Initial Study / Mitigated Negative Declaration

1651 Lynn Road

Residential Subdivision Project

City of Thousand Oaks



PREPARED FOR:

City of Thousand Oaks
Community Development
Department, Planning Division
2100 Thousand Oaks Boulevard
Thousand Oaks, California 91362
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Contact: Johanna Falzarano, Senior Project Manager
(818) 879-4700

September 2024

City of Thousand Oaks

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ACRONYM LIST

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACM	Asbestos-Containing Materials
ADT	Average Daily Trips
AF	Acre Feet
AMS	American Meteorological Society
AMSL	Average Mean Sea Level
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
BOARD	Board of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CalFire	California Department of Forestry and Fire Protection
CAO	Clean-up and Abatement Order
CAP	Climate Action Plan
CAPCOA	California Air Pollution Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEAP	Climate and Environmental Action Plan
CEQA	California Environmental Quality Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH_4	Methane
City	City of Thousand Oaks
CMWD	Calleguas Municipal Water District
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	CO_2 Equivalents
CPA	Clean Power Alliance
CRPD	Conejo Recreation and Park District
CVUSD	Conejo Valley Unified School District
CWPP	Community Wildfire Protection Plan
CY	Cubic Yards
DBH	Breast diameter height
DPM	Diesel Particulate Matter
DTSC's	Department of Toxic Substances Control's
du/acre	Density Units per Acre
EIR	Environmental Impact Report
ENERGY CODE	State's 2022 Building Energy Efficiency Standards
EOP	Emergency Operations Plan
FEMA	Federal Emergency Management Agency
FHSZs	Fire Hazard Severity Zones
FTA	Federal Transit Administration
GHG	Greenhouse Gases
GPD/UNIT	Gallons Per Day Per Unit

GVWR	Gross Vehicle Weight Rating
HAA	Housing Accountability Act
HCP	Habitat Conservation Plan
HEPA	High Efficiency Particulate Air
HFCs	Hydrofluorocarbons
HP	Horsepower
HRA	Health Risk Assessment
HSC	Health and Safety Code
HVAC	Heating, Ventilation and Air Conditioning
ITE	Institute of Transportation Engineers
LBP	Lead Based Paint
LOS	Levels of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MJHMP	Multi-Jurisdictional Local Hazard Mitigation Plan
MLD	Most Likely Descendant
MND	Initial Study/Mitigated Negative Declaration
MPOs	Metropolitan Planning Organizations
MT	Metric Tons
$MTCO_2e$	Metric Tons of Carbon Dioxide Equivalents
MWD	Metropolitan Water District
N_2O	Nitrous oxide
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
ND	Negative Declaration
NIMS	National Incident Management System
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
ODS	Objective Design Standard
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
Qoa	Pleistocene Alluvial Material
OPR	Office of Planning and Research
OSFM	Office of the State Fire Marshal
Pb	Lead
PDF	Product design feature
PFCs	Perfluorocarbons
PM	Particulate Matter
PPV	Peak particle Velocity
PROJECT	1651 Lynn Road Residential Subdivision Project
PTP	Protected Tree Permit
R-E	Rural-Exclusive
RECs	Recognized Environmental Conditions
REL	Reference Exposure Level
RHNA	Regional Housing Needs Allocation
RHNA	Regional Housing Needs Allocation
ROG	Reactive Organic Gases
RPD	Residential Planned Development
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategies

