from Interstate 10 that is located as near as 1,400 feet south of the project site. Noise is also created from activities at Del Norte Park that is adjacent to the north side of the project site. The following describes the measurement procedures, measurement locations, noise measurement results, and the modeling of the existing noise environment.

5.1 Noise Measurement Equipment

The noise measurements were taken using a Larson-Davis Model 831 Type 1 precision sound level meter programmed in "slow" mode to record noise levels in "A" weighted form as well as the frequency spectrum of the noise broken down into 1/3 octaves. The sound level meter and microphone were mounted on a tripod five feet above the ground and were equipped with a windscreen during all measurements. The sound level meter was calibrated before and after the monitoring using a Larson-Davis calibrator, Model CAL 200. The accuracy of the calibrator is maintained through a program established through the manufacturer and is traceable to the National Bureau of Standards. The noise level measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (ANSI S1.4-2014 standard).

Noise Measurement Locations

The noise monitoring locations were selected in order to obtain noise levels in the vicinity of the project site. Descriptions of the noise monitoring sites are provided below in Table C and are shown in Figure 5. Appendix A includes a photo index of the study area and noise level measurement locations.

Noise Measurement Timing and Climate

The noise measurements on the south side of the project site that captured primarily traffic noise were taken on a weekday and were recorded between 12:28 p.m. and 12:53 p.m. on Wednesday, May 29, 2024. During the noise measurements, the sky was hazy, the temperature was 72 degrees Fahrenheit, the humidity was 58 percent, barometric pressure was 29.54 inches of mercury, and the wind was blowing at an average rate of five miles per hour.

The noise measurements taken north of the project site at Del Norte Park that captured noise from activities at the Park were taken on a Saturday and were recorded between 1:04 p.m. and 1:23 p.m. on Saturday, November 16, 2024. During the noise measurements, the sky was clear (no clouds), the temperature was 64 degrees Fahrenheit, the humidity was 45 percent, barometric pressure was 29.43 inches of mercury, and the wind was blowing at an average rate of four miles per hour.

5.2 Noise Measurement Results

The results of the noise level measurements are presented in Table C and the noise monitoring data printouts are included in Appendix B.

Table C – Existing (Ambient) Noise Measurement Results

Site No.	Description	Primary Noise Source	Start Time of Measurement	Measured Noise Level	
				dBA Leq	dBA Lmax
Noise Measurements taken on Wednesday, May 29, 2024					
1	Located near the southwest corner of the project site, approximately 25 feet north of Del Norte Street centerline and 60 feet east of Nora Avenue centerline.	Vehicles on Nora Avenue and Del Norte Street	12:28 p.m.	55.0	70.1
2	Located near lower northeast corner of the project site, approximately 65 feet west of Sunset Avenue centerline.	Vehicles on Sunset Avenue	12:43 p.m.	60.3	68.3
Noise Measurements taken on Saturday, November 16, 2024.					
3	Located on the north property line, approximately 50 feet south of the Little League Field	People in Stands and on Little League Field	1:04 p.m.	55.0	66.1
4	Located a couple feet north of the north property line in the small dog portion of the Central Bark Dog Park	Dogs in the Dog Park	1:23 p.m.	62.4	78.7

Notes: Noise measurements taken with a Larson-Davis Model 831 Type 1 precision sound level meter.

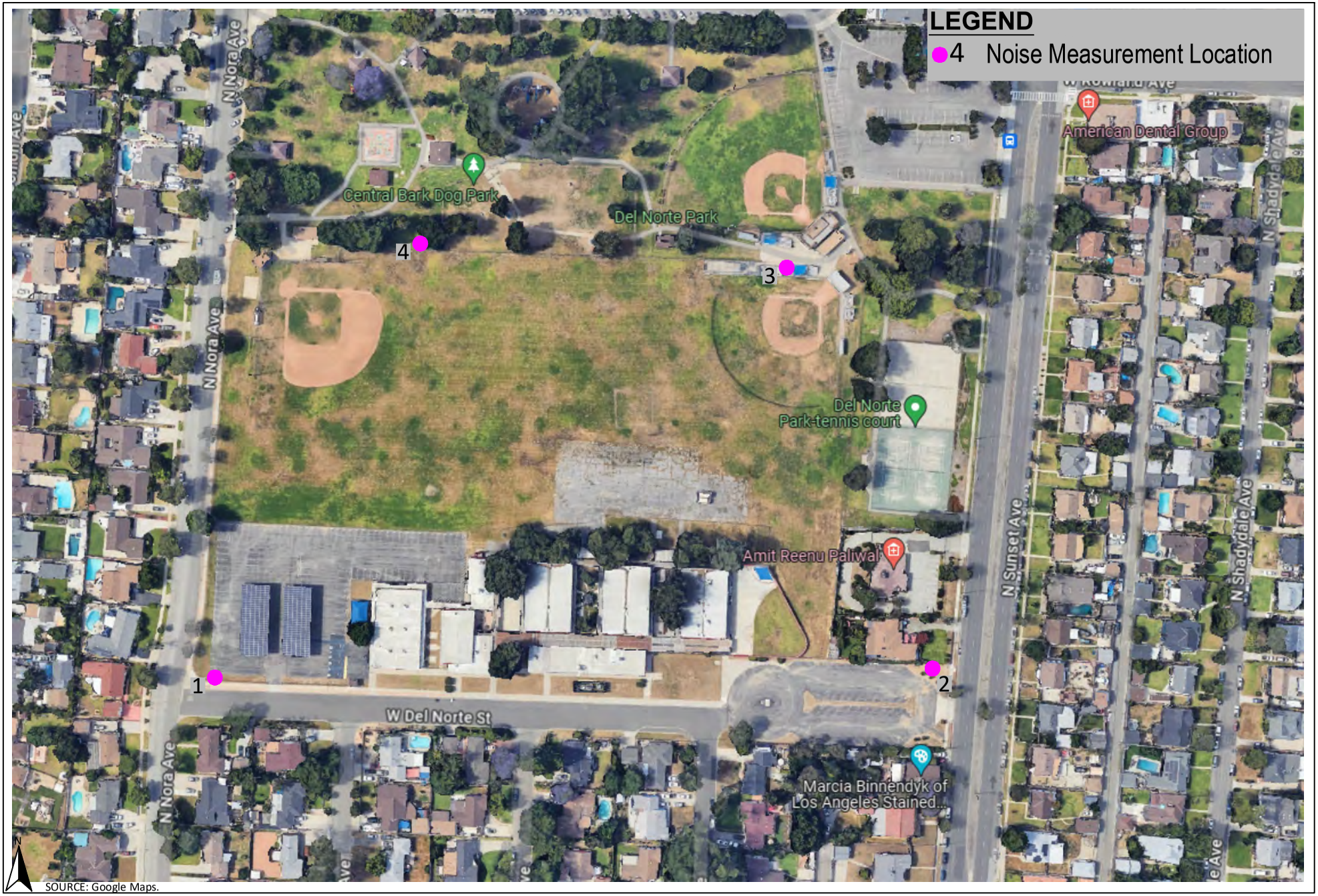
5.3 Project Site Noise Compatibility

General Plan Policy P6.23 Action A 6.23a requires new residential development to reduce exterior noise levels for any usable outdoor area to the "normally acceptable" range in the City's land use/noise compatibility matrix (see Figure 4, above). Figure 4, above shows that the "normally acceptable" range for new residential development is 60 dBA CNEL or below.

As shown in Table C, the noise levels in the proximity of the project site range between 55.0 and 62.4 dBA Leq. The two locations, where the measured noise level captured a noise level in excess of 60 dBA were located at the eastern edge of the project site, adjacent to Sunset Avenue and on the north side of the project site, adjacent to the Dog Park. As shown above in Figure 3 – Wall Plan, the proposed project would construct a 6-foot high wall along the eastern edge of the project site and a 6-foot high fence on the portions of the northern edge of the project site that are adjacent to private outdoor areas.

Caltrans research has found that sound walls provide 5 dB of noise shielding when the wall reaches the height of line of sight between source and receiver (approximately 5 feet high) and then an additional 0.9 dBA of noise shielding for each foot above the line of sight[1]. As such, the proposed 6-foot high walls would provide approximately 5.9 dBA of noise reduction, which would reduce the worst-case measured noise level of 62.4 dBA on the project site to 56.5 dBA, which is within the City's "normally acceptable" range for new residential development. Therefore, with construction of the walls shown above Figure 3, the proposed project would be compliant with General Plan Policy P6.23 Action A 6.23a.

1 Obtained from: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf



SOURCE: Google Maps.

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Figure 5
Field Noise Measurement Locations

6.0 MODELING PARAMETERS AND ASSUMPTIONS

6.1 Construction Noise

The noise impacts from construction of the proposed project have been analyzed through use of the FHWA's Roadway Construction Noise Model (RCNM). The FHWA compiled noise measurement data regarding the noise generating characteristics of several different types of construction equipment used during the Central Artery/Tunnel project in Boston. Table D below provides a list of the construction equipment anticipated to be used for each phase of construction that was obtained from the *1501 Del Norte Street Residential Air Quality Analysis* (Air Quality Analysis), prepared by Urban Crossroads, May, 2025.

Table D – Construction Equipment Noise Emissions and Usage Factors

Equipment Description	Number of Equipment	Acoustical Use Factor[1] (percent)	Spec 721.560 Lmax at 50 feet[2] (dBA, slow[3])	Actual Measured Lmax at 50 feet[4] (dBA, slow[3])
Demolition				
Concrete/Industrial Saw	1	20	90	90
Excavators	2	40	85	81
Rubber Tired Dozers	1	40	85	82
Site Preparation				
Tractor	1	40	84	N/A
Grading				
Grader	1	40	85	83
Rubber Tired Dozer	1	40	85	82
Scrapers	2	40	85	84
Tractor	1	40	84	N/A
Building Construction				
Forklift (Gradall)	1	40	85	83
Generator	1	50	82	81
Front End Loader	1	40	80	79
Tractor	1	40	84	N/A
Paving				
Paver	1	50	85	77
Paving Equipment	1	50	85	77
Rollers	2	20	85	80
Architectural Coating				
Air Compressor	2	40	80	78

Notes:
[1] Acoustical use factor is the percentage of time each piece of equipment is operational during a typical workday.
[2] Spec 721.560 is the equipment noise level utilized by the RCNM program.
[3] The "slow" response averages sound levels over 1-second increments. A "fast" response averages sound levels over 0.125-second increments.
[4] Actual Measured is the average noise level measured of each piece of equipment during the Central Artery/Tunnel project in Boston, Massachusetts primarily during the 1990s.
Source: Federal Highway Administration, 2006.

Table D shows the associated measured noise emissions for each piece of equipment from the RCNM model and measured percentage of typical equipment use per day. Construction noise impacts to the

nearby sensitive receptors have been calculated according to the equipment noise levels and usage factors listed in Table D and through use of the RCNM. For each phase of construction, the nearest piece of equipment was placed at the shortest distance of the proposed activity to the nearest home to the west and each subsequent piece of equipment was placed an additional 50 feet away, since it is unlikely that two pieces of equipment would operate closer than 50 feet apart. The RCNM printouts are provided in Appendix C for the unmitigated conditions and Appendix D for the mitigated conditions.

6.2 Operations-Related Noise

Operation of the proposed project would generate additional vehicle trips on the nearby roads as well as create noise onsite, which have been modeled separately and are described below.

FHWA Model Methodology

The proposed project would result in increases in traffic noise to the nearby roadways as well as introduce new sensitive receptors to the project site. The project impacts to the offsite roadways were analyzed through use of the FHWA Traffic Noise Prediction Model - FHWA-RD-77-108 (FHWA Model) as detailed in the *Technical Noise Supplement to the Traffic Noise Analysis Protocol,* prepared by Caltrans, September 2013. The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Adjustments are then made to the reference energy mean emission level to account for:

- The roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway);
- The total average daily traffic (ADT) and the percentage of ADT which flows during the day, evening and night, the travel speed, the vehicle mix on the roadway, which is a percentage of the volume of automobiles, medium trucks and heavy trucks, the roadway grade, the angle of view of the observer exposed to the roadway; and
- Site conditions ("hard" or "soft" relates to the absorption of the ground, pavement or landscaping).

The following section provides a discussion of the software and modeling input parameters used in this analysis and a discussion of the resultant existing noise model.

<u>FHWA Model Traffic Noise Prediction Model Inputs</u>

The roadway parameters used for this study are presented in Table E. The roadway classifications are based on the City's General Plan Circulation Element. The roadway speeds are based on the posted speed limits. The distance to the nearest sensitive receptor was determined by measuring the distance from the roadway centerline to the nearest residence. Since the study area is located in a suburban environment and landscaping or natural vegetation exists along the sides of the analyzed roads, soft site conditions were modeled.

Table E – FHWA Model Roadway Parameters

Roadway	Segment	General Plan Classification	Vehicle Speed (MPH)	Distance to Nearest Receptor[1] (feet)
Nora Avenue	North of Driveway 1	Local	25	55
Nora Avenue	North of Del Norte Street	Local	25	55
Nora Avenue	South of Del Norte Street	Local	25	55
Yaleton Avenue	South of Del Norte Street	Local	25	50
Sunset Avenue	North of Workman Avenue	Commercial Thoroughfare	40	60
Del Norte Street	West of Yaleton	Local	25	35
Del Norte Street	East of Yaleton	Local	25	35

Notes:
[1] Distance measured from nearest offsite residential structure to centerline of roadway.
Source: City of West Covina, 2016.

According to the Air Quality Analysis (Urban Crossroads, 2025) the proposed 34 single-family homes would generate 322 weekday trips and the 248 condos/townhomes would generate 1,132 weekday trips for a total of 1,454 daily vehicle trips generated by the proposed project. The existing traffic volumes were obtained by multiplying by 12 the PM peak hour vehicle counts taken by AIM TD, LLC that are provided in the *1501 Del Norte Street Due Diligence Traffic Assessment* (Traffic Study), prepared by Urban Crossroads, June 24, 2024. The existing with project daily trips were calculated by multiplying project trip distribution for each roadway as shown in the Traffic Study by the project total 1,454 daily trips and then adding that to the existing daily trips for each road segment. The ADT volumes used in this analysis are shown in Table F.

Table F – Average Daily Traffic Volumes

		Average Daily Traffic Volumes	
Roadway	Segment	Existing	Existing + Project
Nora Avenue	North of Driveway 1	1,090	1,635
Nora Avenue	North of Del Norte Street	1,090	1,308
Nora Avenue	South of Del Norte Street	920	1,174
Yaleton Avenue	South of Del Norte Street	160	414
Sunset Avenue	North of Workman Avenue	20,570	21,079
Del Norte Street	West of Yaleton	280	571
Del Norte Street	East of Yaleton	180	798

Source: City of West Covina, 2016; Urban Crossroads, 2025.

The vehicle mixes used in the FHWA-RD-77-108 Model are shown in Table G and are based on typical vehicle mixes observed in Southern California. The vehicle mixes provide the hourly distribution percentages of automobiles, medium trucks, and heavy trucks for input into the FHWA model.

Table G – Roadway Vehicle Mixes

Vehicle Type	Traffic Flow Distributions			
	Day (7 a.m. to 7 p.m.)	Evening (7 p.m. to 10 p.m.)	Night (10 p.m. to 7 a.m.)	Overall
Local				
Automobiles	73.60%	13.60%	10.22%	97.42%
Medium Trucks	0.90%	0.04%	0.9%	1.84%
Heavy Trucks	0.35%	0.04%	0.35%	0.74%
Commercial Thoroughfare				
Automobiles	69.50%	12.90%	9.60%	92.00%
Medium Trucks	1.44%	0.06%	1.50%	3.00%
Heavy Trucks	2.40%	0.10%	2.50%	5.00%

Source: Vista Environmental.

FHWA Model Source Assumptions

To assess the roadway noise generation in a uniform manner, all vehicles are analyzed at the single lane equivalent acoustic center of the roadway being analyzed. In order to determine the height above the road grade where the noise is being emitted from, each type of vehicle has been analyzed independently with autos at road grade, medium trucks at 2.3 feet above road grade, and heavy trucks at 8 feet above road grade. These elevations were determined through a noise-weighted average of the elevation of the exhaust pipe, tires, and mechanical parts in the engine, which are the primary noise emitters from a vehicle.

Onsite Noise Modeling Methodology

The operation of the proposed project would contain the same noise sources that currently occur in the project vicinity that consists of residential and park uses. Since the proposed community space area that includes a pool, BBQ area and shade structures would be located near the center of the development, any noise created from the community space area stationary sources, such as pool pumps would not be noticeable on the nearby properties. In addition, the project would include paseos and common areas throughout the project site, however no stationary noise producing equipment would be located in these common areas and Assembly Bill 1307 specifies that for the purposes of CEQA, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment for new residential projects in urban areas. Since the proposed project meets the Assembly Bill 1307 requirements, no onsite noise sources that are generated by human beings have been analyzed.

The only onsite noise source not generated by the occupants and guests that has the potential to increase the noise levels at the nearby offsite residential properties would be from air conditioning equipment. The project applicant has stated that the proposed homes will likely use a heat pump made by Carrier Series 38 MURA, which produces noise levels that range between 54 and 62 dBA at one meter (3.28 feet). In order to provide a worst-case analysis, a noise level of 62 dBA at one meter was utilized to analyze the air conditioner noise impacts. The noise level at the nearest homes were calculated through use of standard geometric spreading of noise, which provides an attenuation rate of 6 dB per doubling the distance between source and receptor.

6.3 Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to damage at the highest levels. Table H gives approximate vibration levels for particular construction activities. The data in Table H provides a reasonable estimate for a wide range of soil conditions.

Table H – Vibration Source Levels for Construction Equipment

Equipment		Peak Particle Velocity (inches/second)	Approximate Vibration Level (L_v) at 25 feet
Pile driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile driver (sonic)	Upper range	0.734	105
	Typical	0.170	93
Clam shovel drop (slurry wall)		0.202	94
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drill		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Source: Federal Transit Administration, 2018.

The construction-related vibration impacts have been calculated through the vibration levels shown above in Table H and through typical vibration propagation rates. The equipment assumptions were based on the equipment lists provided above in Table C.

7.0 IMPACT ANALYSIS

7.1 CEQA Thresholds of Significance

Consistent with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, a significant impact related to noise would occur if a proposed project is determined to result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

7.2 Generation of Noise Levels in Excess of Standards

The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The following section calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the proposed project and compares the noise levels to the City standards.

Construction-Related Noise

The construction activities for the proposed project are anticipated to include demolition of the existing school structures and parking areas, site preparation and grading of the 13.56-acre project site, building construction of a residential community with 282 homes, paving of the onsite roads and sidewalks, and application of architectural coatings. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

The nearest sensitive receptors to the project site are the single-family homes located as near as eight (8) feet south of the southeastern portion of the project site and mixed-use office professional (zoned OPMU) structures as near as four (4) feet north of the southeastern portion of the project site. There are also single-family homes located on the west side of Nora Avenue, which are as near as 90 feet west of the project site. In addition, Del Norte Park is adjacent to the north and east sides of the project site, where the nearest picnic table area (passive recreation area) is located as near as 150 feet north of the project site. In order to account for the acoustical center of the offroad equipment, it has been assumed that the average width of offroad equipment is 12 feet wide, which would result in an additional 6 feet being added to the distances to the nearby sensitive receptors.

Section 15-95(a) of the City's Municipal Code restricts construction activities from occurring between the hours of 8:00 p.m. one day and 7:00 a.m. of the next day. The City construction noise standards do not provide any limits to the noise levels that may be created from construction activities that occur during the allowable hours of construction. As such, in order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the FTA construction noise criteria thresholds detailed above in Section 4.1 have been utilized, which shows that a significant construction

noise impact would occur if construction noise exceeds 80 dBA during the daytime at the nearby homes and park.

Construction noise impacts to the nearby sensitive receptors have been calculated through use of the RCNM and the parameters and assumptions detailed in Section 6.1 of this report including Table D that shows the anticipated construction equipment that would be used in each phase of construction. The calculated construction-related noise impacts prior to mitigation are shown below in Table I and the RCNM printouts for the unmitigated conditions are provided in Appendix C.

Table I – Construction Noise Levels at the Nearby Sensitive Receptors Prior to Mitigation

	Construction Noise Level (dBA Leq) at:			
Construction Phase	**Homes to the East[1]**	**Homes to the South[2]**	**Homes to the West[3]**	**Park to the North[4]**
Demolition	97	94	78	74
Site Preparation	94	91	74	70
Grading	95	92	77	74
Building Construction	94	91	76	72
Paving	88	86	71	67
Painting	88	85	70	66
Maximum Construction Noise Level	**97**	**94**	**78**	**74**
FTA Construction Noise Threshold[5]	**80**	**80**	**80**	**80**
Exceed Threshold?[4]	**Yes**	**Yes**	No	No

Notes:
[1] The nearest homes to the east are located as near as 4 feet from the project site.
[2] The nearest homes to the south are located as near as 8 feet from the project site.
[3] The nearest homes to the west are located as near as 90 feet from the center of the project site
[4] The park to the noise is based on the picnic table area that is located as near as 150 feet from the project site.
[5] Obtained from Table B, above.
Source: RCNM, Federal Highway Administration, 2006

Table I shows that the greatest noise impacts would occur during the demolition phase, with noise levels as high as 97 dBA Leq at the homes to the east, 94 dBA Leq at the homes to the south, 78 dBA Leq at the homes to the west, and 74 dBA Leq at the park to the north. Table I shows that the noise levels at the homes to the east and south would exceed the FTA construction noise standard of 80 dBA, while the noise levels at the homes to the west and park to the north would be below the FTA construction noise standard of 80 dBA. This would be considered a significant impact.

Mitigation Measure 1 has been provided that would require the installation of a temporary noise barrier on the portion of the east side that is adjacent to the homes and entire south side as well as providing additional temporary noise barriers around all stationary equipment and concrete saws that are operated within 30 feet of the homes to the east and south and Mitigation Measure 2 has been provided that would restrict the largest equipment, which is typically the loudest from operating within 20 feet from any offsite structure.

According to the Housing and Urban Development's Barrier Performance Module, a 12-foot barrier would result in a noise reduction of approximately 10 dBA, which was entered into the RCNM model for the homes to the east and homes to the south in order to account for Mitigation Measure 1. In addition, the minimum distance was adjusted out to 20 feet for the homes to the east and homes to the south in order

to account for Mitigation Measure 2. The RCNM model was re-run and the calculated mitigated construction-related noise levels are shown in Table J and the RCNM printouts for the mitigated conditions are provided in Appendix D. As shown in Table J, with implementation of Mitigation Measures 1 and 2, construction-related noise impacts would be below the FTA construction noise standard of 80 dBA at all analyzed receptors. Therefore, with implementation of Mitigation Measures 1 and 2, construction noise impacts would be less than significant.

Table J – Mitigated Construction Noise Levels at the Nearby Sensitive Receptors

	Construction Noise Level (dBA Leq) at:			
Construction Phase	**Homes to the East[1]**	**Homes to the South[2]**	**Homes to the West[3]**	**Park to the North[4]**
Demolition	79	79	78	74
Site Preparation	76	76	74	70
Grading	77	77	77	74
Building Construction	76	76	76	72
Paving	71	71	71	67
Painting	71	71	71	67
Maximum Construction Noise Level	**79**	**79**	**78**	**74**
FTA Construction Noise Threshold[5]	**80**	**80**	**80**	**80**
Exceed Threshold?[4]	No	**No**	No	No

Notes:
[1] The nearest homes to the east are located as near as 4 feet from the project site.
[2] The nearest homes to the south are located as near as 8 feet from the project site.
[3] The nearest homes to the west are located as near as 90 feet from the center of the project site
[4] The park to the noise is based on the picnic table area that is located as near as 150 feet from the project site.
[5] Obtained from Table B, above.
Source: RCNM, Federal Highway Administration, 2006

Operational-Related Noise

Potential noise impacts associated with the operations of the proposed project would be from project-generated vehicular traffic on the nearby roadways and from onsite noise sources to the nearby sensitive receptors. The noise impacts created from project generated vehicular traffic on the nearby roadways and from onsite noise sources to the nearby homes have been analyzed separately below.

Roadway Vehicular Noise Impact to Nearby Sensitive Receptors

Vehicle noise is a combination of the noise produced by the engine, exhaust and tires. The level of traffic noise depends on three primary factors (1) the volume of traffic, (2) the speed of traffic, and (3) the number of trucks in the flow of traffic. The proposed project does not propose any uses that would require a substantial number of truck trips and the proposed project would not alter the speed limit on any existing roadway so the proposed project's potential offsite noise impacts have been focused on the noise impacts associated with the change of volume of traffic that would occur with development of the proposed project.

Neither the General Plan nor the Municipal Code defines what constitutes a "substantial permanent increase to ambient noise levels". As such, this impact analysis has utilized guidance from the Federal Transit Administration for a moderate impact that has been detailed above in Table A.

The potential offsite traffic noise impacts created by the on-going operations of the proposed project have been analyzed through utilization of the FHWA model and parameters described above in Section 6.2 and the FHWA model noise calculation spreadsheets are provided in Appendix E. The proposed project's potential offsite traffic noise impacts have been calculated through a comparison of the existing year scenario to the existing with project scenario. The results of this comparison are shown in Table K.

Table K – Project-Related Roadway Noise Contributions

		dBA CNEL at Nearest Receptor[1]			
Roadway	Segment	Existing	Existing Plus Project	Project Contribution	Increase Threshold[2]
Nora Avenue	North of Driveway 1	48.2	50.0	+1.8	+7 dBA
Nora Avenue	North of Del Norte Street	48.2	49.0	+0.8	+7 dBA
Nora Avenue	South of Del Norte Street	47.5	48.5	+1.0	+7 dBA
Yaleton Avenue	South of Del Norte Street	40.5	44.6	+4.1	+7 dBA
Sunset Avenue	North of Workman Avenue	67.2	67.3	+0.1	+1 dBA
Del Norte Street	West of Yaleton	45.3	48.4	+3.1	+7 dBA
Del Norte Street	East of Yaleton	43.4	49.9	+6.5	+7 dBA

Notes:
[1] Distance to nearest sensitive receptors shown in Table E, does not take into account existing noise barriers such as walls and structures.
[2] Increase Threshold obtained from the FTA's allowable noise impact exposures detailed above in Table A.
Source: FHWA Traffic Noise Prediction Model FHWA-RD-77-108.

Table K shows that the proposed project's permanent noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed the roadway noise increase thresholds detailed above. It should be also noted, that the noise levels shown in Table K do not account for non-road noise sources and the greatest project impacts that occur on Del Norte Street are below the measured ambient noise level of 55.0 dBA Leq as shown above in Table C – Existing (Ambient) Noise Measurement Results. For these reasons, the proposed project would not result in a substantial permanent roadway noise increase above ambient noise levels. Roadway noise impacts would be less than significant.

Onsite Noise Impacts to Nearby Sensitive Receptors

As detailed above in Section 6.2, operation of the project may create onsite noise impacts to the nearby residential properties from the operation of air conditioning equipment. Section 15-85 of the Municipal Code restricts the making of noise in any residential neighborhood that is plainly audible at a distance of 50 feet from the property line of any property. In order to provide a quantitative threshold, "plainly audible" has been assumed in this analysis to be a noise level that exceeds ambient noise levels at a distance of 50 feet from the nearby homes and park property lines.

The project applicant has stated that the proposed townhomes will likely use a heat pump made by Carrier Series 38 MURA, which produces noise levels as high as 62 dBA at one meter. The noise level at 50 feet from the nearest residential property lines were calculated through use of standard geometric spreading of noise, which provides an attenuation rate of 6 dB per doubling the distance between source and receptor. Table L shows the calculated noise levels at the nearby sensitive receptors.

Table L – Onsite Operational Noise Levels at the Nearby Sensitive Receptors

Noise Source	Calculated Noise Levels (dBA Leq) at[1]:			
	Homes to East[2]	Homes to South[3]	Homes to West[4]	Park to North[5]
Air Conditioner Equipment	37	31	31	47
Existing Ambient Noise Levels	**60.3**	**60.3**	**55.0**	**55.0**
Exceed Ambient Noise Threshold?	No	No	No	No

Notes:
[1] Noise levels calculated based on a reference noise level of 62 dB at one meter and a standard geometric spreading of noise, which results in a 6.0 dB drop in noise when distance is doubled.
[2] The distance from the nearest air conditioner equipment to the nearest property line for the Homes to the East is 10 feet. As such, noise was calculated at 60 feet.
[3] The distance from the nearest air conditioner equipment to the nearest property line for the Homes to the South is 60 feet. As such, noise was calculated at 110 feet.
[4] The distance from the nearest air conditioner equipment to the nearest property line for the Homes to the West is 60 feet. As such, noise was calculated at 110 feet.
[5] The distance from the nearest air conditioner equipment to the property line for the Park to the North is 5 feet. As such, noise was calculated at 55 feet.

Table L shows that the proposed project's operational noise from air conditioner units on the project site would create a noise level as high as 47 dBA at the park to the north and as high as 37 dBA at the nearest homes to the east. The operational onsite noise levels would be below the existing ambient noise levels at 50 feet from the nearest property lines. Therefore, operation of the proposed project's onsite noise sources would not create a substantial increase in ambient noise levels that are in excess of applicable noise standards. Onsite noise impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Mitigation Measure 1:

The project applicant shall require the installation of a minimum 12-foot high temporary noise barrier on the portion of the east side of the project site that is adjacent to the homes as well as the entire south side of the project site. The project applicant shall also require the installation of minimum 8-foot high temporary noise barriers around all stationary equipment and concrete saws that are operated within 30 feet of the homes located on the east and south sides of the project site. The temporary noise barriers shall be constructed with either minimum 5/8" thick plywood or oriented strand board (OSB) or sound blankets that have a minimum Sound transmission class (STC) rating of 15 STC.

Mitigation Measure 2:

The project applicant shall require that all construction contractors restrict the operation of any large bulldozers that is powered by a greater than 150 horsepower engine from operating within 20 feet of any off-site structure. The grading contractor shall use a small bulldozer (i.e., D1, D2, or D3 dozers) or other type of equipment that is less than 150 horsepower to perform all demolition and grading activities that are located within 20 feet of any off-site structure.

Level of Significance after Mitigation

Less than significant impact.

7.3 Generation of Excessive Groundborne Vibration

The proposed project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the proposed project.

Construction-Related Vibration Impacts

The construction activities for the proposed project are anticipated to include demolition of the existing school structures and parking areas, site preparation and grading of the 13.56-acre project site, building construction of a residential community with 282 homes, paving of the onsite roads and sidewalks, and application of architectural coatings. Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road equipment.

The primary sources of vibration during construction would be from the operation of a bulldozer during demolition and grading activities and from a vibratory roller during paving activities. From Table H above a large bulldozer would create a vibration level of 0.089 inch-per-second PPV or 87 VdB at 25 feet and a vibratory roller would create a vibration level of 0.21 inch-per-second PPV or 94 VdB at 25 feet. Vibration has the potential to create annoyance to the nearby residents as well as damage to the nearby structures, which have been analyzed separately below.

Human Annoyance Vibration Impacts

The FTA guidance that is detailed above in Section 4.1, defines the threshold for human annoyance in residential buildings where people normally sleep is 72 VdB. Since the human annoyance threshold is based on the daily average, the analyzed distance utilized is based on the nearest offsite home to the center of the project site, which are the homes to the east that are located as near as 485 feet from the center of the project (see Table I, above).

As detailed above, a vibratory roller would create the highest level of vibration at 94 VdB at 25 feet. Based on typical vibration propagation rates, the average vibration level at the nearest homes to the east (485 feet from center of project site) would be 56 VdB, which is below the FTA's human annoyance threshold of 72 VdB. Therefore, construction-related human annoyance vibration impacts would be less than significant.

Building Damage Vibration Impacts

Caltrans guidance that is detailed above in Section 4.2, defines the threshold for building damage to older residential structures and other older buildings to 0.3 inch per second PPV, which is based on the peak vibration level. Since the building damage threshold is based on the peak vibration level, the analyzed distance is the shortest distance between where construction equipment would operate and the nearest offsite structure. The nearest offsite structures are the single-family homes located as near as eight (8) feet south of the southeastern portion of the project site and mixed-use office professional (zoned OPMU) structures as near as four (4) feet north of the southeastern portion of the project site.

For the vibratory roller, the laying of asphalt pavement would occur as near as 24 feet from the nearest home located south of the southeastern portion of the project site. Based on typical vibration propagation rates, the vibration level at the nearest offsite home (24 feet away) would be 0.22 inch per second PPV. The vibration level at the nearest offsite home would be below the building damage threshold of 0.3 inch

per second PPV threshold that is detailed above. Therefore, the use of vibratory rollers during paving activities, would create a less than significant building damage vibration impact.

For the large bulldozer, based on typical vibration propagation rates, the vibration level at the nearest offsite mixed-use structure (4 feet away) would be 0.67 inch per second PPV. The vibration level at the nearest offsite mixed-use structure would exceed the building damage threshold of 0.3 inch per second PPV. This would be considered a significant impact.

Mitigation Measure 2 is provided that would require that the applicant to restrict the use of a large dozer within 20 feet of any offsite structure. For all grading activities that occur within 20 feet of any offsite structure, the applicant shall require the use of a small dozer or other type of equipment that is less than 150 horsepower. From Table H above a small bulldozer would create a vibration level of 0.003 inch-per-second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest mixed-use structure (4 feet away) would be 0.023 inch per second PPV, which would be below the building damage threshold of 0.3 inch per second PPV. Therefore, with implementation of Mitigation Measure 2, a less than significant building damage vibration impact is anticipated from construction of the proposed project.

Operations-Related Vibration Impacts

The proposed project would consist of the development of a residential community. The ongoing operation of the proposed project would not include the operation of any known vibration sources other than typical onsite vehicle operations for a residential development. Therefore, a less than significant vibration impact is anticipated from operation of the proposed project.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Mitigation Measure 2, provided above in Section 7.2.

Level of Significance after Mitigation

Less than significant impact.

7.4 Aircraft Noise

The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airport is San Gabriel Valley Airport, located approximately 5.5 miles west of the project site. The project site is located outside of the 60 dBA CNEL noise contours of this Airport. Impacts would be less than significant.

Level of Significance

Less than significant impact.

8.0 REFERENCES

California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analytics Protocol*, September 2013.

California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, April 2020.

City of West Covina, *West Covina General Plan*, adopted December 2016.

City of West Covina, *Code of Ordinances Supplement 93 Municipal Code,* February 27, 2024.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* May 2006.

Urban Crossroads, *1501 Del Norte Street Residential Air Quality Analysis*, May, 2025.

Urban Crossroads, *1501 Del Norte Street Due Diligence Traffic Assessment*, June 24, 2024.

U.S. Department of Transportation, *FHWA Roadway Construction Noise Model User's Guide,* January, 2006.

U.S. Department of Transportation, *Highway Traffic Noise: Analysis and Abatement Guidance,* December, 2011.

APPENDIX A

Field Noise Measurements Photo Index

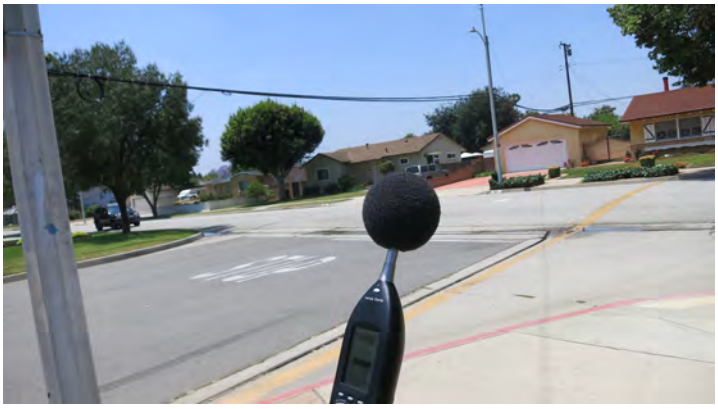
Noise Measurement Site 1 - looking north

Noise Measurement Site 1 - looking northeast

Noise Measurement Site 1 - looking east

Noise Measurement Site 1 - looking southeast

Noise Measurement Site 1 - looking south



Noise Measurement Site 1 - looking southwest

Noise Measurement Site 1 - looking west

Noise Measurement Site 1 - looking northwest

Noise Measurement Site 2 - looking north

Noise Measurement Site 2 - looking northeast

Noise Measurement Site 2 - looking east

Noise Measurement Site 2 - looking southeast

Noise Measurement Site 2 - looking south

Noise Measurement Site 2 - looking southwest

Noise Measurement Site 2 - looking west

Noise Measurement Site 2 - looking northwest

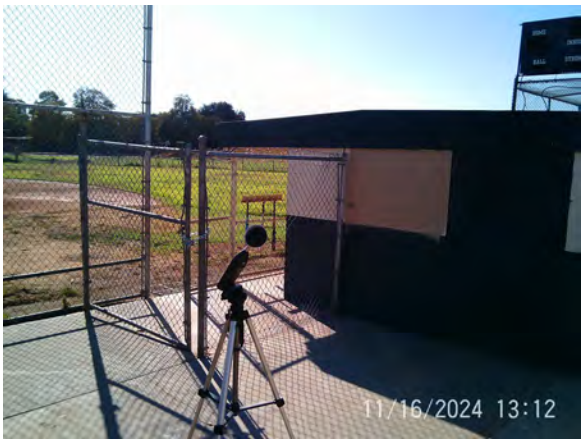
Noise Measurement Site 3 - looking north

Noise Measurement Site 3 - looking northeast

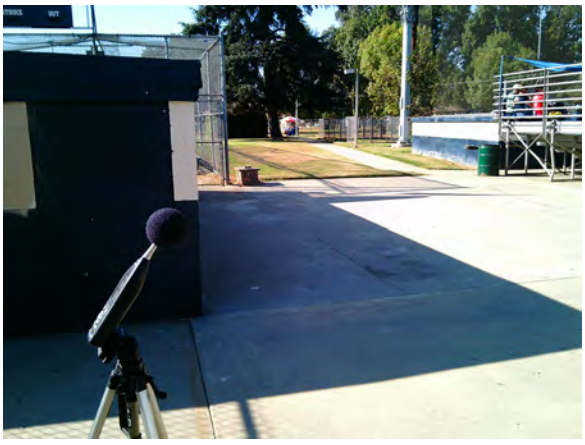
Noise Measurement Site 3 - looking east

Noise Measurement Site 3 - looking southeast

Noise Measurement Site 3 - looking south



Noise Measurement Site 3 - looking southwest


Noise Measurement Site 3 - looking west

Noise Measurement Site 3 - looking northwest

Noise Measurement Site 4 - looking north

Noise Measurement Site 4 - looking northeast

Noise Measurement Site 4 - looking east

Noise Measurement Site 4 - looking southeast

Noise Measurement Site 4 - looking south

Noise Measurement Site 4 - looking southwest

Noise Measurement Site 4 - looking west

Noise Measurement Site 4 - looking northwest

APPENDIX B

Field Noise Measurements Printouts

Measurement Report

Report Summary

Meter's File Name	831_Data.003	Computer's File Name	SLM_0002509_831_Data_0
Meter	831		
Firmware	2.403		
User	GT		Location
Description	1501 Del Norte St, West Covina		
Note	Located near SW corner of project site, approx 25 ft north of Del Norte St CL and 60 ft east of Nora Ave CL		
Start Time	2024-05-29 12:28:39	Duration	0:10:00.0
End Time	2024-05-29 12:38:39	Run Time	0:10:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	55.0 dB		
LAE	82.8 dB	SEA	--- dB
EA	21.0 µPa²h		
LZ_{peak}	102.0 dB	2024-05-29 12:28:40	
LAS_{max}	70.1 dB	2024-05-29 12:29:21	
LAS_{min}	46.2 dB	2024-05-29 12:28:53	
LA_{eq}	55.0 dB		
LC_{eq}	64.0 dB	LC_{eq} - LA_{eq}	9.1 dB
LAI_{eq}	57.5 dB	LAI_{eq} - LA_{eq}	2.5 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	4	0:00:10.5
LAS > 85.0 dB	0	0:00:00.0
LZpeak > 135.0 dB	0	0:00:00.0
LZpeak > 137.0 dB	0	0:00:00.0
LZpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
55.0 dB	55.0 dB	0.0 dB

LDEN	LDay	LEve	LNight
55.0 dB	55.0 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	55.0 dB		64.0 dB		72.4 dB	
$LS_{(max)}$	70.1 dB	2024-05-29 12:29:21	75.3 dB	2024-05-29 12:29:21	92.2 dB	2024-05-29 12:28:40
$LF_{(max)}$	73.6 dB	2024-05-29 12:29:21	79.2 dB	2024-05-29 12:29:21	97.3 dB	2024-05-29 12:28:40
$LI_{(max)}$	76.5 dB	2024-05-29 12:29:21	81.7 dB	2024-05-29 12:29:21	100.1 dB	2024-05-29 12:28:40
$LS_{(min)}$	46.2 dB	2024-05-29 12:28:53	57.7 dB	2024-05-29 12:29:53	62.4 dB	2024-05-29 12:34:33
$LF_{(min)}$	45.7 dB	2024-05-29 12:28:54	55.7 dB	2024-05-29 12:29:45	59.8 dB	2024-05-29 12:34:17
$LI_{(min)}$	46.0 dB	2024-05-29 12:28:53	58.3 dB	2024-05-29 12:34:32	63.8 dB	2024-05-29 12:33:10
$L_{Peak(max)}$	91.0 dB	2024-05-29 12:29:21	94.7 dB	2024-05-29 12:29:21	102.0 dB	2024-05-29 12:28:40

Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	61.6 dB
LAS 10.0	58.5 dB
LAS 33.3	51.7 dB
LAS 50.0	50.5 dB
LAS 66.6	49.4 dB
LAS 90.0	47.6 dB

Measurement Report

Report Summary

Meter's File Name	831_Data.004	Computer's File Name	SLM_0002509_831_Data_004.10.ldbin
Meter	831		
Firmware	2.403		
User	GT	Location	
Description	1501 Del Norte St, West Covina		
Note	Located near NE corner of project site, approx 65 ft west of Sunset Ave CL		
Start Time	2024-05-29 12:43:09	Duration	0:10:00.0
End Time	2024-05-29 12:53:09	Run Time	0:10:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	60.3 dB		
LAE	88.0 dB	SEA	--- dB
EA	70.7 µPa²h		
LZ_{peak}	99.0 dB	2024-05-29 12:47:25	
LAS_{max}	68.3 dB	2024-05-29 12:47:52	
LAS_{min}	46.8 dB	2024-05-29 12:44:16	
LA_{eq}	60.3 dB		
LC_{eq}	68.7 dB	LC_{eq} - LA_{eq}	8.5 dB
LAI_{eq}	61.4 dB	LAI_{eq} - LA_{eq}	1.2 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	15	0:01:03.6
LAS > 85.0 dB	0	0:00:00.0
LZpeak > 135.0 dB	0	0:00:00.0
LZpeak > 137.0 dB	0	0:00:00.0
LZpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
60.3 dB	60.3 dB	0.0 dB

LDEN	LDay	LEve	LNight
60.3 dB	60.3 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	60.3 dB		68.7 dB		73.4 dB	
$LS_{(max)}$	68.3 dB	2024-05-29 12:47:52	81.0 dB	2024-05-29 12:43:09	90.5 dB	2024-05-29 12:43:09
$LF_{(max)}$	70.2 dB	2024-05-29 12:51:52	80.5 dB	2024-05-29 12:43:09	93.8 dB	2024-05-29 12:47:25
$LI_{(max)}$	72.6 dB	2024-05-29 12:51:52	81.0 dB	2024-05-29 12:43:09	96.8 dB	2024-05-29 12:47:25
$LS_{(min)}$	46.8 dB	2024-05-29 12:44:16	59.9 dB	2024-05-29 12:43:51	64.2 dB	2024-05-29 12:50:42
$LF_{(min)}$	46.0 dB	2024-05-29 12:50:42	57.9 dB	2024-05-29 12:44:17	62.2 dB	2024-05-29 12:48:24
$LI_{(min)}$	46.6 dB	2024-05-29 12:44:25	60.4 dB	2024-05-29 12:44:21	65.0 dB	2024-05-29 12:50:40
$L_{Peak(max)}$	85.8 dB	2024-05-29 12:51:52	90.1 dB	2024-05-29 12:51:04	99.0 dB	2024-05-29 12:47:25

Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	65.2 dB
LAS 10.0	64.2 dB
LAS 33.3	60.9 dB
LAS 50.0	58.8 dB
LAS 66.6	54.9 dB
LAS 90.0	48.8 dB

Measurement Report

Report Summary

Meter's File Name	831_Data.001.s	Computer's File Name	831_0002509-20241116 130449-831_Data.001.ldbin
Meter	831 0002509	Firmware	2.403
User	GT	Location	Approximately 50' south of Del Norte Park Little League Field
Job Description	1501 Del Norte Street Residential Project		
Note	During Little League Game, noise from stands and aircraft overflights		

Measurement

Start Time	2024-11-16 13:04:49	Duration	0:15:00.0		
End Time	2024-11-16 13:19:49	Run Time	0:15:00.0	Pause Time	0:00:00.0
Pre-Calibration	2024-11-16 13:00:08	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	55.0 dB		
LAE	84.5 dB	SEA	--- dB
EA	31.6 µPa²h		
LZ_{peak}	101.9 dB	2024-11-16 13:04:49	
LAS_{max}	66.1 dB	2024-11-16 13:10:10	
LAS_{min}	50.0 dB	2024-11-16 13:19:33	
LA_{eq}	55.0 dB		
LC_{eq}	67.4 dB	LC_{eq} - LA_{eq}	12.4 dB
LAI_{eq}	58.8 dB	LAI_{eq} - LA_{eq}	3.8 dB

Exceedances	Count	Duration
LAS > 65.0 dB	1	0:00:01.2
LAS > 85.0 dB	0	0:00:00.0
LZpk > 135.0 dB	0	0:00:00.0
LZpk > 137.0 dB	0	0:00:00.0
LZpk > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	55.0 dB	55.0 dB	--- dB

LDEN	LDay	LEve	LNight
55.0 dB	55.0 dB	--- dB	--- dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	55.0 dB		67.4 dB		72.3 dB	
$L_{S(max)}$	66.1 dB	2024-11-16 13:10:10	75.2 dB	2024-11-16 13:14:42	93.8 dB	2024-11-16 13:04:49
$L_{F(max)}$	71.6 dB	2024-11-16 13:07:58	76.7 dB	2024-11-16 13:14:42	98.5 dB	2024-11-16 13:04:49
$L_{I(max)}$	76.3 dB	2024-11-16 13:07:58	77.6 dB	2024-11-16 13:07:58	100.4 dB	2024-11-16 13:04:49
$L_{S(min)}$	50.0 dB	2024-11-16 13:19:33	63.6 dB	2024-11-16 13:19:43	65.3 dB	2024-11-16 13:13:47
$L_{F(min)}$	49.1 dB	2024-11-16 13:19:33	62.2 dB	2024-11-16 13:19:41	63.9 dB	2024-11-16 13:19:48
$L_{I(min)}$	49.7 dB	2024-11-16 13:19:33	63.9 dB	2024-11-16 13:19:41	65.4 dB	2024-11-16 13:13:47
$L_{Peak(max)}$	93.6 dB	2024-11-16 13:07:58	94.1 dB	2024-11-16 13:07:58	101.9 dB	2024-11-16 13:04:49

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	58.3 dB
LAS 10.0	57.2 dB
LAS 33.3	55.0 dB
LAS 50.0	54.2 dB
LAS 66.6	53.5 dB
LAS 90.0	52.0 dB

Measurement Report

Report Summary

Meter's File Name	831_Data.002.s	Computer's File Name	831_0002509-20241116 132342-831_Data.002.ldbin
Meter	831 0002509	Firmware	2.403
User	GT	Location	South Side of Dog Park on Little Dog side, approx 3 feet west of Large Dog Side
Job Description	1501 Del Norte Street Residential Project		
Note	Approx 6 small dogs and 9 large dogs in Central Bark Dog Park		

Measurement

Start Time	2024-11-16 13:23:42	Duration	0:15:00.0		
End Time	2024-11-16 13:38:42	Run Time	0:15:00.0	Pause Time	0:00:00.0
Pre-Calibration	2024-11-16 13:00:07	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	62.4 dB		
LAE	91.9 dB	SEA	--- dB
EA	173.8 µPa²h		
LZ_{peak}	102.1 dB	2024-11-16 13:23:42	
LAS_{max}	78.7 dB	2024-11-16 13:38:02	
LAS_{min}	46.3 dB	2024-11-16 13:32:36	
LA_{eq}	62.4 dB		
LC_{eq}	65.4 dB	LC_{eq} - LA_{eq}	3.0 dB
LAI_{eq}	70.7 dB	LAI_{eq} - LA_{eq}	8.3 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	31	0:02:23.8
LAS > 85.0 dB	0	0:00:00.0
LZpk > 135.0 dB	0	0:00:00.0
LZpk > 137.0 dB	0	0:00:00.0
LZpk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
62.4 dB	62.4 dB	--- dB

LDEN	LDay	LEve	LNight
62.4 dB	62.4 dB	--- dB	--- dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	62.4 dB		65.4 dB		68.9 dB	
$L_{S(max)}$	78.7 dB	2024-11-16 13:38:02	78.9 dB	2024-11-16 13:30:40	92.6 dB	2024-11-16 13:23:43
$L_{F(max)}$	83.8 dB	2024-11-16 13:38:00	84.1 dB	2024-11-16 13:38:00	97.3 dB	2024-11-16 13:23:42
$L_{I(max)}$	86.3 dB	2024-11-16 13:38:00	86.6 dB	2024-11-16 13:38:00	99.8 dB	2024-11-16 13:23:42
$L_{S(min)}$	46.3 dB	2024-11-16 13:32:36	55.9 dB	2024-11-16 13:28:23	59.6 dB	2024-11-16 13:31:27
$L_{F(min)}$	45.1 dB	2024-11-16 13:24:01	54.3 dB	2024-11-16 13:35:23	57.5 dB	2024-11-16 13:28:22
$L_{I(min)}$	46.3 dB	2024-11-16 13:32:36	56.3 dB	2024-11-16 13:28:22	60.5 dB	2024-11-16 13:31:27
$L_{Peak(max)}$	96.2 dB	2024-11-16 13:38:01	97.6 dB	2024-11-16 13:38:38	102.1 dB	2024-11-16 13:23:42

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	69.8 dB
LAS 10.0	66.9 dB
LAS 33.3	53.1 dB
LAS 50.0	50.1 dB
LAS 66.6	49.1 dB
LAS 90.0	47.6 dB

APPENDIX C

RCNM Model Construction Noise Prior to Mitigation Calculations Printouts

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Demolition Unmitigated

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	10	0
Excavator	No	40		80.7	60	0
Excavator	No	40		80.7	110	0
Dozer	No	40		81.7	160	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Concrete Saw		103.6	96.6	N/A	N/A	N/A	N/A
Excavator		79.1	75.1	N/A	N/A	N/A	N/A
Excavator		73.9	69.9	N/A	N/A	N/A	N/A
Dozer		71.6	67.6	N/A	N/A	N/A	N/A
	Total	**104**	**97**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Demolition Unmitigated

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20.0		89.6	14	0
Excavator	No	40		80.7	64	0
Excavator	No	40		80.7	114	0
Dozer	No	40		81.7	164	0

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Concrete Saw		100.6	94	N/A	N/A	N/A	N/A
Excavator		78.6	74.6	N/A	N/A	N/A	N/A
Excavator		73.6	69.6	N/A	N/A	N/A	N/A
Dozer		71.4	67.4	N/A	N/A	N/A	N/A
	Total	**101**	**94**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Demolition Unmitigated

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	96	0
Excavator	No	40		80.7	146	0
Excavator	No	40		80.7	196	0
Dozer	No	40		81.7	246	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Concrete Saw		83.9	76.9	N/A	N/A	N/A	N/A
Excavator		71.4	67.4	N/A	N/A	N/A	N/A
Excavator		68.8	64.9	N/A	N/A	N/A	N/A
Dozer		67.8	63.9	N/A	N/A	N/A	N/A
	Total	**84**	**78**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Demolition Unmitigated

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	156	0
Excavator	No	40		80.7	206	0
Excavator	No	40		80.7	256	0
Dozer	No	40		81.7	306	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Concrete Saw		79.7	72.7	N/A	N/A	N/A	N/A
Excavator		68.4	64.4	N/A	N/A	N/A	N/A
Excavator		66.5	62.5	N/A	N/A	N/A	N/A
Dozer		65.9	62.0	N/A	N/A	N/A	N/A
	Total	**80**	**74**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Site Preparation Unmitigated

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		10	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		98	94	N/A	N/A	N/A	N/A
	Total	**98**	**94**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84.0		14	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		95.1	91.1	N/A	N/A	N/A	N/A
	Total	**95**	**91**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Site Preparation Unmitigated

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55.0

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		96	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		78.3	74.4	N/A	N/A	N/A	N/A
	Total	**78**	**74**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		156	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		74.1	70.1	N/A	N/A	N/A	N/A
	Total	**74**	**70**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Grading Unmitigated

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		10	0
Dozer	No	40		81.7	60	0
Scraper	No	40		83.6	110	0
Scraper	No	40		83.6	160	0
Tractor	No	40	84		210	0

		Calculated (dBA)		Results Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Grader		99.0	95.0	N/A	N/A	N/A	N/A
Dozer		80.1	76.1	N/A	N/A	N/A	N/A
Scraper		76.7	72.8	N/A	N/A	N/A	N/A
Scraper		73.5	69.5	N/A	N/A	N/A	N/A
Tractor		71.5	67.6	N/A	N/A	N/A	N/A
	Total	**99**	**95**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Grading Unmitigated

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		14	0
Dozer	No	40		81.7	64	0
Scraper	No	40		83.6	114	0
Scraper	No	40		83.6	164	0
Tractor	No	40	84		214	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Grader		96.1	92.1	N/A	N/A	N/A	N/A
Dozer		79.5	75.5	N/A	N/A	N/A	N/A
Scraper		76.4	72.4	N/A	N/A	N/A	N/A
Scraper		73.3	69.3	N/A	N/A	N/A	N/A
Tractor		71.4	67.4	N/A	N/A	N/A	N/A
	Total	**96**	**92**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Grading Unmitigated

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		96	0
Dozer	No	40		81.7	146	0
Scraper	No	40		83.6	196	0
Scraper	No	40		83.6	246	0
Tractor	No	40	84		296	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Grader		79.3	75.4	N/A	N/A	N/A	N/A
Dozer		72.4	68.4	N/A	N/A	N/A	N/A
Scraper		71.7	67.7	N/A	N/A	N/A	N/A
Scraper		69.7	65.8	N/A	N/A	N/A	N/A
Tractor		68.6	64.6	N/A	N/A	N/A	N/A
	Total	**79**	**77**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Grading Unmitigated

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		156	0
Dozer	No	40		81.7	206	0
Scraper	No	40		83.6	256	0
Scraper	No	40		83.6	306	0
Tractor	No	40	84		356	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Grader		75.1	71.1	N/A	N/A	N/A	N/A
Dozer		69.4	65.4	N/A	N/A	N/A	N/A
Scraper		69.4	65.4	N/A	N/A	N/A	N/A
Scraper		67.8	63.9	N/A	N/A	N/A	N/A
Tractor		67.0	63.0	N/A	N/A	N/A	N/A
	Total	**75**	**74**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Building Construction Unmitigated

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	10	0
Generator	No	50		80.6	60	0
Front End Loader	No	40		79.1	110	0
Tractor	No	40	84		160	0

Equipment		Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq
Gradall		97.4	93.4	N/A	N/A	N/A	N/A
Generator		79	76	N/A	N/A	N/A	N/A
Front End Loader		72.3	68.3	N/A	N/A	N/A	N/A
Tractor		73.9	69.9	N/A	N/A	N/A	N/A
	Total	**97**	**94**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Building Construction Unmitigated

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	14	0
Generator	No	50		80.6	64	0
Front End Loader	No	40		79.1	114	0
Tractor	No	40	84		164	0

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Gradall		94.5	90.5	N/A	N/A	N/A	N/A
Generator		78.5	75.5	N/A	N/A	N/A	N/A
Front End Loader		72.0	68.0	N/A	N/A	N/A	N/A
Tractor		73.7	69.7	N/A	N/A	N/A	N/A
	Total	**95**	**91**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Building Construction Unmitigated

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	96	0
Generator	No	50		80.6	146	0
Front End Loader	No	40		79.1	196	0
Tractor	No	40	84		246	0

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Gradall		77.7	73.8	N/A	N/A	N/A	N/A
Generator		71.3	68.3	N/A	N/A	N/A	N/A
Front End Loader		67.2	63.3	N/A	N/A	N/A	N/A
Tractor		70.2	66.2	N/A	N/A	N/A	N/A
	Total	**78**	**76**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Building Construction Unmitigated

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	156	0
Generator	No	50		80.6	206	0
Front End Loader	No	40		79.1	256	0
Tractor	No	40	84.0		306	0

Equipment		Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq
Gradall		73.5	69.5	N/A	N/A	N/A	N/A
Generator		68.3	65.3	N/A	N/A	N/A	N/A
Front End Loader		64.9	60.9	N/A	N/A	N/A	N/A
Tractor		68.3	64.3	N/A	N/A	N/A	N/A
	Total	**74**	**72**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Paving Unmitigated

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	10	0
Paver	No	50		77.2	60	0
Roller	No	20		80	110	0
Roller	No	20		80.0	160	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Paver		91.2	88.2	N/A	N/A	N/A	N/A
Paver		75.6	72.6	N/A	N/A	N/A	N/A
Roller		73.2	66.2	N/A	N/A	N/A	N/A
Roller		69.9	62.9	N/A	N/A	N/A	N/A
	Total	**91**	**88**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Paving Unmitigated

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	14	0
Paver	No	50		77.2	64	0
Roller	No	20		80	114	0
Roller	No	20		80	164	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Paver		88.3	85.3	N/A	N/A	N/A	N/A
Paver		75.1	72.1	N/A	N/A	N/A	N/A
Roller		72.8	65.9	N/A	N/A	N/A	N/A
Roller		69.7	62.7	N/A	N/A	N/A	N/A
	Total	**88**	**86**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Paving Unmitigated

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	96	0
Paver	No	50		77.2	146	0
Roller	No	20		80	196	0
Roller	No	20		80	246	0

		Calculated (dBA)		Results Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Paver		71.6	68.5	N/A	N/A	N/A	N/A
Paver		67.9	64.9	N/A	N/A	N/A	N/A
Roller		68.1	61.1	N/A	N/A	N/A	N/A
Roller		66.2	59.2	N/A	N/A	N/A	N/A
	Total	**72**	**71**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Paving Unmitigated

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	156	0
Paver	No	50		77.2	206	0
Roller	No	20		80	256	0
Roller	No	20		80	306	0

Equipment		Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Paver		67.3	64.3	N/A	N/A	N/A	N/A
Paver		64.9	61.9	N/A	N/A	N/A	N/A
Roller		65.8	58.8	N/A	N/A	N/A	N/A
Roller		64.3	57.3	N/A	N/A	N/A	N/A
	Total	**67**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Painting Unmitigated

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	10	0
Compressor (air)	No	40		77.7	60	0

Equipment		Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq
Compressor (air)		91.6	87.7	N/A	N/A	N/A	N/A
Compressor (air)		76.1	72.1	N/A	N/A	N/A	N/A
	Total	**92**	**88**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Painting Unmitigated

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	14	0
Compressor (air)	No	40		77.7	64	0

Equipment		Results Calculated (dBA) ***Lmax**	**Leq**	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Compressor (air)		88.7	84.7	N/A	N/A	N/A	N/A
Compressor (air)		75.5	71.5	N/A	N/A	N/A	N/A
	Total	**89**	**85**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	96	0
Compressor (air)	No	40		77.7	146	0

Equipment		Results Calculated (dBA) ***Lmax**	**Leq**	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Compressor (air)		72.0	68.0	N/A	N/A	N/A	N/A
Compressor (air)		68.4	64.4	N/A	N/A	N/A	N/A
	Total	**72**	**70**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Painting Unmitigated

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	156	0
Compressor (air)	No	40		77.7	206	0

Equipment		Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq
Compressor (air)		67.8	63.8	N/A	N/A	N/A	N/A
Compressor (air)		65.4	61.4	N/A	N/A	N/A	N/A
	Total	**68**	**66**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

APPENDIX D

RCNM Model Mitigated Construction Noise Calculations Printouts

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Demolition Mitigated

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	26	10
Excavator	No	40		80.7	76	10
Excavator	No	40		80.7	126	10
Dozer	No	40		81.7	176	10

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Concrete Saw		85.3	78.3	N/A	N/A	N/A	N/A
Excavator		67.1	63.1	N/A	N/A	N/A	N/A
Excavator		62.7	58.7	N/A	N/A	N/A	N/A
Dozer		60.7	56.8	N/A	N/A	N/A	N/A
	Total	**85**	**79**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Demolition Mitigated

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	26	10
Excavator	No	40		80.7	76	10
Excavator	No	40		80.7	126	10
Dozer	No	40		81.7	176	10

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Concrete Saw		85.3	78	N/A	N/A	N/A	N/A
Excavator		67.1	63.1	N/A	N/A	N/A	N/A
Excavator		62.7	58.7	N/A	N/A	N/A	N/A
Dozer		60.7	56.8	N/A	N/A	N/A	N/A
	Total	**85**	**79**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Demolition Mitigated

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	96	0
Excavator	No	40		80.7	146	0
Excavator	No	40		80.7	196	0
Dozer	No	40		81.7	246	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Concrete Saw		84	77	N/A	N/A	N/A	N/A
Excavator		71	67	N/A	N/A	N/A	N/A
Excavator		69	65	N/A	N/A	N/A	N/A
Dozer		68	64	N/A	N/A	N/A	N/A
	Total	**84**	**78**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Demolition Mitigated

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	156	0
Excavator	No	40		80.7	206	0
Excavator	No	40		80.7	256	0
Dozer	No	40		81.7	306	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Concrete Saw		79.7	72.7	N/A	N/A	N/A	N/A
Excavator		68.4	64.4	N/A	N/A	N/A	N/A
Excavator		66.5	62.5	N/A	N/A	N/A	N/A
Dozer		65.9	62.0	N/A	N/A	N/A	N/A
	Total	**80**	**74**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Site Preparation Mitigated

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		26	10

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		79.7	75.7	N/A	N/A	N/A	N/A
	Total	**80**	**76**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84.0		26	10

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		79.7	75.7	N/A	N/A	N/A	N/A
	Total	**80**	**76**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Site Preparation Mitigated

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to West	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		96	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		78.3	74.4	N/A	N/A	N/A	N/A
	Total	**78**	**74**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		156	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Tractor		74.1	70.1	N/A	N/A	N/A	N/A
	Total	**74**	**70**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Grading Mitigated

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		26	10
Dozer	No	40		81.7	76	10
Scraper	No	40		83.6	126	10
Scraper	No	40		83.6	176	10
Tractor	No	40	84		226	10

Equipment		Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Grader		80.7	76.7	N/A	N/A	N/A	N/A
Dozer		68.0	64.1	N/A	N/A	N/A	N/A
Scraper		65.6	61.6	N/A	N/A	N/A	N/A
Scraper		62.6	58.7	N/A	N/A	N/A	N/A
Tractor		60.9	56.9	N/A	N/A	N/A	N/A
	Total	**81**	**77**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Grading Mitigated

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		26	10
Dozer	No	40		81.7	76	10
Scraper	No	40		83.6	126	10
Scraper	No	40		83.6	176	10
Tractor	No	40	84		226	10

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Grader		80.7	76.7	N/A	N/A	N/A	N/A
Dozer		68.0	64.1	N/A	N/A	N/A	N/A
Scraper		65.6	61.6	N/A	N/A	N/A	N/A
Scraper		62.6	58.7	N/A	N/A	N/A	N/A
Tractor		60.9	56.9	N/A	N/A	N/A	N/A
	Total	**81**	**77**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Grading Mitigated

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		96	0
Dozer	No	40		81.7	146	0
Scraper	No	40		83.6	196	0
Scraper	No	40		83.6	246	0
Tractor	No	40	84		296	0

		Calculated (dBA)		Results Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Grader		79.3	75.4	N/A	N/A	N/A	N/A
Dozer		72.4	68.4	N/A	N/A	N/A	N/A
Scraper		71.7	67.7	N/A	N/A	N/A	N/A
Scraper		69.7	65.8	N/A	N/A	N/A	N/A
Tractor		68.6	64.6	N/A	N/A	N/A	N/A
	Total	**79**	**77**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Grading Mitigated

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		156	0
Dozer	No	40		81.7	206	0
Scraper	No	40		83.6	256	0
Scraper	No	40		83.6	306	0
Tractor	No	40	84		356	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Grader		75.1	71.1	N/A	N/A	N/A	N/A
Dozer		69.4	65.4	N/A	N/A	N/A	N/A
Scraper		69.4	65.4	N/A	N/A	N/A	N/A
Scraper		67.8	63.9	N/A	N/A	N/A	N/A
Tractor		67.0	63.0	N/A	N/A	N/A	N/A
	Total	**75**	**74**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Building Construction Mitigated

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	26	10
Generator	No	50		80.6	76	10
Front End Loader	No	40		79.1	126	10
Tractor	No	40	84		176	10

Equipment		Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Gradall		79.1	75.1	N/A	N/A	N/A	N/A
Generator		67	64	N/A	N/A	N/A	N/A
Front End Loader		61.1	57.1	N/A	N/A	N/A	N/A
Tractor		63.1	59.1	N/A	N/A	N/A	N/A
	Total	**79**	**76**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Building Construction Mitigated

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	26	10
Generator	No	50		80.6	76	10
Front End Loader	No	40		79.1	126	10
Tractor	No	40	84		176	10

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Gradall		79.1	75.1	N/A	N/A	N/A	N/A
Generator		67.0	64.0	N/A	N/A	N/A	N/A
Front End Loader		61.1	57.1	N/A	N/A	N/A	N/A
Tractor		63.1	59.1	N/A	N/A	N/A	N/A
	Total	**79**	**76**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Building Construction Mitigated

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	96	0
Generator	No	50		80.6	146	0
Front End Loader	No	40		79.1	196	0
Tractor	No	40	84		246	0

Equipment	Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Gradall	77.7	73.8	N/A	N/A	N/A	N/A
Generator	71.3	68.3	N/A	N/A	N/A	N/A
Front End Loader	67.2	63.3	N/A	N/A	N/A	N/A
Tractor	70.2	66.2	N/A	N/A	N/A	N/A
Total	**78**	**76**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Building Construction Mitigated

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	156	0
Generator	No	50		80.6	206	0
Front End Loader	No	40		79.1	256	0
Tractor	No	40	84		306	0

	Calculated (dBA)		Results Noise Limits (dBA)			
			Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Gradall	73.5	69.5	N/A	N/A	N/A	N/A
Generator	68.3	65.3	N/A	N/A	N/A	N/A
Front End Loader	64.9	60.9	N/A	N/A	N/A	N/A
Tractor	68.3	64.3	N/A	N/A	N/A	N/A
Total	**74**	**72**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Paving Mitigated

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	26	10
Paver	No	50		77.2	76	10
Roller	No	20		80	126	10
Roller	No	20		80.0	176	10

Equipment	Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Paver	72.9	69.9	N/A	N/A	N/A	N/A
Paver	63.6	60.6	N/A	N/A	N/A	N/A
Roller	62.0	55.0	N/A	N/A	N/A	N/A
Roller	59.1	52.1	N/A	N/A	N/A	N/A
Total	**73**	**71**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Paving Mitigated

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	26	10
Paver	No	50		77.2	76	10
Roller	No	20		80	126	10
Roller	No	20		80	176	10

		Calculated (dBA)		Results Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Paver		72.9	69.9	N/A	N/A	N/A	N/A
Paver		63.6	60.6	N/A	N/A	N/A	N/A
Roller		62.0	55.0	N/A	N/A	N/A	N/A
Roller		59.1	52.1	N/A	N/A	N/A	N/A
	Total	**73**	**71**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Paving Mitigated

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	96	0
Paver	No	50		77.2	146	0
Roller	No	20		80	196	0
Roller	No	20		80	246	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Paver		71.6	68.5	N/A	N/A	N/A	N/A
Paver		67.9	64.9	N/A	N/A	N/A	N/A
Roller		68.1	61.1	N/A	N/A	N/A	N/A
Roller		66.2	59.2	N/A	N/A	N/A	N/A
	Total	**72**	**71**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Paving Mitigated

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	156	0
Paver	No	50		77.2	206	0
Roller	No	20		80	256	0
Roller	No	20		80	306	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Paver		67.3	64.3	N/A	N/A	N/A	N/A
Paver		64.9	61.9	N/A	N/A	N/A	N/A
Roller		65.8	58.8	N/A	N/A	N/A	N/A
Roller		64.3	57.3	N/A	N/A	N/A	N/A
	Total	**67**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Painting Mitigated

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to East	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	26	10
Compressor (air)	No	40		77.7	36	10

Equipment		Calculated (dBA) ***Lmax**	**Leq**	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Compressor (air)		73.3	69.4	N/A	N/A	N/A	N/A
Compressor (air)		70.5	66.5	N/A	N/A	N/A	N/A
	Total	**73**	**71**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Painting Mitigated

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to South	Residential	60.3	60.3	60.3

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	26	10
Compressor (air)	No	40		77.7	36	10

Equipment		Results *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Compressor (air)		73.3	69.4	N/A	N/A	N/A	N/A
Compressor (air)		70.5	66.5	N/A	N/A	N/A	N/A
	Total	**73**	**71**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Homes to West	Residential	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	96	0
Compressor (air)	No	40		77.7	96	0

Equipment		Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Compressor (air)		72.0	68.0	N/A	N/A	N/A	N/A
Compressor (air)		72.0	68.0	N/A	N/A	N/A	N/A
	Total	**72**	**71**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/25/2025
Case Description: 1501 Del Norte St Residential - Painting Mitigated

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Park to North	Commercial	55.0	55.0	55.0

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	156	0
Compressor (air)	No	40		77.7	156	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Compressor (air)		67.8	63.8	N/A	N/A	N/A	N/A
Compressor (air)		67.8	63.8	N/A	N/A	N/A	N/A
	Total	**68**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

APPENDIX E

FHWA Model Roadway Noise Calculation Printouts

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING CONDITIONS

Project: 1501 Del Norte Street Residential
Site Conditions: Soft

	Vehicle Mix 1 (Local)				Vehicle Mix 2 (Thoroughfare)				Vehicle Mix 3 (SR-91)			
Vehicle Type	Day	Evening	Night	Daily	Day	Evening	Night	Daily	Day	Evenin	Night	Daily
Automobiles	73.60%	13.60%	10.22%	97.42%	69.50%	12.90%	9.60%	92.00%	63.35%	12.98%	15.19%	91.52%
Medium Trucks	0.90%	0.90%	0.04%	1.84%	1.44%	0.06%	1.50%	3.00%	2.15%	0.39%	1.09%	3.63%
Heavy Trucks	0.35%	0.04%	0.35%	0.74%	2.40%	0.10%	2.50%	5.00%	2.65%	0.25%	1.94%	4.85%

Road Name: Nora Avenue **Segment: North of Driveway 1**

Average Daily Traffic: 1090 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Local

	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.55 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-9.02	-0.67	-1.20	48.54	46.42	45.11	39.10	47.52	48.14	70 dBA:	**2**	**2**
Medium Trucks	71.09	-26.26	-0.67	-1.20	42.95	21.70	27.73	9.43	22.58	25.33	65 dBA:	**4**	**4**
Heavy Trucks	78.74	-30.22	-0.67	-1.20	46.65	21.30	17.90	22.55	28.75	28.84	60 dBA:	**8**	**9**
				Total:	**51.38**	**46.45**	**45.20**	**39.20**	**47.59**	**48.22**	55 dBA:	**18**	**19**

Road Name: Nora Avenue **Segment: North of Del Norte Street**

Average Daily Traffic: 1090 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Local

	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.55 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-9.02	-0.67	-1.20	48.54	46.42	45.11	39.10	47.52	48.14	70 dBA:	**2**	**2**
Medium Trucks	71.09	-26.26	-0.67	-1.20	42.95	21.70	27.73	9.43	22.58	25.33	65 dBA:	**4**	**4**
Heavy Trucks	78.74	-30.22	-0.67	-1.20	46.65	21.30	17.90	22.55	28.75	28.84	60 dBA:	**8**	**9**
				Total:	**51.38**	**46.45**	**45.20**	**39.20**	**47.59**	**48.22**	55 dBA:	**18**	**19**

Road Name: Nora Avenue **Segment: South of Del Norte Street**

Average Daily Traffic: 920 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Local

	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.55 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-9.76	-0.67	-1.20	47.81	45.69	44.37	38.36	46.78	47.41	70 dBA:	**2**	**2**
Medium Trucks	71.09	-27.00	-0.67	-1.20	42.22	20.97	26.99	8.70	21.84	24.59	65 dBA:	**3**	**4**
Heavy Trucks	78.74	-30.95	-0.67	-1.20	45.91	20.56	17.16	21.81	28.01	28.11	60 dBA:	**7**	**8**
				Total:	**50.65**	**45.71**	**44.46**	**38.46**	**46.85**	**47.48**	55 dBA:	**16**	**17**

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING CONDITIONS

Project: 1501 Del Norte Street Residential
Site Conditions: Soft

Road Name: Yaleton Avenue **Segment: South of Del Norte Street**

Average Daily Traffic: 160 Vehicles | Vehicle Speed: 25 MPH | Vehicle Mix: 1 | Roadway Classification: Local

	NOISE PARAMETERS AT 50 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.51 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-17.36	-0.04	-1.20	40.84	38.72	37.41	31.40	39.82	40.44	70 dBA:	**0**	**1**
Medium Trucks	71.09	-34.60	-0.04	-1.20	35.25	14.00	20.02	1.73	14.88	17.63	65 dBA:	**1**	**1**
Heavy Trucks	78.74	-38.55	-0.04	-1.20	38.95	13.60	10.20	14.85	21.05	21.14	60 dBA:	**2**	**3**
				Total:	**43.68**	**38.75**	**37.49**	**31.50**	**39.89**	**40.52**	55 dBA:	**5**	**5**

Road Name: Sunset Avenue **Segment: North of Workman Avenue**

Average Daily Traffic: 20570 Vehicles | Vehicle Speed: 40 MPH | Vehicle Mix: 2 | Roadway Classification: Commercial Thoroughfare

	NOISE PARAMETERS AT 60 FEET FROM CENTERLINE (Equiv. Lane Dist: 53.58 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	1.44	-0.55	-1.20	67.05	64.68	63.38	57.33	65.76	66.39	70 dBA:	**36**	**39**
Medium Trucks	76.31	-13.42	-0.55	-1.20	61.14	41.93	34.15	43.35	49.51	49.54	65 dBA:	**77**	**84**
Heavy Trucks	81.16	-11.20	-0.55	-1.20	68.20	51.21	43.43	52.64	58.79	58.83	60 dBA:	**166**	**180**
				Total:	**71.13**	**64.89**	**63.43**	**58.73**	**66.64**	**67.17**	55 dBA:	**358**	**389**

Road Name: Del Norte Street **Segment: West of Yaleton**

Average Daily Traffic: 280 Vehicles | Vehicle Speed: 25 MPH | Vehicle Mix: 1 | Roadway Classification: Local

	NOISE PARAMETERS AT 35 FEET FROM CENTERLINE (Equiv. Lane Dist: 34.29 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-14.93	2.35	-1.20	45.67	43.54	42.23	36.22	44.64	45.26	70 dBA:	**1**	**1**
Medium Trucks	71.09	-32.17	2.35	-1.20	40.08	18.83	24.85	6.55	19.70	22.45	65 dBA:	**2**	**2**
Heavy Trucks	78.74	-36.12	2.35	-1.20	43.77	18.42	15.02	19.67	25.87	25.97	60 dBA:	**3**	**4**
				Total:	**48.51**	**43.57**	**42.32**	**36.32**	**44.71**	**45.34**	55 dBA:	**7**	**8**

Road Name: Del Norte Street **Segment: East of Yaleton**

Average Daily Traffic: 180 Vehicles | Vehicle Speed: 25 MPH | Vehicle Mix: 1 | Roadway Classification: Local

	NOISE PARAMETERS AT 35 FEET FROM CENTERLINE (Equiv. Lane Dist: 34.29 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-16.85	2.35	-1.20	43.75	41.62	40.31	34.30	42.72	43.35	70 dBA:	**1**	**1**
Medium Trucks	71.09	-34.08	2.35	-1.20	38.16	16.91	22.93	4.63	17.78	20.53	65 dBA:	**1**	**1**
Heavy Trucks	78.74	-38.04	2.35	-1.20	41.85	16.50	13.10	17.75	23.95	24.05	60 dBA:	**2**	**3**
				Total:	**46.59**	**41.65**	**40.40**	**34.40**	**42.79**	**43.42**	55 dBA:	**5**	**6**

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING WITH PROJECT CONDITIONS

Project: 1501 Del Norte Street Residential
Site Conditions: Soft

	Vehicle Mix 1 (Local)				Vehicle Mix 2 (Thoroughfare)				Vehicle Mix 3 (SR-91)			
Vehicle Type	Day	Evening	Night	Daily	Day	Evening	Night	Daily	Day	Evenin	Night	Daily
Automobiles	73.60%	13.60%	10.22%	97.42%	69.50%	12.90%	9.60%	92.00%	63.35%	12.98%	15.19%	91.52%
Medium Trucks	0.90%	0.90%	0.04%	1.84%	1.44%	0.06%	1.50%	3.00%	2.15%	0.39%	1.09%	3.63%
Heavy Trucks	0.35%	0.04%	0.35%	0.74%	2.40%	0.10%	2.50%	5.00%	2.65%	0.25%	1.94%	4.85%

Road Name: Nora Avenue **Segment: North of Driveway 1**

Average Daily Traffic: 1635 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Local

	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.55 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-7.26	-0.67	-1.20	50.31	48.18	46.87	40.86	49.28	49.91	70 dBA:	**2**	**3**
Medium Trucks	71.09	-24.50	-0.67	-1.20	44.72	23.47	29.49	11.19	24.34	27.09	65 dBA:	**5**	**5**
Heavy Trucks	78.74	-28.46	-0.67	-1.20	48.41	23.06	19.66	24.31	30.51	30.61	60 dBA:	**11**	**12**
				Total:	**53.15**	**48.21**	**46.96**	**40.96**	**49.35**	**49.98**	55 dBA:	**23**	**25**

Road Name: Nora Avenue **Segment: North of Del Norte Street**

Average Daily Traffic: 1308 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Local

	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.55 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-8.23	-0.67	-1.20	49.34	47.21	45.90	39.89	48.31	48.94	70 dBA:	**2**	**2**
Medium Trucks	71.09	-25.47	-0.67	-1.20	43.75	22.50	28.52	10.22	23.37	26.12	65 dBA:	**4**	**5**
Heavy Trucks	78.74	-29.43	-0.67	-1.20	47.44	22.09	18.69	23.34	29.54	29.64	60 dBA:	**9**	**10**
				Total:	**52.18**	**47.24**	**45.99**	**39.99**	**48.38**	**49.01**	55 dBA:	**20**	**22**

Road Name: Nora Avenue **Segment: South of Del Norte Street**

Average Daily Traffic: 1174 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Local

	NOISE PARAMETERS AT 55 FEET FROM CENTERLINE (Equiv. Lane Dist: 54.55 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-8.70	-0.67	-1.20	48.87	46.75	45.43	39.42	47.84	48.47	70 dBA:	**2**	**2**
Medium Trucks	71.09	-25.94	-0.67	-1.20	43.28	22.03	28.05	9.76	22.90	25.65	65 dBA:	**4**	**4**
Heavy Trucks	78.74	-29.89	-0.67	-1.20	46.98	21.62	18.22	22.87	29.07	29.17	60 dBA:	**9**	**9**
				Total:	**51.71**	**46.77**	**45.52**	**39.52**	**47.91**	**48.54**	55 dBA:	**19**	**20**

FHWA-RD-77-108 HIGHWAY TRAFFIC NOISE PREDICTION MODEL

Scenario: EXISTING WITH PROJECT CONDITIONS

Project: 1501 Del Norte Street Residential
Site Conditions: Soft

Road Name: Yaleton Avenue **Segment: South of Del Norte Street**
Average Daily Traffic: 414 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Local

	NOISE PARAMETERS AT 50 FEET FROM CENTERLINE (Equiv. Lane Dist: 49.51 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-13.22	-0.04	-1.20	44.98	42.85	41.54	35.53	43.95	44.58	70 dBA:	**1**	**1**
Medium Trucks	71.09	-30.46	-0.04	-1.20	39.39	18.14	24.16	5.86	19.01	21.76	65 dBA:	**2**	**2**
Heavy Trucks	78.74	-34.42	-0.04	-1.20	43.08	17.73	14.33	18.98	25.18	25.28	60 dBA:	**4**	**5**
				Total:	**47.82**	**42.88**	**41.63**	**35.63**	**44.02**	**44.65**	55 dBA:	**9**	**10**

Road Name: Sunset Avenue **Segment: North of Workman Avenue**
Average Daily Traffic: 21079 Vehicles Vehicle Speed: 40 MPH Vehicle Mix: 2 Roadway Classification: Commercial Thoroughfare

	NOISE PARAMETERS AT 60 FEET FROM CENTERLINE (Equiv. Lane Dist: 53.58 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	67.36	1.55	-0.55	-1.20	67.16	64.78	63.49	57.44	65.87	66.50	70 dBA:	**36**	**39**
Medium Trucks	76.31	-13.32	-0.55	-1.20	61.24	42.03	34.25	43.46	49.62	49.65	65 dBA:	**78**	**85**
Heavy Trucks	81.16	-11.10	-0.55	-1.20	68.31	51.32	43.54	52.74	58.90	58.93	60 dBA:	**169**	**183**
				Total:	**71.24**	**65.00**	**63.54**	**58.83**	**66.75**	**67.28**	55 dBA:	**364**	**395**

Road Name: Del Norte Street **Segment: West of Yaleton**
Average Daily Traffic: 571 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Local

	NOISE PARAMETERS AT 35 FEET FROM CENTERLINE (Equiv. Lane Dist: 34.29 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-11.83	2.35	-1.20	48.76	46.64	45.32	39.31	47.73	48.36	70 dBA:	**1**	**1**
Medium Trucks	71.09	-29.07	2.35	-1.20	43.17	21.92	27.94	9.65	22.79	25.54	65 dBA:	**2**	**3**
Heavy Trucks	78.74	-33.03	2.35	-1.20	46.87	21.51	18.12	22.76	28.96	29.06	60 dBA:	**5**	**6**
				Total:	**51.60**	**46.66**	**45.41**	**39.41**	**47.80**	**48.43**	55 dBA:	**12**	**13**

Road Name: Del Norte Street **Segment: East of Yaleton**
Average Daily Traffic: 798 Vehicles Vehicle Speed: 25 MPH Vehicle Mix: 1 Roadway Classification: Local

	NOISE PARAMETERS AT 35 FEET FROM CENTERLINE (Equiv. Lane Dist: 34.29 ft)										**Centerline Distance to**		
	Noise Adjustments				**Unmitigated Noise Levels**						**Noise Contour (in feet)**		
Vehicle Type	REMEL	Traffic Adj.	Dist Adj.	Finite Adj	Leq Peak	Leq Day	Leq Eve.	Leq Night	Ldn	CNEL		Ldn	CNEL
Automobiles	59.44	-10.38	2.35	-1.20	50.21	48.09	46.78	40.77	49.19	49.81	70 dBA:	**1**	**2**
Medium Trucks	71.09	-27.62	2.35	-1.20	44.62	23.37	29.39	11.10	24.25	27.00	65 dBA:	**3**	**3**
Heavy Trucks	78.74	-31.57	2.35	-1.20	48.32	22.97	19.57	24.22	30.42	30.51	60 dBA:	**7**	**7**
				Total:	**53.05**	**48.12**	**46.87**	**40.87**	**49.26**	**49.89**	55 dBA:	**14**	**16**

Appendix I

Vehicle Miles Traveled (VMT) Screening Evaluation

TECHNICAL MEMORANDUM

DATE: April 29, 2025
TO: Greg Martin, Rincon Consultants, Inc.
FROM: Alex So, Urban Crossroads, Inc.
JOB NO: 16435-02 VMT

SUBJECT: 1501 DEL NORTE STREET RESIDENTIAL VEHICLE MILES TRAVELED (VMT) SCREENING EVALUATION

Urban Crossroads, Inc. has completed the following Vehicle Miles Traveled (VMT) Screening Evaluation for the 1501 Del Norte Street Residential (Project) located in the City of West Covina.

PROJECT OVERVIEW

The Project involves the demolition of the existing buildings and structures on site followed by construction of 34 single-family detached homes and 248 attached townhomes, for a total of 282 dwelling units. The project site is 13.56 acres, of which 13.19 acres would be developed for residential uses, and the additional 0.37 acres would be converted and used as an extension and dedication of Del Norte Street from its current terminus east to Sunset Avenue. The Project site plan is included in Attachment A.

BACKGROUND

The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. The VMT screening evaluation presented in this report has been developed based on the adopted City of West Covina City Resolution No. 2020-57 (June 2020) (**City Guidelines**) (1).

VMT SCREENING

The City Guidelines recommends standardized VMT screening methods that can be used to identify when a proposed land use project is anticipated to result in a less than significant VMT impact thereby eliminating the need to conduct a full model-based analysis. The San Gabriel Valley Council of Governments (SGVCOG) provides a VMT screening tool (**Screening Tool**) to assist with conducting VMT screening for individual land use projects. The Screening Tool is designed to assist in screening and estimating project-generated VMT for certain types of land use projects in the San Gabriel Valley and its member agencies. The City's screening methods are listed below, and a land use project need only meet one of the screening criteria to result in a less than significant impact:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening
- Affordable Housing Screening

Transit Priority Area (TPA) Screening

Consistent with City Guidelines, projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing "major transit stop"[1] or an existing stop along a "high-quality transit corridor"[2]) may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project meets the following sub criteria:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the City;
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Southern California Association of Governments [SCAG]); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Based on the Screening Tool results included in Attachment B, the Project is located within a TPA. As such, the applicable TPA sub-criteria will be reviewed to determine consistency with the City's VMT screening approach.

- The Project proposes to develop a total of 461,687 square feet of inhabitable living space on 13.19 acres. This results in an estimated FAR of 0.8, which meets the City's minimum FAR requirement.
- The Project includes a reduction in parking requirements below those outlined in the West Covina Municipal Code, as permitted under the Specific Plan provisions.
- The Project consists of residential uses located on parcels with a zoning designation that is also identified as residential and is consistent with the City's future development plans and the applicable Sustainable Communities Strategy.
- The Project does not propose to replace any existing residential units.

The Project is located within a TPA and meets all sub-criteria associated with the City's TPA screening requirements.

TPA Screening criteria is met.

Low VMT Area Screening

The City Guidelines state that projects that have a VMT per service population (population and employees) 15% below the baseline Citywide VMT per service population are presumed to have a less than significant impact. The parcels containing the proposed Project were selected and the Screening Tool was run for VMT per Service Population (i.e., population and employment) measure of VMT. The Project's transportation analysis zone (TAZ) 2230630o was found to generate 25.5 VMT per service population, whereas the Citywide baseline VMT per service population is 31.8 VMT per service population and a 15% below baseline threshold of 27.1 VMT per service population.

[1] Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.")

[2] Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.")

Based on the Screening Tool results presented in Attachment B, the Project is located within a low VMT generating area.

Low VMT Area Screening criteria is met.

PROJECT TYPE SCREENING

As directed by the City Guidelines, local serving retail with buildings less than 50,000 square feet and other local serving essential services (e.g., day care centers, public schools, medical/dental office buildings, etc.) are presumed to have a less than significant VMT impact. In addition, City Guidelines recognize projects generating less than 110 daily trips, as having a less than significant impact on VMT.

The Project does not intend to develop any local serving retail, local essential services, nor is it expected to generate less than 110 daily trips.

Project Type Screening criteria is not met.

AFFORDABLE HOUSING SCREENING

The City Guidelines state residential or mixed-use development projects with units that are deed-restricted, income-qualified housing can be presumed to have a less-than-significant transportation impact and would not require a detailed VMT analysis. The Project is not proposing any income-qualified units.

Affordable Housing Screening criteria is not met.

CONCLUSION

Based on our preliminary review of applicable VMT screening thresholds as recommended by the SGVCOG, the Project would meet the **TPA Screening and Low VMT Area** screening criteria. The Project is presumed to have a less than significant VMT impact; no further VMT analysis is required.

If you have any questions, please contact me directly at aso@urbanxroads.com.

REFERENCES

1. **City of West Covina.** *ADOPTING "VEHICLE MILES TRAVELED" THRESHOLDS OF SIGNIFICANCE FOR PURPOSES OF ANALYZING TRANSPORTATION IMPACTS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.* June 2020.

ATTACHMENT A:
PROJECT SITE PLAN

EXISTING
DEL NORTE PARK
NORA AVENUE
DRIVEWAY F
DRIVEWAY E
DRIVEWAY D
DRIVEWAY C
DRIVEWAY V
DRIVEWAY G
DRIVEWAY H
DRIVEWAY M
DRIVEWAY A
EXISTING
DEL NORTE PARK
EXISTING
MEDICAL CLINIC
EXISTING
SINGLE FAMILY
DEL NORTE STREET
EXISTING
SINGLE FAMILY
SUNSET AVENUE

ATTACHMENT B
SGVCOG SCREENING TOOL RESULTS

SGVCOG VMT Evaluation Tool Report

Project Details

Timestamp of Analysis: May 15, 2024, 01:34:22 PM

Project Name: 1501 Del Norte

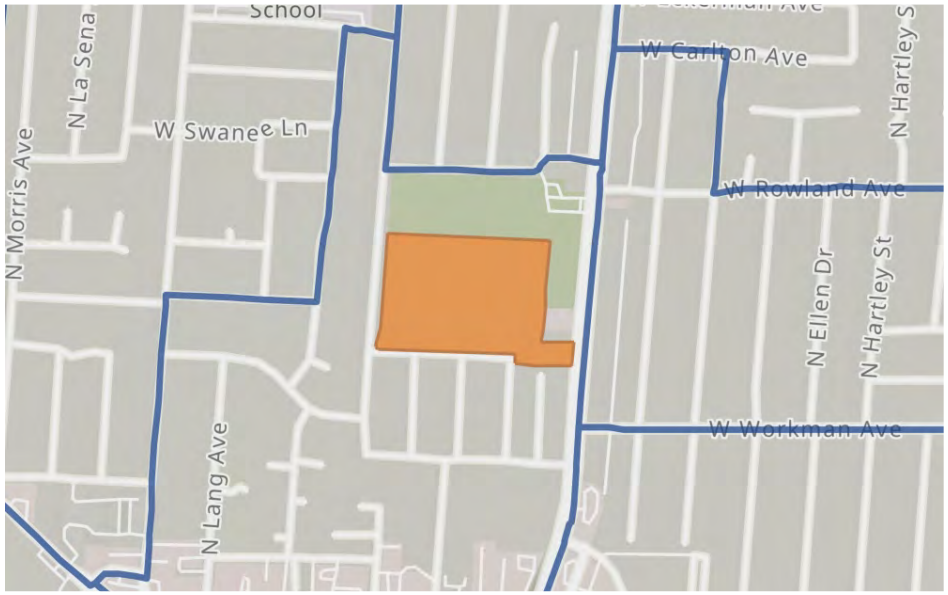
Project Description: 338 multi-family residential

Project Location

jurisdiction:
West Covina

apn	TAZ
8458-020-901	22306300

Inside a TPA?
No (Fail)



Analysis Details

Data Version: SCAG Regional Travel Demand Model
2016 RTP Base Year 2012

Analysis Methodology: TAZ

Baseline Year: 2024

Project Land Use

Residential:

Single Family DU:

Multifamily DU:

Total DUs: 0

Non-Residential:

Office KSF:

Local Serving Retail KSF:

Industrial KSF:

Residential Affordability (percent of all units):

Extremely Low Income: 0 %

Very Low Income: 0 %

Low Income: 0 %

Parking:

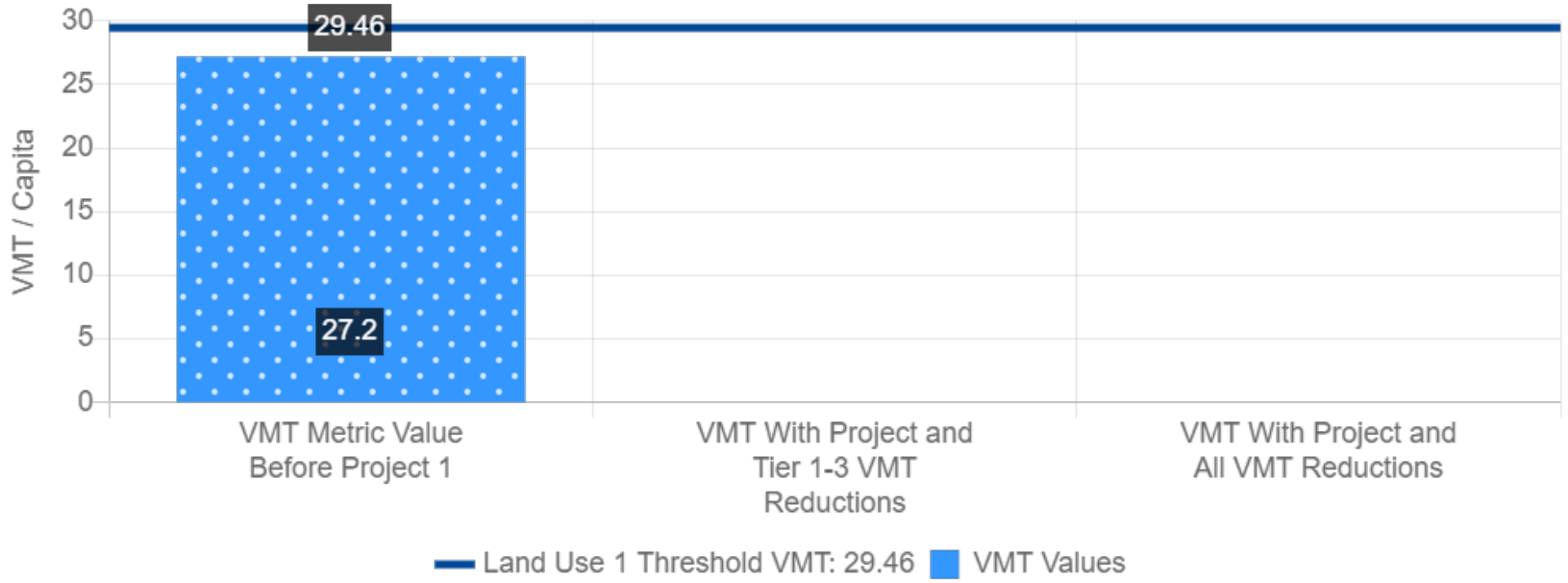
Motor Vehicle Parking:

Bicycle Parking:

Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Without Project 1:	Total VMT per Service Population
VMT Baseline Description 1:	SGVCOG Average
VMT Baseline Value 1:	34.66
VMT Threshold Description 1:	-15%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	27.2	null	null
Low VMT Screening Analysis	Yes (Pass)	null	null



Appendix J

Traffic Study Scoping Agreement

SCOPING AGREEMENT

DATE: June 3, 2025
TO: Jo-Anne Burns, City of West Covina
FROM: Charlene So, Urban Crossroads, Inc.
JOB NO: 16435-01 TA Scope

SUBJECT: DEL NORTE (TENTATIVE TRACT NO. 044618) TRAFFIC STUDY SCOPING AGREEMENT

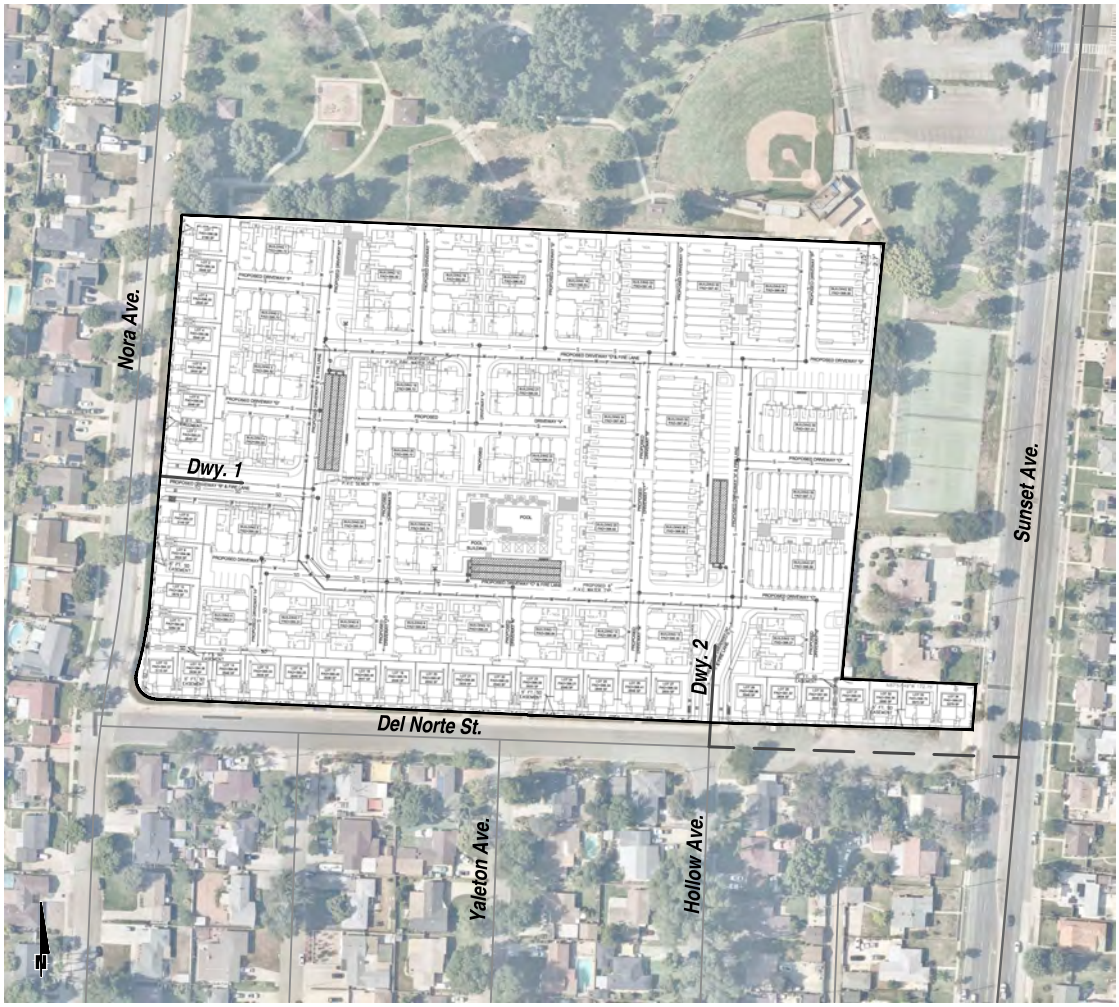
Urban Crossroads, Inc. has prepared the following Traffic Study Scoping Agreement for the Del Norte (Project), which is located at 1501 Del Norte Street in the City of West Covina. This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations based on preliminary comments received from the City's Traffic Consultant.

PROJECT DESCRIPTION

It is our understanding that the Project is to consist of 34 single family detached residential dwelling units, 138 townhomes, and 110 (4-story) stacked flats for a total of 282 dwelling units on a 13.8-acre site. The existing site includes structures that were previously utilized for the Del Norte Intermediate School site which closed in 1989 and were then utilized for the East San Gabriel Valley Regional Occupational Program and Technical Center and later utilized by the East San Gabriel Valley ROP Technical Center. However, the facility has since relocated and the existing structures are currently vacant. As such, no credit has been considered for the purposes of the Traffic Study. Exhibit 1 shows the preliminary site plan.

The Project proposes an access point on Nora Avenue (secondary access) and one on Del Norte Street at the northerly extension of Hollow Avenue (primary access). In addition, the Project will be extending Del Norte Street from the existing terminus at Hollow Avenue out to Sunset Avenue to the east creating a new intersection. The new intersection of Sunset Avenue and Del Norte Street will be restricted to right-in/right-out access only. The Project entries are not proposed to be gated. The Project's anticipated Opening Year is 2028.

EXHIBIT 1: SITE PLAN



TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) were used to estimate the trip generation. The following trip generation rates were utilized for calculating the trip generation for the proposed Project (see also Table 1):

- Single Family Detached Housing (ITE Land Use Code 210) has been used to derive site specific trip generation estimates for up to 34 dwelling units.
- Single Family Attached Housing (ITE Land Use Code 215) has been used to derive site specific trip generation estimates for up to 138 townhomes.
- Multifamily Housing (Mid-Rise, 4-10 Floors) has been used to derive site specific trip generation estimates for up to 110 4-story stacked flats.

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project are also shown in Table 1. The proposed Project is anticipated to generate 1,816 two-way trip-ends per day with 131 AM peak hour trips and 154 PM peak hour trips.

TABLE 1: PROJECT TRIP GENERATION SUMMARY

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Single Family Attached	DU	215	0.15	0.33	0.48	0.32	0.25	0.57	7.20
Multifamily (Mid-Rise)	DU	221	0.09	0.28	0.37	0.24	0.15	0.39	4.54

[1] Trip Generation Source: ITE Trip Generation Manual, 11th Edition (2021).

[2] DU = Dwelling Units

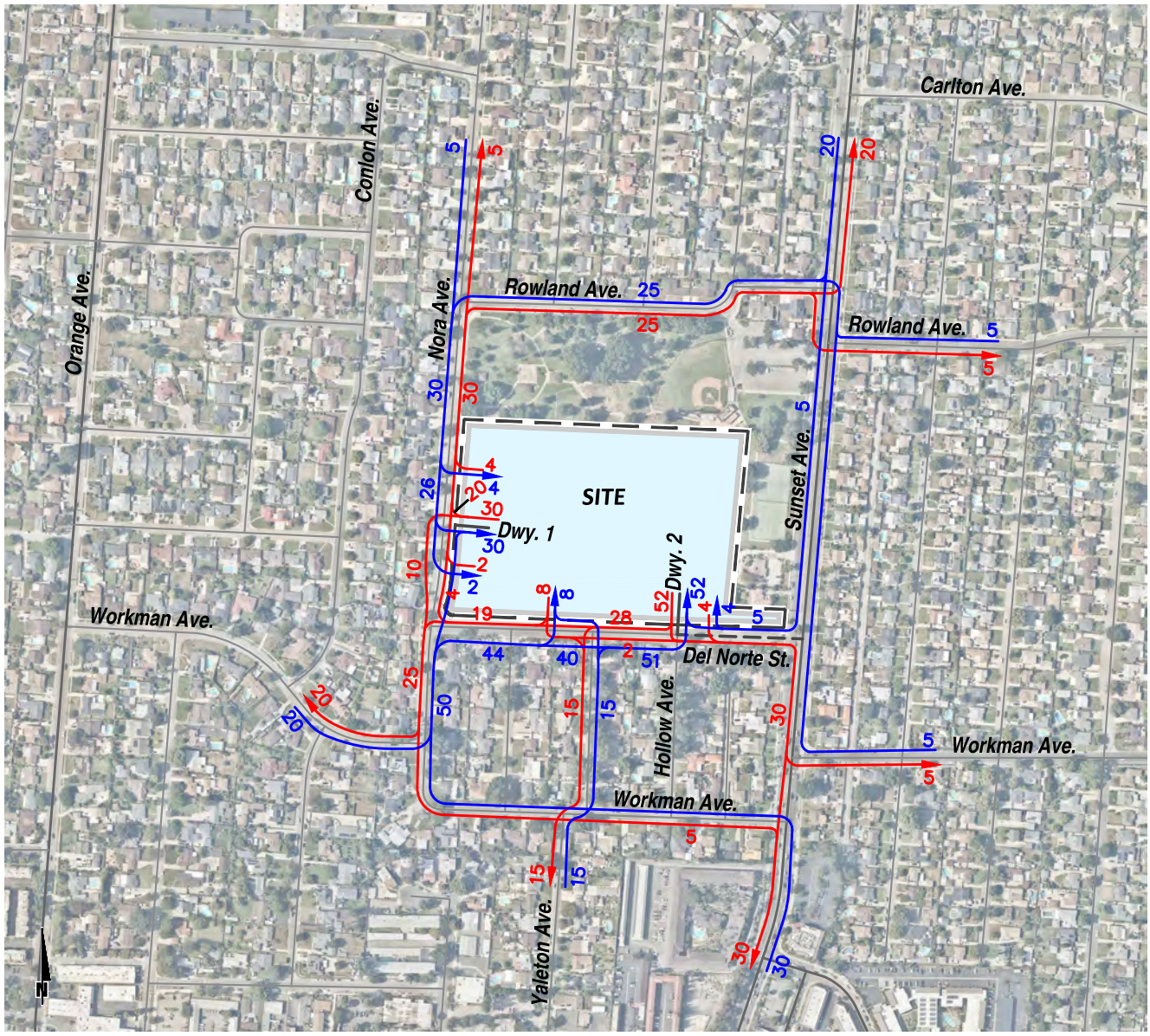
Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached	34	DU	6	18	24	20	12	32	322
Townhomes	138	DU	21	46	67	45	34	79	994
Stacked Flats (4-story)	110	DU	9	31	40	26	17	43	500
Total Trips	**282**	**DU**	**36**	**95**	**131**	**91**	**63**	**154**	**1,816**

[1] DU = Dwelling Units

TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered to identify the route where the Project traffic would distribute. The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution patterns used for the Project are shown in Exhibit 2.

EXHIBIT 2: PROJECT TRIP DISTRIBUTION



LEGEND:

10 = *Percent To/From Project*
= *Inbound Trip Distribution*
= *Outbound Trip Distribution*

ANALYSIS SCENARIOS

Consistent with the City's Guidelines, intersection analysis will be provided for the following analysis scenarios:

- Existing (2025) Conditions
- Existing plus Project Conditions
- Opening Year (2028) Without Project (with cumulatives and ambient growth)
- Opening Year (2028) With Project
- Horizon Year Without Project
- Horizon Year With Project

The project will require a General Plan Amendment from Civic School to Medium and High Density Residential and to a Specific Plan for density and design. As such, Horizon Year analysis scenarios are included in the list above.

All study area intersections will be evaluated using the Highway Capacity Manual (HCM) 7th Edition analysis methodology. The study area that is proposed to be evaluated is shown in Exhibit 3 and listed in Table 2. The study area has been selected based on a 50 peak hour trip criteria (where the Project would be contributing 50 or more peak hour trips).

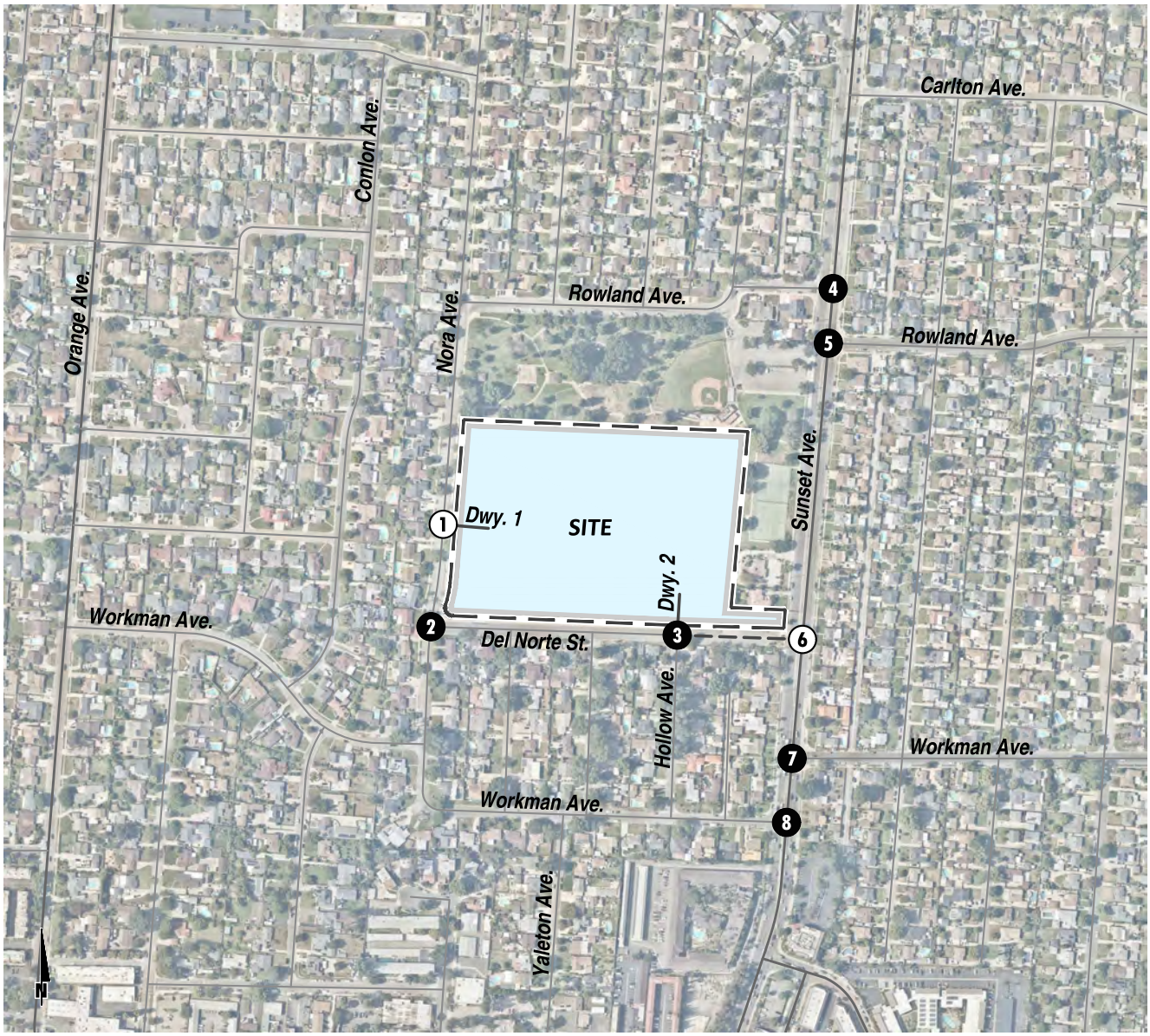
TABLE 2: STUDY AREA INTERSECTIONS

ID	Intersection Location	Jurisdiction
1	Nora Av. & Driveway 1 (Future)	West Covina
2	Nora Av. & Del Norte St.	West Covina
3	Hollow Av./Driveway 2 & Del Norte St.	West Covina
4	Sunset Av. & Rowland Av. - North	West Covina
5	Sunset Av. & Rowland Av. - South	West Covina
6	Sunset Av. & Del Norte St. (Future)	West Covina
7	Sunset Av. & Workman Av. - North	West Covina
8	Sunset Av. & Workman Av. - South	West Covina

TRAFFIC COUNTS

Traffic counts (classified by vehicle type) were conducted when local schools were in session and operating on a typical bell schedule (May 29, 2025). No adjustments are proposed to the traffic counts for the baseline traffic condition with the exception of volume balancing between closely spaced intersections (if necessary). Traffic counts were collected between the hours of 7:00-9:00 AM and 4:00-6:00 PM along with applicable pedestrian and bicycle information for each analysis location shown in Exhibit 3.

EXHIBIT 3: STUDY AREA



LEGEND:

● = *Existing Intersection Analysis Location*

○ = *Future Intersection Analysis Location*

AMBIENT GROWTH

An ambient growth rate of 1.0% per year is proposed for the study area intersections to approximate background growth not identified by nearby cumulative development projects. As such, a total of 3.03% will be applied to the baseline for 2028 conditions (1.0% per year over 3 years).

CUMULATIVE PROJECTS

It is requested that the City provide current cumulative projects within the study area for inclusion in the Traffic Analysis.

SPECIAL ISSUES

The following special issues will also be addressed:

- A Vehicle Miles Traveled (VMT) Analysis will be addressed under separate cover.
- Conduct traffic signal warrant analysis for all existing and future unsignalized study area intersections, which also includes all Project driveways that do not have access restrictions. Peak hour volume warrants will be evaluated for existing intersections and planning-level (ADT) warrants for all future intersections.
- Discussion of internal circulation and parking.
- Discuss pedestrian connections – sidewalks and ADA ramps.
- Identify locations for loading/unloading zones for larger trucks.
- Identify trash enclosures within the development.
- Line of sight analysis per AASHTO stopping distance tables at each Project driveway will be conducted in order to identify potential on-street parking restrictions. UXR to identify the distance of red curb needed on either side of each driveway to maintain clear sight triangles, which includes vegetation proposed adjacent to each driveway.
- Any pedestrian or transit improvements along Project frontage streets should be considered/identified (specifically at uncontrolled crossing at Sunset Avenue and Rowland Avenue).
- Identify any potential impacts to existing area residents due to increased traffic on Nora Avenue or Del Norte Avenue.
- A queuing analysis for the Project driveways will be conducted along with Studebaker/2nd. Queuing will also be addressed for the freeway off-ramps to ensure no spillback onto the mainline.
- Identify construction impacts by including a general discussion on duration, type of work, type of vehicles, how construction vehicles will enter the site, staging areas, etc. and identify ways in which construction will minimize impacts on the adjacent neighborhoods.

If you have any questions, please contact me directly at cso@urbanxroads.com.

Appendix K

Del Norte Traffic Engineering and Construction Evaluation

TECHNICAL MEMORANDUM

DATE: July 18, 2025
TO: John Moreland, Rincon Consulting
FROM: Charlene So, Urban Crossroads, Inc.
Isabella Anaya, Urban Crossroads, Inc.
JOB NO: 16435-03 Evaluation Memo

SUBJECT: DEL NORTE TRAFFIC ENGINEERING AND CONSTRUCTION EVALUATION

Urban Crossroads, Inc. has prepared the following Traffic Engineering and Construction Evaluation for the Del Norte development (Project), which is located at 1501 Del Norte Street in the City of West Covina, as shown in Exhibit 1. Specifically, this evaluation provides a review of the pedestrian connection in the vicinity of the Project, pedestrian and transit improvements on frontage streets, sight distance evaluation of Project driveways, and a discussion of potential construction impacts.

PROJECT OVERVIEW

The proposed Project is to consist of 34 single family detached residential dwelling units, 138 townhomes, and 110 (4-story) stacked flats for a total of 282 dwelling units on a 13.8-acre site. The existing site includes structures that were previously utilized for the Del Norte Intermediate School site which closed in 1989 and was then utilized for the East San Gabriel Valley Regional Occupational Program Technical Center. However, the facility has since relocated and the existing structures are currently vacant. Exhibit 2 shows the preliminary site plan.

The Project proposes an access point on Nora Avenue (secondary access) and one on Del Norte Street at the northerly extension of Hollow Avenue (primary access). In addition, the Project will be extending Del Norte Street from the existing terminus at Hollow Avenue easterly out towards Sunset Avenue creating a new intersection. The new intersection of Sunset Avenue and Del Norte Street will be restricted to right-in/right-out access only, which will be physically controlled by the existing raised median on Sunset Avenue. The Project entries are not proposed to be gated. The Project's anticipated Opening Year is 2029.

EXHIBIT 1: PROJECT LOCATION

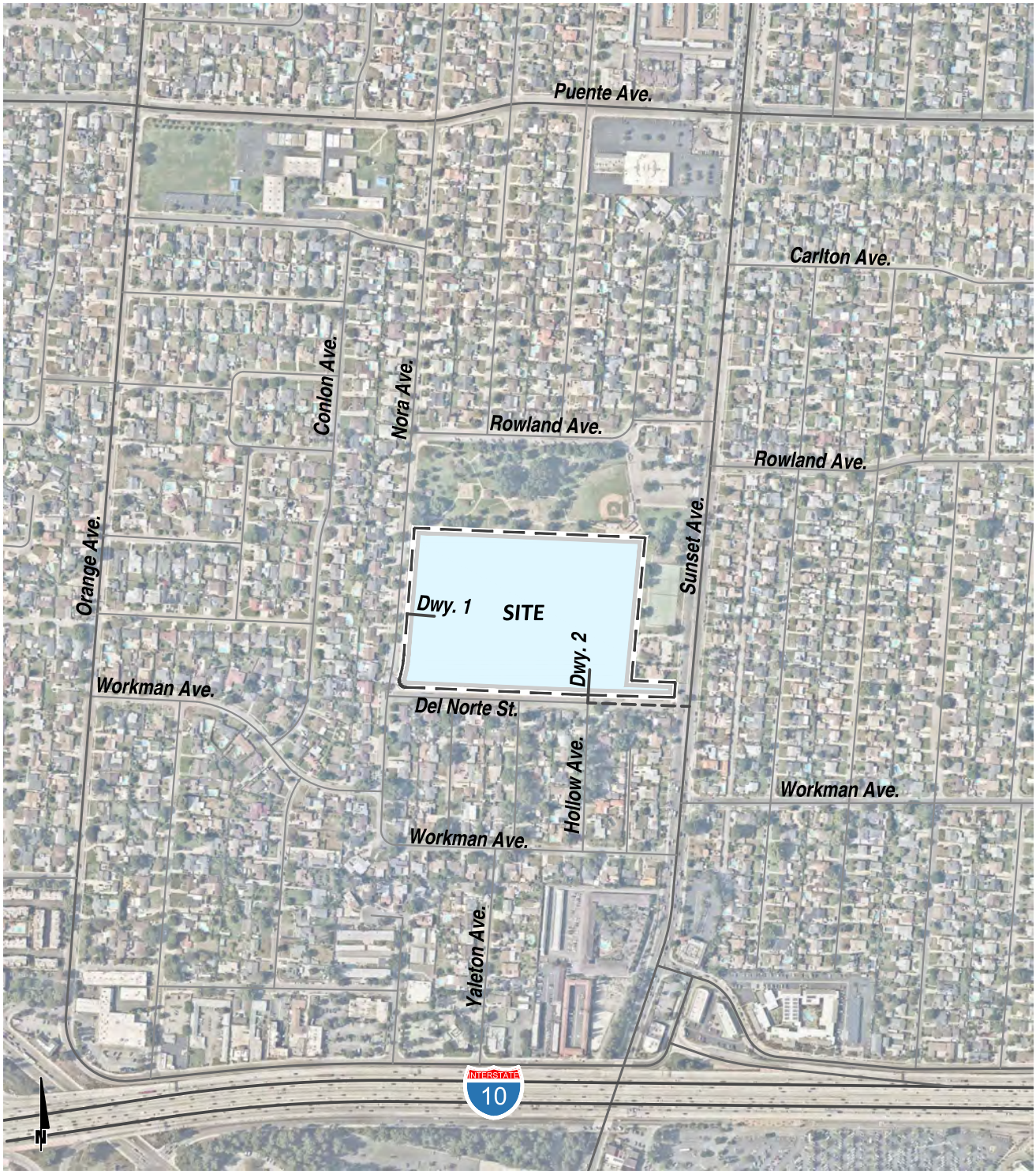


EXHIBIT 2: PRELIMINARY SITE PLAN

PEDESTRIAN CONNECTIONS

This section provides a review of existing pedestrian and transit facilities, and improvements to those site facilities that the Project would be responsible for. Per Chapter 7, Article 11 of the City of West Covina Municipal Code (WCMC), any person, owner, lessee or agent constructing commercial, residential, or industrial buildings shall also provide for the construction or installation to City Standards, of sidewalks, curbs, etc., unless such improvements already exist along all street frontages adjoining the lot on which the building is to be constructed.

BICYCLE & PEDESTRIAN FACILITIES

Sidewalks

In accordance with Chapter 19, Article II of the WCMC, the Project is responsible for the construction of sidewalks along the Project boundary in compliance with City Standards. For multiple-family residential projects, sidewalk widths must be a minimum of five (5) feet. On full-width sidewalks, there should not be less than one (1) tree well provided for each forty (40) linear feet. A greater distance between tree wells may be permitted if there are existing poles, signs, hydrants, etc., along the given area.

Concrete sidewalks will be provided along the residential units for internal circulation, and street sidewalks will be constructed along the Project's boundary on both Nora Avenue and Del Norte Street. The Project is also proposing a potential City park sidewalk that would connect the northeast region of the Project to the existing Del Norte Park located to the north. The Project will be providing connections to the existing park via a connection with overhead portal to the northwest end and northeast end of the Project. The Project will provide street trees along Nora Avenue and Del Norte Street, and accent trees along the Project's internal sidewalks.

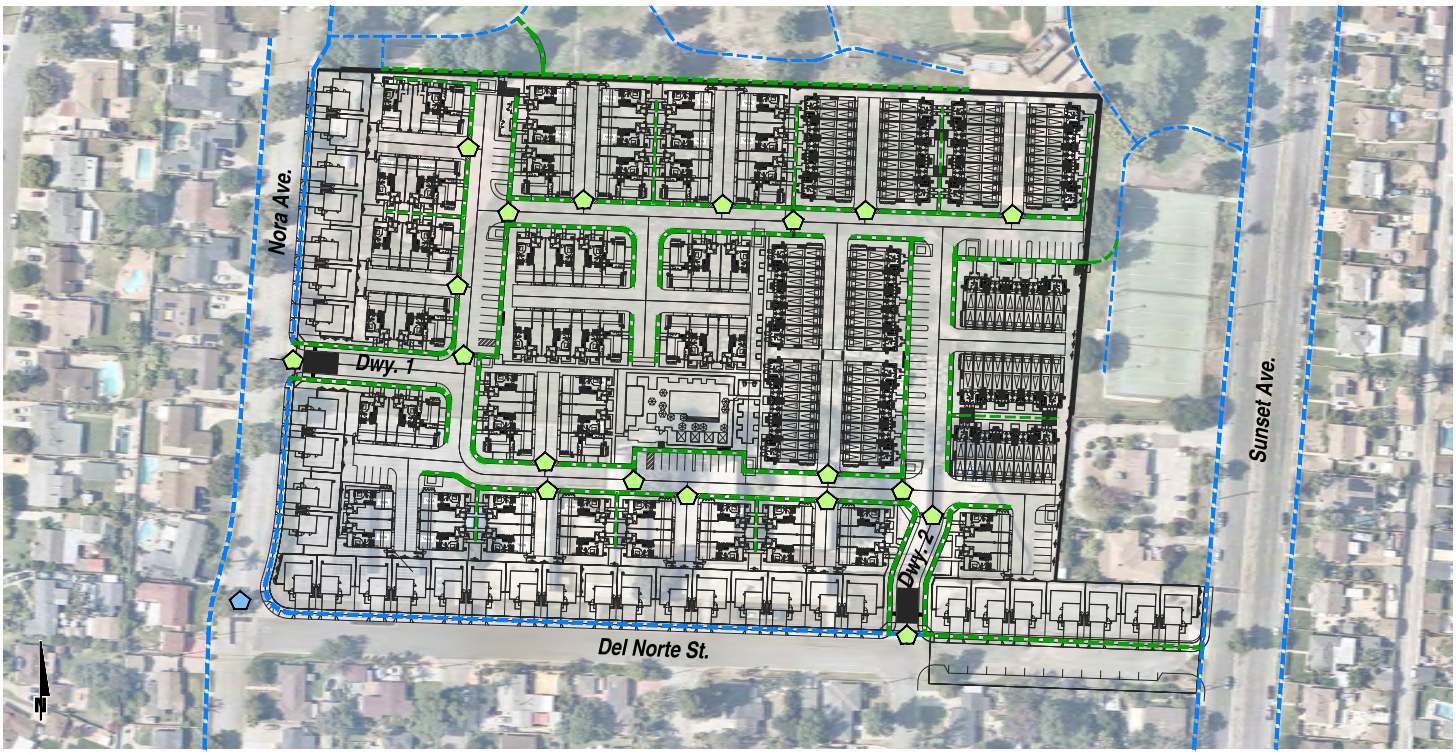
Crosswalks

In accordance with Chapter 22, Article 6 of the WCMC, the traffic authority may establish, designate and maintain marked crosswalks at intersections and other places by appropriate devices, marks, or lines upon the surface of the roadway. The Project proposes two (2) driveway entrances, one along Nora Avenue, and another along Del Norte Street. The curb-to-curb length for both driveways is twenty-six (26) feet. The driveways are stop controlled for vehicles exiting the Project, giving pedestrians the right way when crossing. No formal crosswalk markings will be established at the Project driveways, but the corners will provide the required 2010 Americans with Disabilities Act (ADA) compliant ramps.

With the construction of the new right-in, right-out intersection of Sunset Avenue and Del Norte Street, it is the Project's responsibility to construct a north-south crosswalk connection along the Project's boundary. The proposed intersection of Sunset Avenue & Del Norte Street will be stop controlled on the eastbound approach (vehicles exiting from Del North Street to make a right and head southbound on Sunset Avenue), allowing pedestrians that are accessing the existing Del Norte Park to safely use the proposed north-south crosswalk connection. Due to the existing median on Sunset Avenue, no east-west crosswalk connection from the Project will be constructed across Sunset Avenue at Del Norte Street. There is also an existing marked mid-block pedestrian crosswalk to the north across Sunset Avenue at Rowland Avenue that provides direct access to the Del Norte Park.

Exhibit 3 shows the existing and proposed sidewalks and crosswalk connections in the vicinity of the Project.

EXHIBIT 3: PROJECT SIDEWALKS AND CROSSWALKS



Bike Paths

The City of West Covina does not have an adopted bicycle plan. Chapter 22, Article III of the WCMC defines standards for Class I Bike Paths, Class II Bike Lanes, and Class III Shared Routes. A Class I Bike Path is an exclusive, off-road facility, and a Class III Shared Route is a street designated as a bicycle route (typically signed but not striped, shared space with vehicles). Class II Bike Lanes are divided into Class IIa (no parking) and Class IIb (parking permitted) categories and are striped, on-street facilities (typically curb-adjacent).

As stated in the City of West Covina General Plan, the City lacks any special facilities for cyclists outside of the Downtown area. No bicycle facilities have been identified surrounding the Project.

ADA Ramps

Pursuant to Chapter 4, Section 406 Curb Ramps of the 2010 ADA Standards for Accessible Design, counter slopes adjoining road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20 (5%). Transitions between curb ramps, sidewalks, and streets must be flush and free of vertical changes in level. Curb landings shall be provided at the tops of curb ramps, and the landing clear length shall be thirty-six (36) inches minimum with the landing clear width being as wide as the curb ramp.

In addition to the 2010 ADA Standards, curb ramp construction in California must comply with the California Building Code (CBC), Chapter 11B. This includes stricter slope controls, clear landing dimensions, and detectable warning surface requirements. All curb ramps must have top landings of at least 36 inches in length (consistent with ADA), be aligned with the path of travel, and feature truncated dome detectable warnings in contrasting color and texture. Curb ramp design and construction must ensure flush transitions and no vertical level changes between the ramp and adjacent surfaces (also consistent with ADA). Compliance with these standards is required for all public and private projects and will be enforced during inspection and acceptance.

It is the Project's responsibility to ensure that the curb ramps at the Project driveways and at the proposed intersection of Sunset Avenue and Del Norte Street adhere to the ADA curb ramp design standards, as shown in Exhibit 4.

Transit Service

The Project is currently served by Foothill Transit, a community-oriented public transit agency serving the San Gabriel Valley, Pomona Valley, and downtown Los Angeles. The existing transit route within the vicinity of the Project is shown in Exhibit 5. As shown in Exhibit 5, the transit line that runs along Sunset Avenue which could potentially serve the Project is Line 185: Azusa – West Covina – Puente Hills Mall via Irwindale. The following bus stops in the Project's vicinity are as follows:

- Sunset Avenue & Rowland Avenue (Northbound) – Stop 2524
- Sunset Avenue & Rowland Avenue (Southbound) – Stop 2525
- Sunset Avenue & Workman Avenue (Northbound) – Stop 2534
- Sunset Avenue & Workman Avenue (Southbound) – Stop 2535

Service times for the stops along Foothill Transit Route 185 are approximately every 30 minutes during the weekday peak hours. Transit service should be reviewed periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. As such, it is

recommended that the Project Applicant work in conjunction with the City to potentially provide bus service to the site.

In January 2025, the City of West Covina phased out the Red and Blue shuttle services to shift towards the City's new Micro-Transit service, "Go West Covina." The new shuttle service started in November 2024 and aims to provide on-demand, app-based transit in vehicles. Go West Covina serves the City of West Covina free of charge Monday – Friday from 7AM to 7PM. The implementation of the City's new micro-transit service can serve the riders that once used the Red and Blue shuttle service stops along Sunset Avenue and Workman Avenue near the proposed Project.

No transit improvements (bus stops, bus turnout, etc.) have been identified as part of the Project's construction along its frontages.

EXHIBIT 4: ADA RAMPS

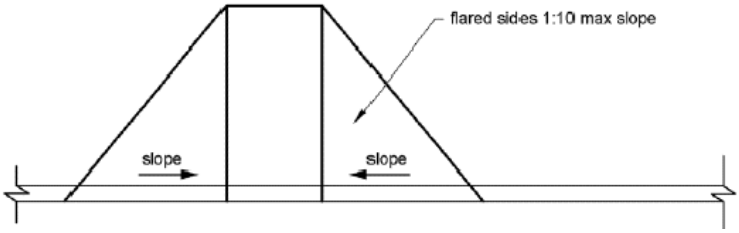


FIGURE 406.2

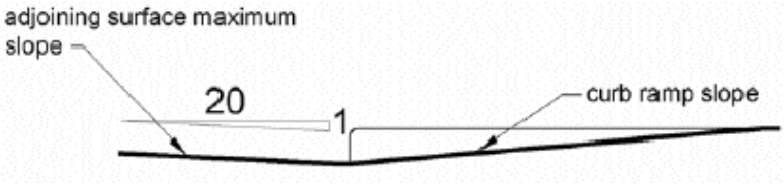


FIGURE 406.3

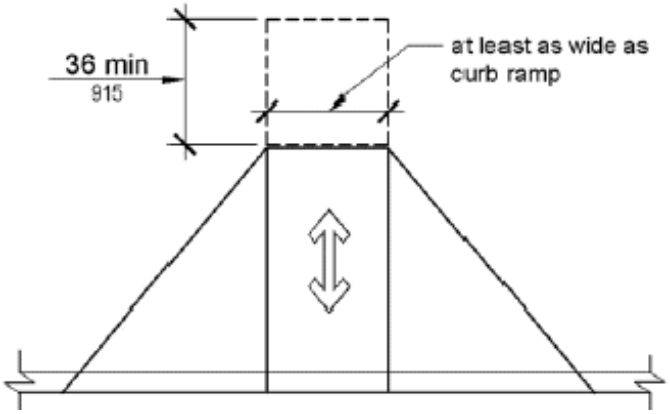
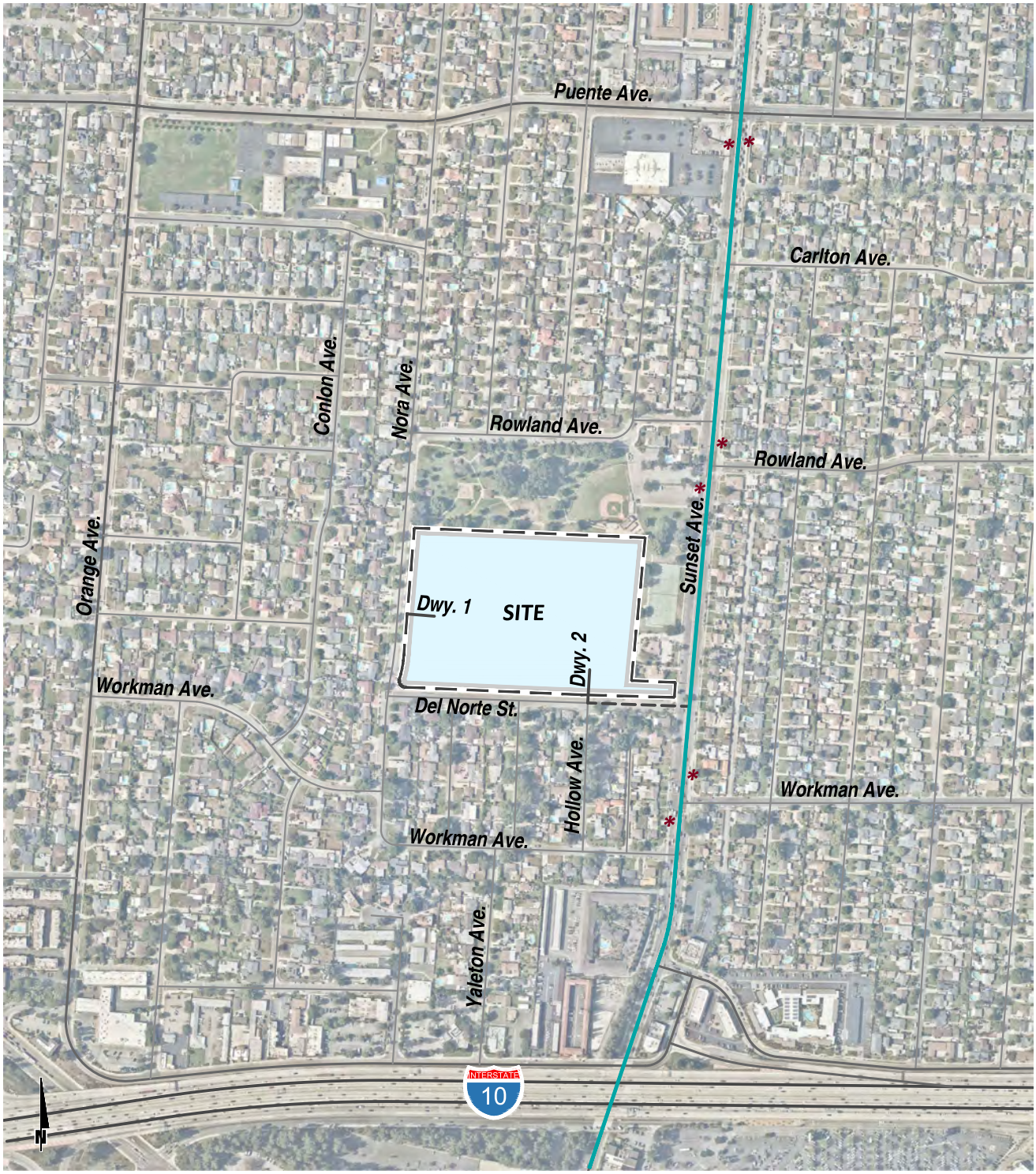


FIGURE 406.4

EXHIBIT 5: TRANSIT ROUTES



LEGEND:

* = Bus Stop

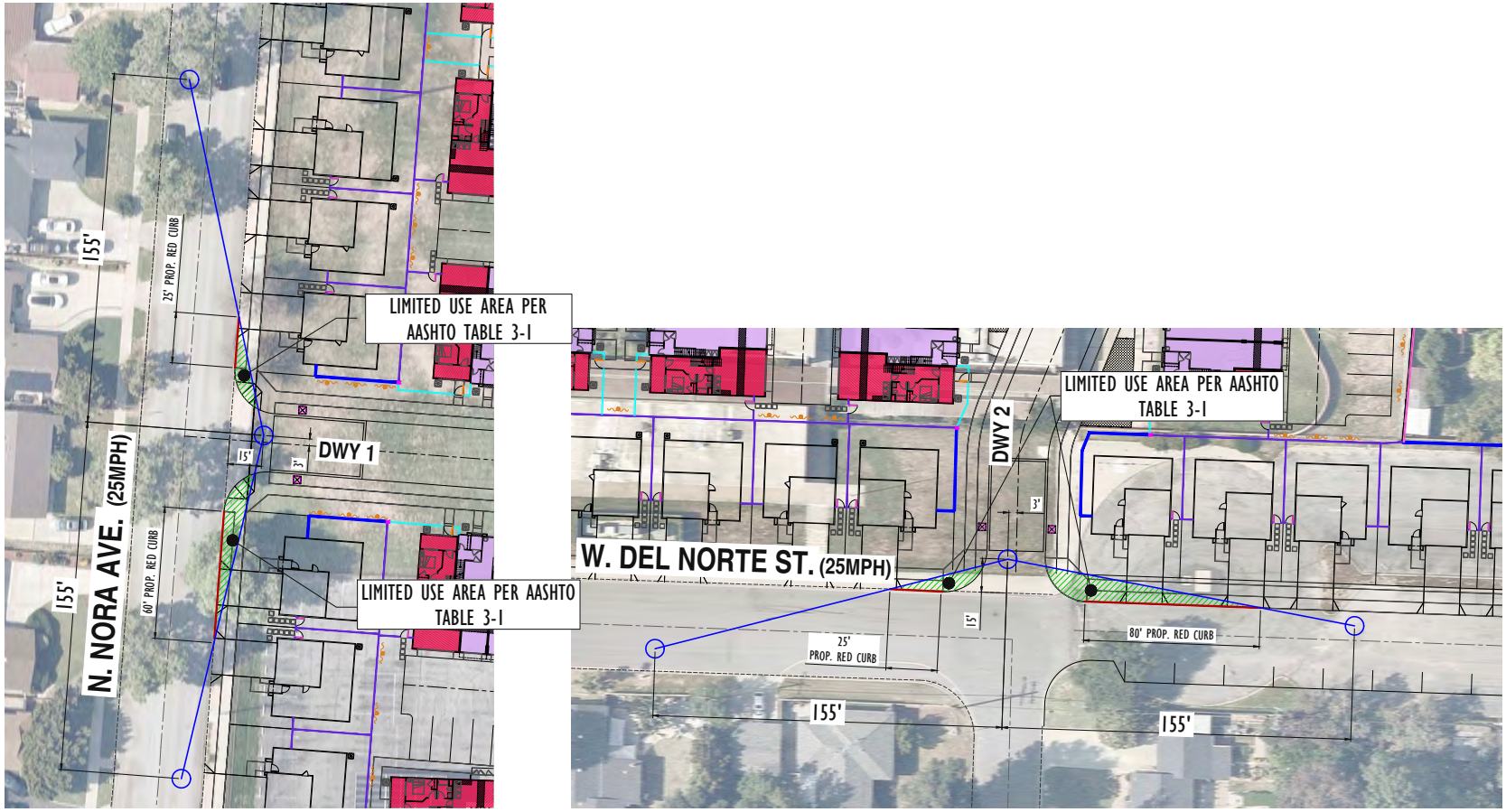
= Foothill Transit Line 185

SIGHT DISTANCE

Horizontal sight distance has been evaluated for Driveway 1 along Nora Avenue and Driveway 2 along Del Norte Street based on the American Association of State Highway Transportation Officials (AASHTO) Green Book Guidelines. As defined by the AASHTO Green Book, sight distance is the length of the roadway ahead that is visible to the driver. The available sight distance on a roadway should be sufficiently long to enable a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path.

Adequate visibility for vehicular and pedestrian traffic can be accommodated at the Project driveway by limiting sight obstructions within the identified limited use area (shaded triangular area often referred to as "clear sight triangles"). Any landscaping/hardscape within the limited use area should not exceed 30 inches in height. The limited use area should be kept clear of any landscaping or any other obstructions that may impede the visibility of the driver, including on-street parking. As such, restrictions to on-street parking within the limited use areas are also necessary. Minimum horizontal sight distances for the Project driveways are provided in Exhibit 6, however, sight distance should be re-evaluated in the field once the driveways have been constructed. It is anticipated that the minimum 155-foot sight distance for both driveways can be accommodated. Driveway 1 should accommodate a 25-foot proposed red curb to the north of the driveway, and a 60-foot proposed red curb to the south of the driveway. Driveway 2 should accommodate an 80-foot proposed red curb to the east of the driveway, and a 25-foot proposed red curb to the west of the driveway. The sight distance lines, limited use area, and clear sight triangles per the AASHTO Green Book are illustrated in Exhibit 6.

EXHIBIT 6: SIGHT DISTANCE



NOTE: Concept Only. Not for Construction. Additional Improvements may be required.

EXHIBIT 4 :
Sight Distance for Driveway 1 & 2 of 1501 Del Norte Development Project

CONSTRUCTION IMPACTS

This section provides a review of the Project construction impacts.

ON-SITE CONSTRUCTION PHASING

The Project is currently anticipating six (6) phases of construction with a duration of approximately twenty-four (24) months. The construction phases include:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

The construction schedule utilized is presented in Table 1. Construction will begin January 2026 and would last through January 2028. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the California Environmental Quality Act (CEQA) Guidelines.

TABLE 1: CONSTRUCTION DURATION

Construction Activity	Start Date	End Date	Days
Demolition	01/01/2026	02/11/2026	30
Site Preparation	02/12/2026	03/04/2026	15
Grading	03/05/2026	05/06/2026	45
Building Construction	05/07/2026	01/26/2028	450
Paving	12/16/2027	01/26/2028	30
Architectural Coating	12/03/2026	01/26/2028	300

CONSTRUCTION VEHICLES

The construction vehicle list presented in Table 2 has been developed based on information provided by the Project Applicant. Consistent with industry standards and typical construction practices, each of the construction vehicles listed is assumed to operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the City Code.

TABLE 2: CONSTRUCTION VEHICLE ASSUMPTIONS

Construction Activity	Equipment[1]	Quantity	Hours
Demolition	Excavators	2	8
	Rubber Tired Dozers	1	8
Site Preparation	Crawler Tractors	1	8
Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Crawler Tractors	1	8
Building Construction	Forklifts	1	8
	Tractors/Loaders/Backhoes	2	8
Paving	Pavers	1	8
	Paving Equipment	1	8
	Rollers	2	8

TRAFFIC CONTROL AND WORKING HOURS

Construction would occur Monday through Saturday between the hours of 7:00 AM and 8:00 PM pursuant to WCMC construction standards. The City may require the Project Applicant to prepare a construction management plan.

The number of daily worker trips are based on the California Emissions Estimator Model (CalEEMod) defaults. It should be noted that for daily vendor trips, specifically, CalEEMod only assigns daily vendor trips to the Building Construction phase. Daily vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for daily vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity. Table 3 presents the construction trip assumptions based on the CalEEMod defaults.

TABLE 3: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips/Day	Vendor Trips/Day	Hauling Trips/Day
Demolition	10	2	19
Site Preparation	3	2	0
Grading	13	3	12
Building Construction	198	27	0
Paving	10	0	0
Architectural Coating	40	0	0

CONCLUSION

If you have any questions or comments regarding the Traffic Engineering and Construction Evaluation, please contact me directly at cso@urbanxroads.com.

Appendix L

Sewer Area Study

SEWER AREA STUDY

FOR

1501 DEL NORTE STREET
WEST COVINA, CA 91790

PREPARED BY:

MORAN CONSULTING CORPORATION
4500 PACIFIC COAST HWY. SUITE #210
LONG BEACH, CA 90804
TEL. (562) 340-4670
FAX (562) 340-4680

PROJECT NO. 224181
NOVEMBER 22, 2024

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I INTRODUCTION

The project associated with this sewer study consists of the construction of (282) total homes each being Single Family Homes, 3-story townhomes, and 4-story flats in a "Residential Single-Family Zone"

This Sewer Area Study will demonstrate adequate capacity in the existing City of West Covina sewer system serving the site; and that no sewer mitigation measures are required.

II SITE DESCRIPTION

The 13.62-acre site is on the north side of Del Norte Street and the west side of Sunset Avenue. The site address is 1501 Del Norte Street, West Covina, CA 91790.

Half of the sewage from the site is conveyed to an 8" VCP sewer main on Sunset Avenue and the rest on Nora Avenue, and ultimately discharges to the Los Angeles County Sanitation District (LACSD) trunk sewer, located on Willow Avenue and Garvey Avenue (See Appendix D)

III PROJECT DESCRIPTION

The development for this project will be a residential with (34) single-family homes, (138) Townhomes, and (110) Stacked Flats. Also, there will be a community center with an outdoor pool. It will also have access to a private driveway lane with entrances to the adjacent streets, Nora Avenue and Del Norte Street. The proposed property is 13.19 acres with a proposed street dedication of 0.43 acres to the City of West Covina.

IV. DESCRIPTION OF EXISTING SEWER SYSTEM

The property site will be connecting to an existing 8" VCP main sewer pipe along Sunset Avenue and Nora Avenue. The flow direction of the sewer heads south towards Workman Avenue which will lead to the trunk sewer line southwest approximately 2 miles from City of West Covina manhole 639.

V. DESCRIPTION OF PROPOSED SEWER SYSTEM

The proposed sewer line that will collect the townhomes and Stacked Flats will be an 8" Sewer with a 35-foot lateral connecting to Nora Avenue 8" existing Sewer line and a 713-foot lateral on Del Norte Avenue connecting to an existing line along Sunset Avenue. All single-family homes on the property's perimeter will have an individual lateral connection to the adjacent public sewer.

VI. METHODOLOGY USED AND LIST OF REFERENCES

The methodology prescribed by The County of Los Angeles was used for this study.

Peak Flow Rates

Existing flow rates at MH #639 and MH #503 were determined by evaluating the tributary area. An analysis of this manhole will be in section VII of this Appendix.

Flow rates for the proposed development were calculated using sewer production rates published in Los Angeles County's *"Estimated Average Daily Sewage Flows for Various Occupancies"* table. (See Appendix B)

Average daily flow rates were multiplied by a factor of 2.5 to obtain peak flow rates.

Sewer Line Capacity

The capacity of each segment of sewer between manholes was calculated using pipe sizes and slopes documented in the City of West Covina Zoning Maps that route all sewer lines.

Pipe Capacity was modeled using the Cumulative Calculate Flow over the Capacity for each pipe segment using Kutter's formula, and an "n" value of 0.013.

In accordance with LA County's methodology. 100% capacity is defined as ½ full for pipes under 15-inches, and ¾ full for pipes 15-inches and above.

VII SEWER CAPACITY ANALYSIS

Sewer Main on Sunset Avenue

Existing flow rates in the City's 8" sewer main on Sunset Avenue were determined by area interpretation.

Estimated Average Daily Sewage Flow

Project Site Area = 593,294 sf.

Peak Flow = 2.5 x ADF

Calculate Proposed Flow

Path 1:

Occupancy:

3 Bedroom Dwelling Units (18)

ADF: 300 gal/D.U. x 16 Dwelling Units = 4,800 GPD = 0.01 cfs

Peak Flow = ADF x 2.5 = 0.01 cfs x 2.5 = 0.02 cfs

Condominiums (79)

Condominiums coefficient = 0.001 from "Estimated Average Daily Sewage Flows for Various Occupancies" (See Appendix B)

ADF: 0.001 cfs/unit. x 79 Units = 0.08cfs

Path 2:

Occupancy:

3 Bedroom Dwelling Units (16)

ADF: 300 gal/D.U. x 16 Dwelling Units = 4800 GPD = 0.01 cfs

Peak Flow = ADF x 2.5 = 0.01 cfs x 2.5 = 0.02 cfs

Condominiums (144)

Condominiums coefficient = 0.001 from "Estimated Average Daily Sewage Flows for Various Occupancies" (See Appendix B)

ADF: 0.001 cfs/unit. x 144 Units = 0.14 cfs

Path 1

Occupancy	Gallons/ D.U.	Units	CFS/Units	Estimated ADF (GPD)	GPD to CFS	Peak Flow
Condominiums (Flats)		35	0.04		0.04	0.04
Condominiums (Townhomes)		44	0.04		0.04	0.04
3 Bedroom Dwelling Units	300	18		5400	0.01	0.02
Total		97		5400	0.05	0.10

Path 2

Occupancy	Gallons/ D.U.	Units	CFS/Units	Estimated ADF (GPD)	GPD to CFS	Peak Flow
Condominiums (Flats)		20	0.02		0.02	0.02
Condominiums (Townhomes)		124	0.12		0.12	0.12
3 Bedroom Dwelling Units	300	16		4800	0.01	0.02
Total		160		4800	0.13	0.16

VIII. PROPOSED MITIGATION IF NECESSARY

No segments exceeded 151% capacity from the project site to the trunk sewer, therefore no mitigation is necessary.

IX. CONCLUSION

Based on the criteria developed by the City of West Covina the sewer system serving the proposed project site is adequate to serve the proposed project; without requiring any sewer mitigation measures.

X. APPENDIX OR REFERENCES

APPENDIX A

SEWER AREA MAP

PROPOSED POINT OF CONNECTION

12 INCH DIA SEWER PIPE

8 INCH DIA SEWER PIPE

PROJECT LOCATION

PROPOSED POINT OF CONNECTION

8 INCH DIA SEWER PIPE

15 INCH DIA SEWER PIPE

8 INCH DIA SEWER PIPE

15 INCH DIA SEWER PIPE

NEAREST TRUNK LINE

Legend
Description Unit Length

SEE EXHIBIT B

SEE EXHIBIT C

LEGEND:

- EXISTING CSD TRUNK SEWERS
- SANITARY SEWER PIPE
- CITY BOUNDARY
- SEWER DRAINAGE AREA BORDER
- (108) SEWER MAINTENANCE ZONE
- SEWAGE DELIVERY POINTS
- FLOW MONITORING LOCATIONS (PENDING)
- SEWER FLOW TO SEWAGE DELIVERY POINT

PLAN
SCALE: 1"=600'

600 300 0 600 1200
SCALE FEET

APPENDIX F:

MAINTENANCE YARD,
SEWER MAINTENANCE ZONES
FLOW MONITORING LOCATIONS
& DELIVERY POINTS
EXHIBIT A

WILLDAN Engineering
2401 E. Katella Avenue, Suite 450
Anaheim, CA 92806
(714)978-8200 fax (714)978-8299

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APPENDIX B

SEWER CAPACITY CALCULATIONS

SEWER AREA TABLE (PATH 1)

Street Name	Segment		Pipe		Design Capacity		Area (Sq. Ft.)	Area (Ac.)	Zoning Coeff.	Calculated Peak Flow (cfs)	Cumulative Calculated Flow	% Full	PC or CI Construction Plan	Comment	Jurisdiction
	M.H. #	M.H. #	Size (in.)	Slope (%)	1/2 Full (<15")	3/4 Full (> 15")						Cumulative Flow/ Capacity			
Sunset Ave A1	636	637	8	0.4	0.49		9492	0.22	0.001	0.001	0.00	0%		Under Capacity	LA COUNTY
Sunset Ave A2	637	638	8	0.4	0.49		32492	0.75	0.015	0.028	0.03	6%		Under Capacity	LA COUNTY
Project Site A3	638	639	8	0.4	0.49					0.10	0.13	26%		Below 151% capacity; no mitigation required	LA COUNTY
Sunset Ave A5	639	640	8	0.4	0.49		37741	0.87	0.001	0.00	0.13	27%		Under Capacity	LA COUNTY
Sunset Ave A6	640	489	8	0.4	0.49		35772	0.82	0.004	0.01	0.14	28%		Under Capacity	LA COUNTY
Workman Ave A7	489	490	8	0.4	0.49		52989	1.22	0.004	0.01	0.15	31%		Under Capacity	LA COUNTY
Workman Ave A8	490	493	8	0.4	0.49		36706	0.84	0.004	0.01	0.16	32%		Under Capacity	LA COUNTY
Workman Ave A9	493	484	8	0.4	0.49		6885	0.16	0.004	0.00	0.16	33%		Under Capacity	LA COUNTY
Yaleton Ave A10	484	485	8	0.4	0.49		57451	1.32	0.004	0.01	0.17	35%		Under Capacity	LA COUNTY
Yaleton Ave A11	485	486	8	0.4	0.49		115058	2.64	0.004	0.03	0.20	41%		Under Capacity	LA COUNTY
Yaleton Ave A12	486	487	8	0.4	0.49		85066	1.95	0.015	0.07	0.27	56%		Under Capacity	LA COUNTY
Garvey Ave A13	487	474	8	0.4	0.49					0.00	0.27	56%		Under Capacity	LA COUNTY
Garvey Ave A14	474	473	8	0.4	0.49		72522	1.66	0.015	0.06	0.34	69%		Under Capacity	LA COUNTY
Garvey Ave A15	473	472	8	0.4	0.49		45238	1.04	0.015	0.04	0.37	76%		Under Capacity	LA COUNTY
Garvey Ave A16	472	460	8	0.4	0.49		66224	1.52	0.015	0.06	0.43	88%		Under Capacity	LA COUNTY
Garvey Ave A17	460	462	8	0.4	0.49		74435	1.71	0.015	0.06	0.50	101%		Under Capacity	LA COUNTY
Orange Ave A18	462	463	8	0.4	0.49					0.00	0.50	101%		Under Capacity	LA COUNTY
Orange Ave A19	463	464	8	0.4	0.49					0.00	0.50	101%		Under Capacity	LA COUNTY
Pacific Ave A20	464	465	8	0.4	0.49		37911	0.87	0.015	0.03	0.53	108%		Under Capacity	LA COUNTY
Pacific Ave A21	465	466	8	0.4	0.49					0.00	0.53	108%		Under Capacity	LA COUNTY
Pacific Ave A22	466	656	8	0.4	0.49					0.00	0.53	108%		Under Capacity	LA COUNTY
Pacific Ave A23	656	432	8	0.4	0.49					0.00	0.53	108%		Under Capacity	LA COUNTY
Pacific Ave A24	432	429	8	0.4	0.49		27918	0.64	0.015	0.02	0.55	113%		Under Capacity	LA COUNTY
Pacific Ave A25	429	430	15	0.4		5.07	31707.00	0.73	0.004	0.01	0.56	11%		Under Capacity	LA COUNTY
Pacific Ave A26	430	355	15	0.4		5.07	61349	1.41	0.004	0.01	0.57	11%		Under Capacity	LA COUNTY
Willow Ave A27	355	356	15	0.4		5.07	29590	0.68	0.004	0.01	0.58	11%		Under Capacity	LA COUNTY
Willow Ave A28	356	357	15	0.4		5.07	118863	2.73	0.004	0.03	0.61	12%		Under Capacity	LA COUNTY
Willow Ave A29	357	358	15	0.4		5.07	121337	2.79	0.004	0.03	0.64	13%		Under Capacity	LA COUNTY
Willow Ave A30	358	359	15	0.4		5.07	154894	3.56	0.004	0.04	0.67	13%		Under Capacity	LA COUNTY
Willow Ave A31	359	360	15	0.4		5.07	70981	1.63	0.004	0.02	0.69	14%		Under Capacity	LA COUNTY
Willow Ave A32	360	361	15	0.4		5.07	56038	1.29	0.004	0.01	0.70	14%		Under Capacity	LA COUNTY
Willow Ave A33	361	348	15	0.4		5.07	19530	0.45	0.004	0.00	0.70	14%		Under Capacity	LA COUNTY
Willow Ave A34	348	346	15	0.4		5.07	10332	0.24	0.004	0.00	0.71	14%		Under Capacity	LA COUNTY
Willow Ave A35	346	347	15	0.4		7.36				0.00	0.71	10%		Under Capacity	LA COUNTY
Willow Ave A36	347	330	15	0.4		5.07				0.00	0.71	14%		Under Capacity	LA COUNTY
Willow Ave A37	330	331	15	0.4		5.07	65361	1.50	0.004	0.02	0.72	14%		Under Capacity	LA COUNTY
Willow Ave A38	331	332	15	0.4		5.07	91924	2.11	0.004	0.02	0.74	15%		Under Capacity	LA COUNTY
Willow Ave A39	332	329	15	0.4		5.07	107432	2.47	0.004	0.02	0.77	15%		Under Capacity	LA COUNTY
Willow Ave A40	329	333	15	0.4		5.07	58632	1.35	0.004	0.01	0.78	15%		Under Capacity	LA COUNTY
Willow Ave A41	333	334	15	0.4		5.07	67972	1.56	0.004	0.02	0.80	16%		Under Capacity	LA COUNTY
Willow Ave A42	334	341	15	0.4		5.07	79459	1.82	0.004	0.02	0.82	16%		Under Capacity	LA COUNTY
Willow Ave A43	341	342	15	0.4		5.07	85038	1.95	0.004	0.02	0.83	16%		Under Capacity	LA COUNTY
Willow Ave A44	342	343	15	0.4		5.07	77618	1.78	0.004	0.02	0.85	17%		Under Capacity	LA COUNTY
Willow Ave A45	343	344	15	0.4		5.07	54728	1.26	0.004	0.01	0.87	17%		Under Capacity	LA COUNTY
Willow Ave A46	344	345	15	0.4		5.07	31813	0.73	0.004	0.01	0.87	17%		Under Capacity	LA COUNTY
Willow Ave A47	345	TR MH	15	0.4		5.07	9778	0.22	0.004	0.00	0.87	17%		Under Capacity	LA COUNTY

SEWER AREA TABLE (PATH 2)

Street Name	Segment		Pipe		Design Capacity		Area (Sq. Ft.)	Area (Ac.)	Zoning Coeff.	Calculated Peak Flow (cfs)	Cumulative Calculated Flow	% Full	PC or CI Construction Plan	Comment	Jurisdiction
	M.H. #	M.H. #	Size (in.)	Slope (%)	1/2 Full (<15")	3/4 Full (> 15")						Cumulative Flow/ Capacity			
Sunset Ave A1	633	634	8	0.4	0.49		43504	1.00	0.004	0.01	0.01	2%		Under Capacity	LA COUNTY
Sunset Ave A2	634	635	8	0.4	0.49		29435	0.68	0.004	0.01	0.02	3%		Under Capacity	LA COUNTY
Sunset Ave A3	635	632	8	0.4	0.49		21736	0.50	0.004	0.00	0.02	4%		Under Capacity	LA COUNTY
Rowloand Ave A4	632	631	8	0.4	0.49		23663	0.54	0.004	0.01	0.03	6%		Under Capacity	LA COUNTY
Hollow Ave A5	628	629	8	0.4	0.49		73155	1.68	0.004	0.02	0.04	9%		Under Capacity	LA COUNTY
Hollow Ave A6	629	630	8	0.4	0.49		57790	1.33	0.004	0.01	0.06	12%		Under Capacity	LA COUNTY
Hollow Ave A7	630	631	8	0.4	0.49		36301	0.83	0.004	0.01	0.07	13%		Under Capacity	LA COUNTY
Hollow Ave A8	631	513	8	0.4	0.49		18467	0.42	0.004	0.00	0.07	14%		Under Capacity	LA COUNTY
Rowloand Ave A9	513	514	8	0.4	0.49		7460	0.17	0.004	0.00	0.07	15%		Under Capacity	LA COUNTY
Yaleton Ave A10	606	607	8	0.4	0.49		31743	0.73	0.004	0.01	0.08	16%		Under Capacity	LA COUNTY
Yaleton Ave A11	607	521	8	0.4	0.49		61472	1.41	0.004	0.01	0.09	19%		Under Capacity	LA COUNTY
Yaleton Ave A12	521	515	8	0.4	0.49		74950	1.72	0.004	0.02	0.11	22%		Under Capacity	LA COUNTY
Yaleton Ave A13	515	514	8	0.4	0.49		43688	1.00	0.004	0.01	0.12	25%		Under Capacity	LA COUNTY
Rowland Ave A14	514	516	8	0.4	0.49		14741	0.34	0.004	0.00	0.12	25%		Under Capacity	LA COUNTY
Foxdale Ave A15	608	609	8	0.4	0.49		62962	1.45	0.004	0.01	0.14	28%		Under Capacity	LA COUNTY
Foxdale Ave A16	609	520	8	0.4	0.49		61651	1.42	0.004	0.01	0.15	31%		Under Capacity	LA COUNTY
Foxdale Ave A17	520	517	8	0.4	0.49		60724	1.39	0.004	0.01	0.17	34%		Under Capacity	LA COUNTY
Foxdale Ave A18	517	516	8	0.4	0.49		58650	1.35	0.004	0.01	0.18	37%		Under Capacity	LA COUNTY
Rowland Ave A19	516	511	8	0.4	0.49		14473	0.33	0.004	0.00	0.18	37%		Under Capacity	LA COUNTY
Nora Ave A20	604	605	8	0.4	0.49		48905	1.12	0.004	0.01	0.19	40%		Under Capacity	LA COUNTY
Nora Ave A21	605	516	8	0.4	0.49		71174	1.63	0.004	0.02	0.21	43%		Under Capacity	LA COUNTY
Nora Ave A22	516	518	8	0.4	0.49		60856	1.40	0.004	0.01	0.22	46%		Under Capacity	LA COUNTY
Nora Ave A23	518	511	8	0.4	0.49		73744	1.69	0.004	0.02	0.24	49%		Under Capacity	LA COUNTY
Nora Ave A24	511	512	8	0.4	0.49		36750	0.84	0.004	0.01	0.25	51%		Under Capacity	LA COUNTY
Nora Ave A25	512	503	8	0.4	0.49		44369	1.02	0.004	0.01	0.26	53%		Under Capacity	LA COUNTY
Project Site A26	503	502	8	0.4	0.49		38334	0.88	0.004	0.17	0.43	88%		Below 151% capacity; no mitigation required	LA COUNTY
Nora Ave A27	502	501	8	0.4	0.49		151736	3.48	0.004	0.03	0.47	95%		Under Capacity	LA COUNTY
Workman Ave A28	501	504	8	0.4	0.49		14098	0.32	0.004	0.00	0.47	96%		Under Capacity	LA COUNTY
Workman Ave A29	504	505	8	0.4	0.49		34098	0.78	0.004	0.01	0.48	98%		Under Capacity	LA COUNTY
Workman Ave A30	505	508	8	0.4	0.49		50426	1.16	0.004	0.01	0.49	100%		Under Capacity	LA COUNTY
Workman Ave A31	508	509	8	0.4	0.49		37901	0.87	0.004	0.01	0.50	102%		Under Capacity	LA COUNTY
Workman Ave A32	509	443	8	0.4	0.49		52301	1.20	0.004	0.01	0.51	104%		Under Capacity	LA COUNTY
Orange Ave A33	443	454	12	0.4	1.07		57530	1.32	0.004	0.01	0.52	49%		Under Capacity	LA COUNTY
Orange Ave A34	454	455	12	0.4	1.07		72517	1.66	0.004	0.02	0.54	51%		Under Capacity	LA COUNTY
Orange Ave A35	455	453	12	0.4	1.07		23589	0.54	0.004	0.01	0.55	51%		Under Capacity	LA COUNTY
Pacific Lane A36	453	447	12	0.4	1.07		326434	7.49	0.004	0.07	0.62	58%		Under Capacity	LA COUNTY
Pacific Lane A37	447	452	12	0.4	1.07		134871	3.10	0.004	0.03	0.65	61%		Under Capacity	LA COUNTY
Pacific Lane A38	452	431	12	0.4	1.07		143404	3.29	0.004	0.03	0.68	64%		Under Capacity	LA COUNTY
Pacific Lane A39	431	429	12	0.4	1.07		125520	2.88	0.004	0.03	0.71	67%		Under Capacity	LA COUNTY
Pacific Ave A40	429	430	15	0.4		5.07	31707	0.73	0.004	0.01	0.72	14%		Under Capacity	LA COUNTY
Pacific Ave A41	430	355	15	0.4		5.07	61349	1.41	0.004	0.01	0.74	15%		Under Capacity	LA COUNTY
Willow Ave A42	355	356	15	0.4		5.07	29590	0.68	0.004	0.01	0.74	15%		Under Capacity	LA COUNTY
Willow Ave A43	356	357	15	0.4		5.07	118863	2.73	0.004	0.03	0.77	15%		Under Capacity	LA COUNTY
Willow Ave A44	357	358	15	0.4		5.07	121337	2.79	0.004	0.03	0.80	16%		Under Capacity	LA COUNTY
Willow Ave A45	358	359	15	0.4		5.07	154894	3.56	0.004	0.04	0.83	16%		Under Capacity	LA COUNTY
Willow Ave A46	359	360	15	0.4		5.07	70981	1.63	0.004	0.02	0.85	17%		Under Capacity	LA COUNTY
Willow Ave A47	360	361	15	0.4		5.07	56038	1.29	0.004	0.01	0.86	17%		Under Capacity	LA COUNTY
Willow Ave A48	361	348	15	0.4		5.07	19530	0.45	0.004	0.00	0.87	17%		Under Capacity	LA COUNTY
Willow Ave A49	348	346	15	0.4		5.07	10332	0.24	0.004	0.00	0.87	17%		Under Capacity	LA COUNTY
Willow Ave A50	346	347	15	0.4		7.36		0.00		0.00	0.87	12%		Under Capacity	LA COUNTY
Willow Ave A51	347	330	15	0.4		5.07		0.00		0.00	0.87	17%		Under Capacity	LA COUNTY
Willow Ave A52	330	331	15	0.4		5.07	65361	1.50	0.004	0.02	0.88	17%		Under Capacity	LA COUNTY
Willow Ave A53	331	332	15	0.4		5.07	91924	2.11	0.004	0.02	0.90	18%		Under Capacity	LA COUNTY
Willow Ave A54	332	329	15	0.4		5.07	107432	2.47	0.004	0.02	0.93	18%		Under Capacity	LA COUNTY
Willow Ave A55	329	333	15	0.4		5.07	58632	1.35	0.004	0.01	0.94	19%		Under Capacity	LA COUNTY
Willow Ave A56	333	334	15	0.4		5.07	67972	1.56	0.004	0.02	0.96	19%		Under Capacity	LA COUNTY
Willow Ave A57	334	341	15	0.4		5.07	79459	1.82	0.004	0.02	0.98	19%		Under Capacity	LA COUNTY
Willow Ave A58	341	342	15	0.4		5.07	85038	1.95	0.004	0.02	1.00	20%		Under Capacity	LA COUNTY
Willow Ave A59	342	343	15	0.4		5.07	77618	1.78	0.004	0.02	1.01	20%		Under Capacity	LA COUNTY
Willow Ave A60	343	344	15	0.4		5.07	54728	1.26	0.004	0.01	1.03	20%		Under Capacity	LA COUNTY
Willow Ave A61	344	345	15	0.4		5.07	31813	0.73	0.004	0.01	1.03	20%		Under Capacity	LA COUNTY
Willow Ave A62	345	TR MH	15	0.4		5.07	9778	0.22	0.004	0.00	1.04	20%		Under Capacity	LA COUNTY

Worksheet for Circular Pipe - 8in

Project Description	
Friction Method	Kutter Formula
Solve For	Discharge

Input Data	
Roughness Coefficient	0.010
Channel Slope	0.004 ft/ft
Normal Depth	4.0 in
Diameter	8.0 in

Results	
Discharge	0.49 cfs
Flow Area	0.2 ft²
Wetted Perimeter	1.0 ft
Hydraulic Radius	2.0 in
Top Width	0.67 ft
Critical Depth	3.9 in
Percent Full	50.0 %
Critical Slope	0.004 ft/ft
Velocity	2.83 ft/s
Velocity Head	0.12 ft
Specific Energy	0.46 ft
Froude Number	0.976
Maximum Discharge	1.08 cfs
Discharge Full	0.99 cfs
Slope Full	0.001 ft/ft
Flow Type	Subcritical

GVF Input Data	
Downstream Depth	0.0 in
Length	0.0 ft
Number Of Steps	0

GVF Output Data	
Upstream Depth	0.0 in
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	50.0 %
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	4.0 in
Critical Depth	3.9 in
Channel Slope	0.004 ft/ft
Critical Slope	0.004 ft/ft

Worksheet for Circular Pipe - 12in

Project Description	
Friction Method	Kutter Formula
Solve For	Discharge

Input Data	
Roughness Coefficient	0.013
Channel Slope	0.004 ft/ft
Normal Depth	6.0 in
Diameter	12.0 in

Results	
Discharge	1.07 cfs
Flow Area	0.4 ft²
Wetted Perimeter	1.6 ft
Hydraulic Radius	3.0 in
Top Width	1.00 ft
Critical Depth	5.2 in
Percent Full	50.0 %
Critical Slope	0.007 ft/ft
Velocity	2.73 ft/s
Velocity Head	0.12 ft
Specific Energy	0.62 ft
Froude Number	0.769
Maximum Discharge	2.34 cfs
Discharge Full	2.15 cfs
Slope Full	0.001 ft/ft
Flow Type	Subcritical

GVF Input Data	
Downstream Depth	0.0 in
Length	0.0 ft
Number Of Steps	0

GVF Output Data	
Upstream Depth	0.0 in
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	0.0 %
Downstream Velocity	0.00 ft/s
Upstream Velocity	0.00 ft/s
Normal Depth	6.0 in
Critical Depth	5.2 in
Channel Slope	0.004 ft/ft
Critical Slope	0.007 ft/ft

Worksheet for Circular Pipe - 15in

Project Description	
Friction Method	Kutter Formula
Solve For	Discharge

Input Data	
Roughness Coefficient	0.010
Channel Slope	0.004 ft/ft
Normal Depth	11.3 in
Diameter	15.0 in

Results	
Discharge	5.07 cfs
Flow Area	1.0 ft²
Wetted Perimeter	2.6 ft
Hydraulic Radius	4.5 in
Top Width	1.08 ft
Critical Depth	11.0 in
Percent Full	75.0 %
Critical Slope	0.004 ft/ft
Velocity	5.14 ft/s
Velocity Head	0.41 ft
Specific Energy	1.35 ft
Froude Number	0.948
Maximum Discharge	5.97 cfs
Discharge Full	5.52 cfs
Slope Full	0.003 ft/ft
Flow Type	Subcritical

GVF Input Data	
Downstream Depth	0.0 in
Length	0.0 ft
Number Of Steps	0

GVF Output Data	
Upstream Depth	0.0 in
Profile Description	N/A
Profile Headloss	0.00 ft
Average End Depth Over Rise	0.0 %
Normal Depth Over Rise	0.0 %
Downstream Velocity	0.00 ft/s
Upstream Velocity	0.00 ft/s
Normal Depth	11.3 in
Critical Depth	11.0 in
Channel Slope	0.004 ft/ft
Critical Slope	0.004 ft/ft

ZONING MAP

“ESTIMATED AVERAGE DAILY SEWAGE FLOW FOR VARIOUS OCCUPANCIES” TABLE

Estimated Average Daily Sewage Flows for Various Occupancies

Occupancy	Abbreviation	*Average daily flow	
Apartment Buildings:			
Bachelor or Single dwelling units	Apt	150	gal/D.U.
1 bedroom dwelling units	Apt	200	gal/D.U.
2 bedroom dwelling units	Apt	250	gal/D.U.
3 bedroom or more dwelling units	Apt	300	gal/D.U.
Auditoriums, churches, etc.	Aud	5	gal/seat
Automobile parking	P	25	gal/1000 sq ft gross floor area
Bars, cocktails lounges, etc.	Bar	20	gal/seat
Commercial Shops & Stores	CS	100	gal/1000 sq ft gross floor area
Hospitals (surgical)	HS	500	gal/bed
Hospitals (convalescent)	HC	85	gal/bed
Hotels	H	150	gal/room
Medical Buildings	MB	300	gal/1000 sq ft gross floor area
Motels	MB	150	gal/unit
Office Buildings	Off	200	gal/1000 sq ft gross floor area
Restaurants, cafeterias, etc.	R	50	gal/seat
Schools:			
Elementary or Jr. High	S	10	gal/student
High Schools	HS	15	gal/student
Universities or Colleges	U	20	gal/student
College Dormitories	CD	85	gal/student

*Multiply the average daily flow by 2.5 to obtain the peak flow

Zoning Coefficients

Zone	Coefficient (cfs/Acre)
Agriculture ----------	0.001
Residential*:	
R-1 ----------	0.004
R-2 ----------	0.008
R-3 ----------	0.012
R-4 ----------	0.016*
Commercial:	
C-1 through C-4 ----------	0.015*
Heavy Industrial:	
M-1 through M-4 ----------	0.021*

* Individual building, commercial or industrial plant capacities shall be the determining factor when they exceed the coefficients shown

* Use 0.001 (cfs/unit) for condominiums only

APPENDIX C

WILL SERVE LETTER

APPENDIX D

SUPPORTING PLANS/MAPS

SITE PLAN

ALTA/NSPS SURVEY

FOR

1501 N. DEL NORTE AVENUE, WEST COVINA, CA 91790

EASEMENTS:

PER PRELIMINARY TITLE REPORT PREPARED BY FIDELITY NATIONAL TITLE COMPANY, ORDER NO. OSA-7095113 (RA) EFFECTIVE DATE JUNE 25,2024.

(3) AN EASEMENT FOR WAGON ROAD AND A WATER DITCH AND INCIDENTAL PURPOSES, RECORDED MARCH 4, 1875 IN
BOOK 36 OF DEEDS, PAGE 169.
IN FAVOR OF: D. C. MENSING
AFFECTS: AS DESCRIBED THEREIN
THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION, (NON-PLOTTABLE)

(4) AN EASEMENT FOR WATER PIPE LINE, WITH THE RIGHT OF INGRESS AND EGRESS AND INCIDENTAL PURPOSES, RECORDED APRIL 22, 1896 IN BOOK 1043 OF DEEDS, PAGE 309.
IN FAVOR OF: AZUSA IRRIGATING COMPANY, A CORPORATION
AFFECTS: AS DESCRIBED THEREIN

THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION, (NON- PLOTTABLE)

(5) THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED AGREEMENT RECORDED JANUARY 14, 1946
AS BOOK 22719, PAGE 40 OF OFFICIAL RECORDS. (NON-PLOTTABLE)

(6) AN EASEMENT FOR POLE LINES AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 26, 1946 AS BOOK 22872, PAGE 213 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, LTD., A CORPORATION
AFFECTS: PARCEL 1 (NON-PLOTTABLE CANNOT BE DETERMINED FROM RECORD INFORMATION)

(7) AN EASEMENT FOR POLE LINES AND INCIDENTAL PURPOSES, RECORDED JANUARY 24, 1951 AS INSTRUMENT NO. 2281, IN BOOK 35398, PAGE 55 OF OFFICIAL RECORDS.
IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION
AFFECTS: AS DESCRIBED THEREIN (PLOTTED)

(8) INTENTIONALLY DELETED

(9) INTENTIONALLY DELETED

(10) A NOTICE THAT SAID LAND IS INCLUDED WITHIN A PROJECT AREA OF THE REDEVELOPMENT AGENCY SHOWN BELOW, AND THAT PROCEEDINGS FOR THE REDEVELOPMENT OF SAID PROJECT HAVE BEEN INSTITUTED UNDER THE REDEVELOPMENT LAW (SUCH REDEVELOPMENT TO PROCEED ONLY AFTER THE ADOPTION OF THE REDEVELOPMENT PLAN) AS DISCLOSED BY A DOCUMENT

RECORDING DATE: JULY 11, 1990
RECORDING NO: 90-1219638, OFFICIAL RECORDS
REDEVELOPMENT PROJECT: AMENDED EASTLAND REDEVELOPMENT PROJECT

RECORDING DATE: DECEMBER 22, 1993
RECORDING NO: 93-2492845, OFFICIAL RECORDS

THE ESTATE OR INTEREST IN THE LAND HEREIN AFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS: A FEE ESTATE
TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:
WEST COVINA UNIFIED SCHOOL DISTRICT
AS TO THE LEGAL DESCRIPTION AND TITLE MATTERS SHOWN HEREON, MORAN CONSULTING CORPORATION HAS RELIED SOLELY UPON THE PRELIMINARY REPORT PREPARED BY ISSUING POLICIES OF FIDELITY NATIONAL TITLE INSURANCE COMPANY. MORAN CONSULTING CORPORATION AND CESAR MORAN, P.L.S. 9376, MAKE NO STATEMENT AS TO THE ACCURACY OR COMPLETENESS OF SAID TITLE REPORT.

LEGAL DESCRIPTION:

REAL PROPERTY IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 1:

THAT PORTION OF THE RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT A TWO INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE, 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID TWO INCH IRON PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG SAID LAST MENTIONED WESTERLY LINE, 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'22" WEST, 626.11 FEET TO A TWO INCH PIPE, MARKING THE NORTHEASTERLY CORNER OF THE PARCEL OF LAND FIRST DESCRIBED IN THE DEED TO HENRY SHINICHI OSHIRO, RECORDED APRIL 23, 1941, IN BOOK 18336 PAGE 324 OF OFFICIAL RECORDS OF SAID COUNTY, BEING THE TRUE POINT OF BEGINNING
THENCE ALONG THE EASTERLY LINE OF THE LAND DESCRIBED IN THE LAST MENTIONED DEED, SOUTH 4°49'31" WEST, 263.51 FEET; THENCE SOUTH 88°24'11" EAST, PARALLEL WITH THE LINE HEREIN DESCRIBED AS HAVING A BEARING "NORTH 88°24'11" WEST," A DISTANCE OF 434.46 FEET; THENCE NORTH 4°44'57" EAST, 263.49 FEET TO A POINT DISTANT SOUTH 88°24'11" EAST, 434.11 FEET FROM THE TRUE POINT OF BEGINNING; THENCE NORTH 88°24'11" WEST, 434.11 FEET TO THE TRUE POINT OF BEGINNING

EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.

PARCEL 2:

THAT PORTION OF RANCHO LA PUENTE, IN THE CITY OF WEST COVINA, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

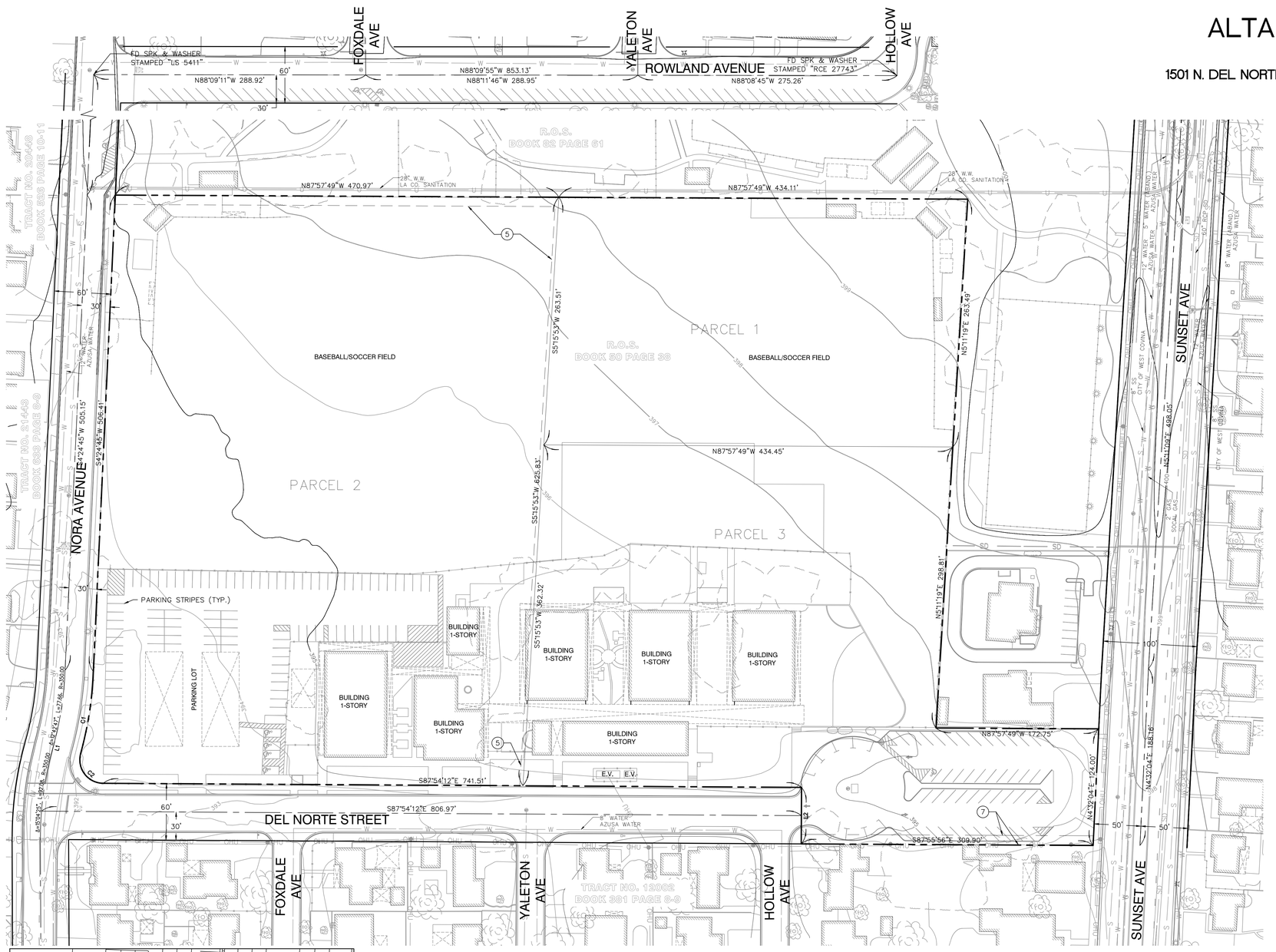
COMMENCING AT A 2 INCH IRON PIPE ON THE WESTERLY LINE OF IRWINDALE AVENUE, 60 FEET WIDE, AS SHOWN IN COUNTY SURVEYOR'S FIELD BOOK 364 PAGES 146 AND 147, IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY, DISTANT NORTH 4°44'57" EAST, ALONG SAID WESTERLY LINE, 496.57 FEET FROM AN ANGLE POINT IN SAID WESTERLY LINE, SAID 2 INCH PIPE BEARING NORTH 88°24'11" WEST, FROM A POINT IN THE WESTERLY LINE OF THE PARCEL OF LAND CONVEYED TO D. C. MENSING BY DEED RECORDED IN BOOK 36 PAGE 169 OF DEEDS, DISTANT SOUTHERLY ALONG SAID LAST MENTIONED WESTERLY LINE 940.083 FEET FROM A STONE MONUMENT MARKING THE NORTHWESTERLY CORNER OF SAID PARCEL OF LAND CONVEYED TO D. C. MENSING; THENCE NORTH 88°24'11" WEST, 626.11 FEET TO A 2 INCH IRON PIPE, MARKING THE NORTHEASTERLY CORNER OF THE PARCEL OF LAND FIRST DESCRIBED IN THE DEED TO HENRY SHINICHI OSHIRO, RECORDED ON APRIL 23, 1941, IN BOOK 18336 PAGE 324 OF OFFICIAL RECORDS OF SAID COUNTY; THENCE ALONG THE EASTERLY LINE OF THE PARCEL OF LAND DESCRIBED IN THE LAST MENTIONED DEED SOUTH 4°49'31" WEST, 263.51 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING SOUTH 4°49'31" WEST, ALONG SAID EASTERLY LINE, 422.90 FEET TO A 2 INCH IRON PIPE; THENCE SOUTH 88°24'11" EAST, 629.20 FEET TO A 2 INCH IRON PIPE, IN SAID WESTERLY LINE OF
IRWINDALE AVENUE, MARKING THE SOUTHEAST CORNER OF PARCEL "A" AS SHOWN ON MAP FILED IN BOOK 50 PAGE 38 OF RECORD OF SURVEYS OF SAID COUNTY; THENCE ALONG SAID WESTERLY LINE OF IRWINDALE AVENUE, NORTH 4°05'42" EAST, 124.00 FEET; THENCE PARALLEL WITH THAT CERTAIN COURSE DESCRIBED ABOVE AS HAVING A BEARING AND LENGTH OF "NORTH 88°24'11" WEST, 626.11 FEET", NORTH 88°24'11" WEST, 192.77 FEET,
THENCE NORTH 4°44'57" EAST, 298.81 FEET TO A POINT IN A LINE THAT PASSES THROUGH THE TRUE POINT OF BEGINNING, AND THAT IS PARALLEL WITH SAID CERTAIN COURSE DESCRIBED AS "NORTH 88°24'11" WEST, 626.11 FEET", SAID POINT IN SAID PARALLEL LINE BEING DISTANT SOUTH 88°24'11" EAST, 434.46 FEET FROM THE TRUE POINT OF BEGINNING; THENCE ALONG SAID PARALLEL LINE NORTH 88°24'11" WEST, 434.46 FEET TO THE TRUE POINT OF BEGINNING.

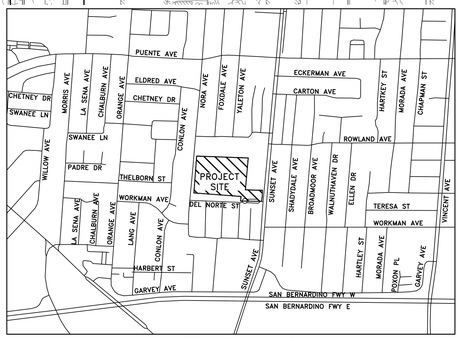
SAID LAND IS A PORTION OF PARCEL "A", AS SHOWN ON MAP FILED IN BOOK 50 PAGE 38 OF RECORDS OF SURVEYS OF SAID COUNTY.

EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JUNE 2, 1958 AS INSTRUMENT NO. 2918, OFFICIAL RECORDS.

ALSO EXCEPT THEREFROM THAT PORTION THEREOF DESCRIBED IN GRANT DEED RECORDED JULY 11, 1966 AS INSTRUMENT NO. 2049, OFFICIAL RECORDS.

EXCEPT THEREFROM THE "PRECIOUS METALS AND ORES THEREOF" AS EXCEPTED FROM THE PARTITION BETWEEN JOHN ROWLAND SR. AND WILLIAM WORKMAN, IN THE PARTITION DEED RECORDED IN BOOK 10, PAGE 39 OF DEEDS.





VICINITY MAP
(NOT TO SCALE)

LEGEND:

- 100.00 — EXISTING CONTOURS
- SS — EXISTING SEWER
- W — EXISTING WATER
- E — ELECTRIC LINE
- G — GAS LINE
- T — TELEPHONE LINE
- X — CHAIN LINK FENCE
- BLOCK WALL
- BOUNDARY LINE
- STREET CENTERLINE
- RIGHT OF WAY
- BENCHMARK
- STREET LIGHT
- POWER POLE
- FIRE HYDRANT
- INFLOW CONTROL VALVE
- SIGN
- SANITARY SEWER MANHOLE
- ELECTRIC MANHOLE
- WATER VALVE

ABBREVIATIONS:

AC	–	ASPHALT CONCRETE
BRKN	–	BROKEN
BLRD	–	BOLLARD
CB	–	CATCH BASIN
CP	–	CONTROL POINT
CONC	–	CONCRETE
COR	–	CORNER
COMMPB	–	COMMUNICATION PULL BOX
EG	–	EDGE OF GUTTER
EJB	–	ELECTRIC JUNCTION BOX
EPB	–	ELECTRIC PULL BOX
EBP	–	ELECTRIC BOX PANEL
E.V.	–	ELECTRICAL VAULT
EX.	–	EXISTING
FD	–	FOUND
FF	–	FINISH FLOOR
FOB	–	FACE OF BUILDING
FOC	–	FACE OF CURB
FL	–	FLOWLINE
FS	–	FINISH SURFACE
FOW	–	FACE OF WALL
GB	–	GRADE BREAK
GV	–	GAS VALVE
INV	–	INVERT
LS	–	LICENSED SURVEYOR
RCP	–	REINFORCED CONCRETE PIPE
SS	–	SANITARY SEWER
SSMH	–	SANITARY SEWER MANHOLE
SDMH	–	STORM DRAIN MANHOLE
SPK	–	SPIKE
SLPB	–	STREET LIGHT PULL BOX
TC	–	TOP OF CURB
TW	–	TOP OF WALL
WM	–	WATER METER
WV	–	WATER VALVE

SURVEYOR'S CERTIFICATION

TO MERITAGE HOMES OF CALIFORNIA, INC AND FIRST AMERICAN TITLE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 3, 4, 5, 8, 11(A), 16, AND 17 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED IN MAY 2024.

CESAR MORAN
P.L.S. 9376

7/23/24
DATE

PROFESSIONAL LAND SURVEYOR CESAR MORAN P.L.S. 9376 STATE OF CALIFORNIA

NOTES:

1. AREA: 593,294 SQ. FT. ~ 13.62 ACRES

SITE CONSISTS OF:

ASSESSORS PARCEL NUMBER: 8458-020-901

2. PARKING COUNT: 159
3. FLOOD ZONE: PER THE FLOOD INSURANCE RATE MAP, THE PROPERTY IS IN A ZONE "X" AREA.
4. ALL TIES SHOWN TO BUILDINGS, WALLS, FENCES, ETC. ARE TO THE EXPOSED FACE OF SAID OBJECT AS NOTED. NO FOOTING EXPLORATION HAS BEEN UNDERTAKEN.
5. THERE WAS NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
6. THERE WAS NO OBSERVED EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
7. NO WETLAND DELINEATION MARKERS WERE OBSERVED.
8. THIS SURVEY HAS BEEN PREPARED FOR TITLE INSURANCE PURPOSES ONLY.

CURVE TABLE

CURVE NO.	LENGTH	RADIUS	DELTA	CHORD DIRECTION	CHORD LENGTH
C1	88.36'	380.00	13.32	N10° 30' 18"E	88.16'
C2	45.85'	25.00	105.08	S35° 26' 06"E	39.69'

LINE TABLE

LINE NO.	LENGTH	DIRECTION
L1	8.73'	S17° 07' 33"W
L2	60.00'	S2° 05' 48"W

DIGALERT
DIAL TOLL FREE 811
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BASIS OF BEARING:
THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCH MARK
BENCH MARK NO. 4G4954 ELEV. 401.938
DATUM: NAD83 YEAR: 2013
DESCRIPTION:
DPW BM TAG IN E CB 3.3 ST S/O BCR @ SE COR SUNSET AVE & ROWLAND AVE

CITY: WEST COVINA
COUNTY: LOS ANGELES
STATE: CALIFORNIA

PROFESSIONAL LAND SURVEYOR CESAR MORAN P.L.S. 9376 STATE OF CALIFORNIA

PREPARED BY:
MORAN CONSULTING CORPORATION
• CIVIL ENGINEERING • SURVEYING • LAND PLANNING
4500 E. Pacific Coast Highway, Suite 210
Long Beach, California 90804
Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com
CESAR MORAN L.S. 9376
DATE: 07/23/24 | JOB NO.: 224181 | DRAWN BY: CR

REVISIONS

N°	DATE	BY	DESCRIPTION
1	07/01/2024	CR	VICINITY MAP PROPERTY AREA UPDATED
2	07/22/2024	CR	REVISED PER UPDATED PTR
3	07/23/2024	CR	REVISED PER UPDATED PTR
4			
5			

PLANS PREPARED FOR:
MLC HOLDING, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310
IRVINE, CA 92606

PHONE (949) 372–3315
E–Mail Address:
JOHANNA.CROOKER@MLCHOLDING.NET

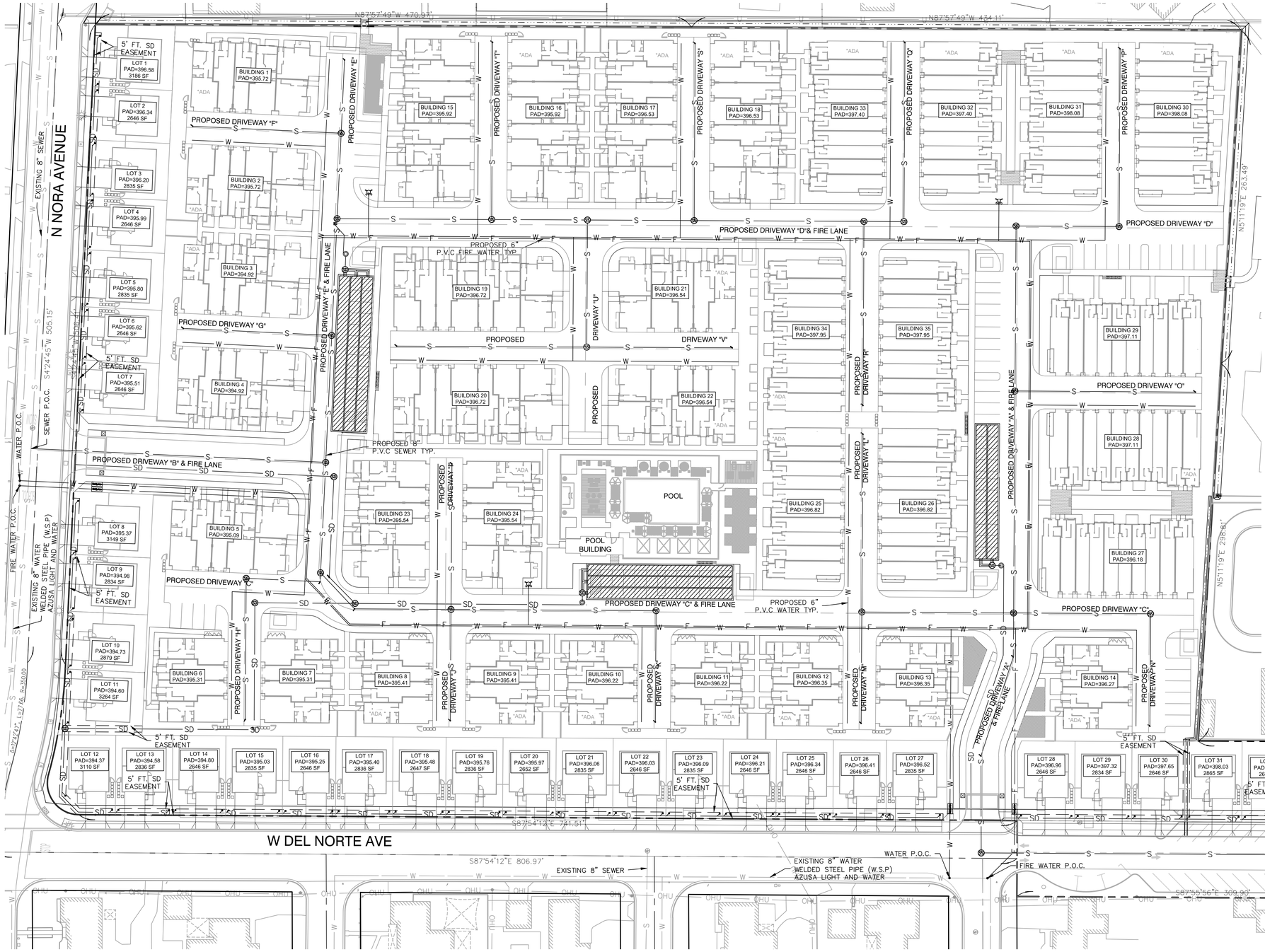
PROJECT TITLE: ALTA SURVEY
TRACT NO.
PROJECT ADDRESS: 1501 DEL NORTE WEST COVINA, CA 91790
SCALE: PER PLAN
LEGAL DESCRIPTION:
SHEET 1 OF 1

SHEET TITLE: ALTA SURVEY

DWG: C:\Users\Cgroves\AppData\Local\Temp\VaultBuilder_557281\C-ALTA.dwg BY: Cnoles Jul 23, 2024 – 5:23:28pm
PROJ: 211041

UTILITY PLAN

TENTATIVE TRACT No. 044618



LEGEND

	CENTERLINE	S	EXISTING SEWER
	PROPOSED PROPERTY LINE	W	EXISTING WATER
	EASEMENTS	G	EXISTING GAS
S	PROPOSED 8" P.V.C. SEWER MAIN	OHU	EXIST. OVERHEAD ELECT.
W	PROPOSED 6" P.V.C WATER MAIN	T	EXISTING TELEPHONE
F	PROPOSED 6" P.V.C FIRE WATER	E	EXISTING ELECTRICAL
SD	PROPOSED STORM DRAIN		SIGN
	PROPOSED TRENCH DRAIN	SD	STORM DRAIN MANHOLE
	PROPOSED SEWER MANHOLE		STORM DRAIN INLET
	PROPOSED SEWER CLEANOUT	E	ELECTRICAL MANHOLE
	PROPOSED WATER VALVE	EV	ELECTRICAL VAULT
	PROPOSED BFP		FIRE HYDRANT
	PROPOSED FIRE HYDRANT	WM	WATER METER
	PROPOSED CATCH BASIN	SS	SEWER MANHOLE
	PROPOSED STORM DRAIN CLEANOUT		LIGHT POLE
SD	PROPOSED ACCESS MANHOLE	EPB	STREET LIGHT PULL BOX
	PROPOSED HYDRODYNAMIC SEPARATOR		
	PROPOSED INFILTRATION GALLERIES		

12/04/24

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

DIGALERT
DIAL TOLL FREE 811
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

BASIS OF BEARING:
THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCHMARK NO: BM 4G4954
DESCRIPTION DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE
DATUM: NAVD88
ELEV: 401.938
YEAR: 2013

CITY: WEST COVINA
COUNTY: LOS ANGELES
STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER CESAR MORAN C72247 CIVIL STATE OF CALIFORNIA

PREPARED BY:
MORAN CONSULTING CORPORATION
• CIVIL ENGINEERING • SURVEYING • LAND PLANNING
4500 E. Pacific Coast Highway, Suite 210
Long Beach, California 90804
Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com

CESAR MORAN P.E. C72247
DATE: 12/04/24 | JOB N° 224181 | DRAWN BY: CR

REVISIONS

N°	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			
6			

PLANS PREPARED FOR:
MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606
PHONE (949) 372-3315
E-Mail

PROJECT TITLE DEL NORTE
TRACT NO. 044618
PROJECT ADDRESS 1501 DEL NORTE STREET WEST COVINA, CA 91790
SCALE: PER PLAN
LEGAL DESCRIPTION SEE SHEET 1
1 OF 1

SHEET TITLE UTILITY PLAN

PROJ#: 211041
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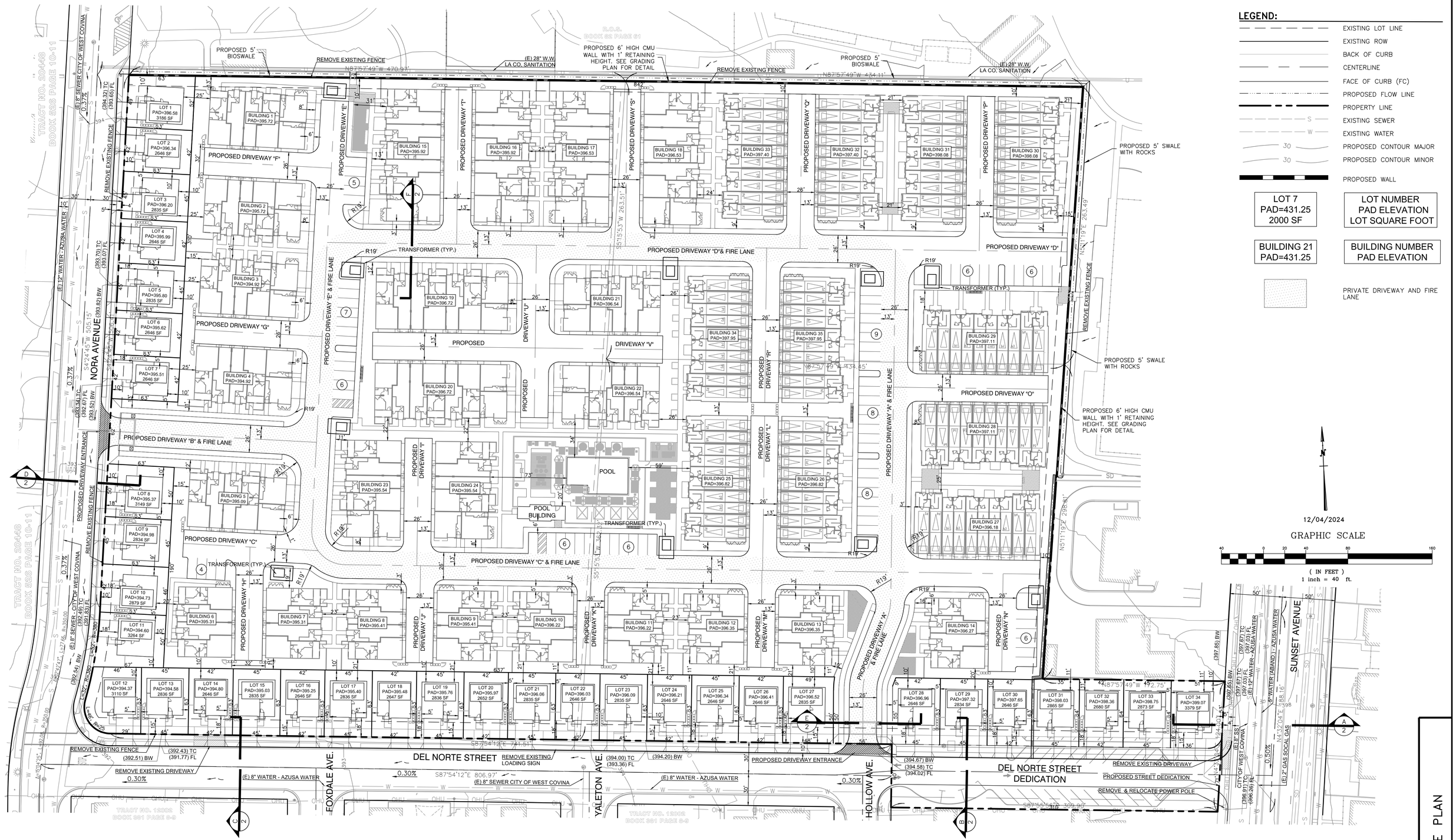

BASIS OF BEARING:
THE BEARING OF N88°09'55"W ALONG THE CENTERLINE OF ROWLAND AVE. FROM NORA AVE TO HOLLOW AVE WAS USED AS THE BASIS OF BEARING FOR THIS MAP.

BENCHMARK NO: BM 4G4954
DESCRIPTION DPW BM TAGE IN E CB 3.3 FT S/O BCR @ SE COR SUNSET AVE & ROWLAND AVENUE
DATUM: NAVD88
ELEV: 401.938
YEAR: 2013

CITY: WEST COVINA
COUNTY: LOS ANGELES
STATE: CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — CESAR MORAN — C72247 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:
MORAN CONSULTING CORPORATION
• CIVIL ENGINEERING • SURVEYING • LAND PLANNING
4500 E. Pacific Coast Highway, Suite 210
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Main (562) 340-4670 Fax (562) 340-4680
E-Mail Address: cmoran@moran-corp.com
CESAR MORAN P.E. C72247
DATE: 12/04/24 | JOB N° 224181 | DRAWN BY: CR

REVISIONS

N°	DATE	BY	DESCRIPTION
1			
2			
3			
4			
5			
6			

PLANS PREPARED FOR:
MLC HOLDINGS, INC.
ATTN: JOHANNA CROOKER
5 PETERS CANYON ROAD, SUITE 310 IRVINE, CA. 92606
PHONE (949) 372-3315
FAX
E-Mail

PROJECT TITLE
DEL NORTE

PROJECT ADDRESS
1501 DEL NORTE STREET
WEST COVINA, CA 91790

LEGAL DESCRIPTION
SEE SHEET 1

TRACT NO.

SCALE: PER PLAN

3 OF 3

SHEET TITLE SITE PLAN

DIGALERT DIAL TOLL FREE 811 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

DWG: C:\Users\Cesar\Vapps\cad\Local\Temp\AcPublish_23168\Site Plan.dwg BY: Cesar Dec 04, 2024 - 2:09:08pm
PROJ: 211041

SMD MAP

SEE SHT. NO. E-2214

SEE SHT. NO. E-2169

SEE SHT. NO. E-2258

SEE SHT. NO. E-2216

U-68
U-69
U-70
U-77

C.I. 2224 - M

A. D. NO. 64A1

THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

PROJECT LOCATION
NEW VISTA TECHNICAL CENTER
DEL NORTE ST

N
AUTOMATED GRAPHICS

METERS
0 50 100 200 250
0 200 400 600 800
FEET

LEGEND

- CLAY SEWERS MAINTAINED BY SMD. 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MAINS
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- C.O. CLEANOUT
- L.H. LAMP HOLE
- PUMP STATION

TOTAL MH'S THIS MAP: 471

E 4,297,000
N 4,136,500

MAP REV.
05-18-15

E-2215

MAP REV
05-18-15

DATA BASE REV
11-18-92

CONSOLIDATED S.M.D.

E-2215

T:598:C6

1127.1229.2215

E-2258

U-70

SEE SHT. NO. E-2257

S. P. 191

P.C. 11207

PROJECT LOCATION

THIS MAP IS INTENDED FOR USE ONLY AS OPERATIONS MAP BY LOS ANGELES COUNTY SEWER MAINTENANCE DISTRICTS. LOS ANGELES COUNTY EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY INACCURACIES WHICH MAY BE PRESENT IN THIS MAP.

SEE SHT. NO. E-2215

SEE SHT. NO. E-2301

SEE SHT. NO. E-2259

E 4,307,000

N 4,136,500

AUTOMATED GRAPHICS

METERS 0 50 100 200 250

FEET 0 200 400 600 800

LEGEND

- CLAY SEWERS MAINTAINED BY SMD, 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- C.O. CLEANOUT
- L.H. LAMP HOLE

TOTAL MH'S THIS MAP: 21

MAP REV. 07-01-93

MAP REV 07-01-93

DATA BASE REV 12-16-92

CONSOLIDATED S.M.D.

E-2258

T:589:F5

1127.1229.2258

AS-BUILT DRAWINGS

B.M. ELEV. 335.975
LEAD & TACK TOP OF CONCRETE HD. WALL
N.E. CORNER PUENTE AVE. & FRANCISQUITO AVE. (IN FRONT OF UNION GAS STATION.)

Beginning of Contract
Sta. 0+00.00
(Remove existing 8" S.tub on North insert 18" pipe & reform arch.)

8" C.M. DRAIN

Exist. 30" M.H. Cr. N.
ELEV. 320.53

INVERT ELEV. 321.79

18" EXT. STR. PIPE, ~~V.C.~~ or N.R.C.

Grade ~~-0.220%~~ =0.220%

Siphon Structure I
Sta. 4+90 ± Lpt 38
(See detail sheet 3)

DOUBLE BARREL SIPHON, 2-15" PIPES
EXT. STR. PIPE, ~~V.C.~~ OR N.R.C.

INVERT ELEV. 322.86

INVERT ELEV. 322.78

Grade ~~-0.286%~~ -6.286%

STD. CONC. CRADLE TYPE 2

Grade Change 6+40.00

Grade 0.00%

STD. CONC. ENCASEMENT TYPE 1

Siphon Structure II
Sta. 7+70 ± Lpt 43
(See detail sheet 3)

Grade Change 7+55.00

INVERT ELEV. 325.80

INVERT ELEV. 313.50

Ground Surface

15" EXT. STR. PIPE, ~~V.C.~~ or N.R.C.

Grade ~~-0.300%~~ =0.304%

Std. M.H. Type "A or D"
Sta. 11+49.11

INVERT ELEV. 324.55

(SEE NOTE SHEET 3)
15" RUBBER GASKET R.C. PIPE

Grade ~~-0.300%~~ =0.331%

Std. M.H. Type "A or D"
Sta. 14+49.97 ± Lpt

INVERT ELEV. 325.90

Grade ~~-0.300%~~ =0.255%

INVERT ELEV. 326.00

1750-D

Beginning of Contract
EXIST. STRUCTURE
Sta. 0+00.00
(See note above)

EXIST. DIST. NO. 22 MAIN TR SEWER 39" R.C. PIPE

FRANCISQUITO AVE.

(RESIDENCES)

RESIDENCE

STUCCO RESIDENCE

FLOOD CONTROL CHANNEL

CITY OF BALDWIN PARK 8" V.C.P. 22-C-1104

CITY OF BALDWIN PARK 8" V.C.P. 15-C-215

INVERT EL. 313.50

Siphon Structure I
Sta. 4+90 ± Lpt 38
(SEE DETAIL SH. 3)

Siphon Structure II
Sta. 7+70 ± Lpt 43
(SEE DETAIL SH. 3)

NOTE:
CONSTRUCT 42' OF 8" EXT. STR. V.C. PIPE @ 0.40% GRADE, PLUS TERMINUS (SEE SIPHON STRUCT. II DETAIL) SHEET 3 FOR INLET ELEVATION.)

SHEET METAL DEFLECTOR (3' HIGH)

15" TRUNK SEWER

15" x 6" WYE

10' R/W

25' OCCUPATIONAL R/W ± PROPOSED

Std. M.H. Type "A or D"
Sta. 10+71.13

Std. M.H. Type "A or D"
Sta. 14+49.97 ± Lpt

6' CHAIN LINK FENCE

2-STR. B.W. PIPE

EDGE LINE

N'LY. LINE OF PROP. L.A.C.F.C. CHANNEL

4" WOV. WIRE FENCE

WALNUT CREEK WASH
DOUBLE WOV. WIRE FENCE

(PROPOSED 100' FLOOD CONTROL CHANNEL)

BIG DALTON

EDGE OF FIELD

(CULTIVATED FIELD)

& PROPOSED 18" TRUNK SEWER

15" x 6" WYES

BRIDGE

SEE NOTE 7 SHEET 3

SEE NOTE 6 SHEET 3

4" GAS 16.5' S. & SO. COUNTIES GAS CO.
10" WATER 83' S. & SAN GAB. VALLEY WATER CO. (STEEL PIPE)

2-15" PIPES
DOUBLE BARREL SIPHON

WALNUT CREEK WASH

STA. 10+71.13 ± 5'WIDE BANK PROTECTION

IDENTICAL

SEWER CURVE DATA
Δ = 08° 03' 19"
T = 102.45'
L = 204.56'
R = 1455'

CONCRETE SUPPORT DETAIL
SCALE: 3/8" = 1'-0"

EXIST. 25" PIPE

CLASS 'B' CONCRETE

O.D. EXIST. 25" PIPE

PROP. 15" PIPE

CLASS 'B' CONCRETE

Beginning of Contract
Sta. 16+48.13

Std. J.C. Type "A or D"
Sta. 16+48.13

Remove plug in existing 15" sewer & join.

Sta. 17+38.17

Ground Surface

EXIST. 15" SEWER

(2500± D) 15" R.C. PIPE

Gr. ~~-0.250%~~ =0.255%

Gr. ~~-0.222%~~ = 0.222%

SEE NOTE 8 SH. 3

INVERT ELEV. 326.70

INVERT ELEV. 326.54

HWY. 1

SIESTA AVE.

Sta. 17+38.17 (See note above)

B.M. ELEV. 339.055
BRASS CAP MON. IN KQ "WC8" IN CURB OF N.E.'LY END OF SIESTA ST., TRACT № 21521

Remove plug in existing 15" sewer & join

Sta. 29+93.90

Std. J.C. Type "A or D"
Sta. 32+11.76

24" x 15" C.M.P. ARCH

EXIST. 15" SEWER

15" EXT. STR. PIPE, ~~V.C.~~ or N.R.C.

Grade ~~-0.220%~~ =0.300%

INVERT ELEV. 330.20

INVERT ELEV. 330.04

Std. J.C. Type "A or D"
Sta. 35+92.76

8" INLET N.
ELEV. 331.51

15" EXT. STR. PIPE, ~~V.C.~~ or N.R.C.

Grade ~~-0.270%~~ =0.255%

INVERT ELEV. 330.81

Std. J.C. Type "A or D"
Sta. 38+16.90

8" INLET N.
ELEV. 333.01

15" EXT. STR. PIPE, ~~V.C.~~ N.R.C. OR 15" 2000-D R.C. PIPE

Grade ~~-0.270%~~ 0.280%

INVERT ELEV. 332.40

INVERT ELEV. 332.31

Std. M.H. Type "A or D"
Sta. 39+55.09 ± Lpt

15" EXT. STR. PIPE, ~~V.C.~~ or N.R.C.

Grade ~~-0.270%~~ =0.230%

CONC. SUPPORT (SEE DETAIL ABOVE)

INVERT ELEV. 332.55

INVERT ELEV. 332.45

B.M. ELEV. 347.355
MON. SPK. S/SIDE P.P. # 10264955 W/SIDE WILLOW.

EXIST. 25" MAIN TO SUBURBAN WATER SYSTEM

End of Contract
Sta. 41+11.67

Sta. 41+11.67

18" INLET N.E.
ELEV. 332.55

CITY OF WEST COVINA 8" V.C.P. 22-C-279

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TRACT № 16431

WALNUT AVE.

CREEK

SHRUBS, LAWN

GROUND COVER

& PROPOSED 15" TRUNK SEWER

15" x 6" WYES

ASPH. PVMT.

LAWN & GROUND COVER

SHRUBS

CAROLLA AVE.

BROMLEY AVE.

PKWY.

WILLOW AVE.

2" GAS 38' W. OF & SO. COUNTIES GAS CO.

6" WATER 24' W. & SUBURBAN WATER SYSTEM

5' GAS 24' E. & SO. COUNTIES GAS CO.

4" WATER 24' W. & SUBURBAN WATER SYSTEM

2" GAS 20' E. & SO. COUNTIES GAS CO.

2" GAS 16.5' E. & SO. COUNTIES GAS CO.

3" GAS 36' E. OF & SO. COUNTIES GAS CO.

6" WATER 19' E. OF & SUBURBAN WATER CO.

4" WOV. WIRE FENCE

5' DOUBLE WOV. WIRE FENCE

3' WOODEN BARRICADE ON TOP OF 1' HIGH ASPHALT BERM.

SURVEY STA. 16+78.45 (R.S. 519)

Exist. Struct.

Std. J.C. Type "A or D" Sta. 16+48.13

Std. J.C. Type "A or D" Sta. 32+11.76 (See detail sheet 3)

Std. J.C. Type "A or D" Sta. 35+92.76

Std. J.C. Type "A or D" Sta. 38+16.90

Std. J.C. Type "A or D" Sta. 39+55.09 ± LPT

Std. M.H. Type "A or D" Sta. 39+ ± LPT +51.09

End of Contract Sta. 41+11.67

BDRY. CITY OF BALDWIN PARK & BDRY. CITY OF WEST COVINA

24" x 15" C.M.P. ARCH

NOT A PART OF THIS CONTRACT (SEE SHT. 3A)

CITY OF WEST COVINA SEWAGE DELIVERY POINT

STUCCO HOUSE № 112

PATIO

FLOWERS

3' WHITE PICKET FCE.

(CHILDREN'S MOVEABLE PLAY EQUIPMENT)

LAWN AREA

6' R/W

5' CH. LK. FCE.

6' R/W OCCUPATIONAL R/W ± M.W.D. SALT WATER (DWG. 15-D-1, SH. 21)

(ASPH. PVMT.)

& PROP. 15" TRUNK SEWER & LOT LINE

M. B. 512 - 36

PRIVATE

STATE

40'

80'

NOTE:
FOR CONSTRUCTION IN PUENTE AVE., SEE NOTE 8, SHEET 3.

DETAIL OF STD. J.C. AT STA. 32 + ± SCALE: 1" = 10'

PROP. 15" SEWER

℄ PROP. 15" SEWER & ℄ WALNUT CREEK PKWY.

C.S.D. № 22 C.S.D. № 15

NO.	SHEET	REVISION	INITIAL	DATE
1	2	CH'D GRADE BETWEEN 7+20.39 AND 7+70	LP	1-22-58

SUBMITTED: J. Cochrane DATED Nov. 26, 1957
RECOMMENDED: C.R. Crowder CHIEF ENGINEER DATED Nov. 26, 1957
APPROVED: Cecil Lacy DATED Nov. 26, 1957

COUNTY SANITATION DISTRICT № 22 OF LOS ANGELES COUNTY, CALIF.
DISTRICT № 22 MAIN TRUNK SEWER
(SECTION I-C)
DWG. № 22-P-26 SHEET № 2 OF 3 SHEETS

PLAN & PROFILE

FIELD BOOK
SURVEYED
DRAWN
CHECKED
TRACED
FOR CHIEF ENGINEER

FINAL SURVEY | FIELD BOOK | INITIAL | DATE
962 A.B.J. 2-27-59
R.E.S.

DATE | BY

DESIGNED
CHECKED
APPROVED

FIELD BOOK
NO. 919

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