SB	Senate Bill
SCAG	Southern California Association of Government
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SEMS	Standardized Emergency Management System
SF	Square Feet
SF_6	Sulfur Hexafluoride
SLF	Sacred Lands File
SO_2	Sulfur Dioxide
SRA	State Responsibility Area
SVLRC	Simi Valley Landfill & Recycling Center
SWPPP	Stormwater Water Pollution Prevention Plan
SWRCB's	State Water Resources Control Board's
TACs	Toxic Air Contaminants
TCAC/HCD	Tax Credit Allocation Committee/Housing Community Development
Tcvb	Conejo Volcanic Formation
TOMC	Thousand Oaks Municipal Code
TPD	Tons Per Day
VTTM	Vesting Tentative Tract Map
Tvcg	Miocene sandstone formations
UCSB	University of California at Santa Barbara
URF	Unit Risk Factor
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VCAPCD	Ventura County Air Pollution Control District
VCFC	Ventura County Fire Code
VCFD	Ventura County Fire Department
VCFPD	Ventura County Fire Prevention District
VCSD	Ventura County Sheriff's Department
VdB	Vibration Decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
WUI	Wildland-Urban Interface

1.0 INTRODUCTION

The purpose of this Initial Study/Mitigated Negative Declaration is to disclose and evaluate the environmental impacts of the 1651 Lynn Road Residential Subdivision Project (Project), located in the City of Thousand Oaks (City) community of Newbury Park, California, as described further in Section 3.0 Project Description, below.

LEGAL AUTHORITY

As Lead Agency, the City has prepared this Initial Study/Mitigated Negative Declaration (MND) in accordance with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code 21000–21189) and relevant provisions of the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Sections 15000–15387), as amended.

Initial Study. Section 15063(c) of the CEQA Guidelines defines an Initial Study as the proper preliminary method of analyzing the potential environmental consequences of a project. To paraphrase from this Section, the relevant purposes of an Initial Study are:

(1) To provide the Lead Agency with the necessary information to decide whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration (ND);
(2) To enable the Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby, enabling the project to qualify for an ND; and
(3) To provide sufficient technical analysis of the environmental effects of a project to permit a judgment based on the record as a whole, that the environmental effects of a project will not have a significant effect on the environment that would necessitate an EIR.

Negative Declaration or Mitigated Negative Declaration. CEQA Guidelines Section 15070 states a public agency shall prepare a ND or MND for a project subject to CEQA when:

(a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
(b) The initial study identifies potentially significant effects, but:
    1. Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
    2. There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

A ND or MND may be used to satisfy the requirements of CEQA when a project would have no significant, unmitigable effects on the environment.

2.0 FINDINGS OF THIS INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The impact analysis in this Initial Study demonstrates that with the incorporation of mitigation measures, the Project would have a less than significant impact on the environment with regard to all CEQA Environmental Checklist topics. For each topic addressed in Section 4.0, the impacts associated with development of the Project have been determined to be "Potentially Significant Unless Mitigation Incorporated," "Less than Significant," or "No Impact." Thus, a MND may be issued.

3.0 PROJECT DESCRIPTION

Adams Lynn Road, the Project Applicant (Applicant), proposes to subdivide the property at 1651 Lynn Road (Assessor's Parcel Numbers [APNs] 660-0-030-165 and 660-0-030-175. The proposed Project is a request to allow the subdivision of a partially vacant 4.30-acre residential lot into 19 residential lots to accommodate the construction of 18 single-family residences, an internal private access road, walls, hardscape, landscape, a bio-retention basin, and grading in the City of Thousand Oaks (City), as well as the removal of oak trees, the encroachment into the protected zone of oak trees, and a waiver from the requirement to underground associated utility lines. The majority of the proposed development would be located on the privately owned APN 660-0-030-165 (4.30 acres); however, the Applicant would be granted an easement over the City-owned APN 660-0-030-175 (0.31 acres) to maintain the landscaping on the parcel fronting Lynn Road.

The Applicant is requesting two Modifications to the Objective Design Standards (ODS) of the City of Thousand Oaks Municipal Code (TOMC), as follows:

1. Gated Access – Allow vehicular and pedestrian gated access to the Project site as otherwise prohibited by TOMC Section 9-4.2205(a)(4); and
2. Flag Lot – Allow for one residential flag lot as otherwise prohibited by TOMC Section 9-4.2205(a)(6).

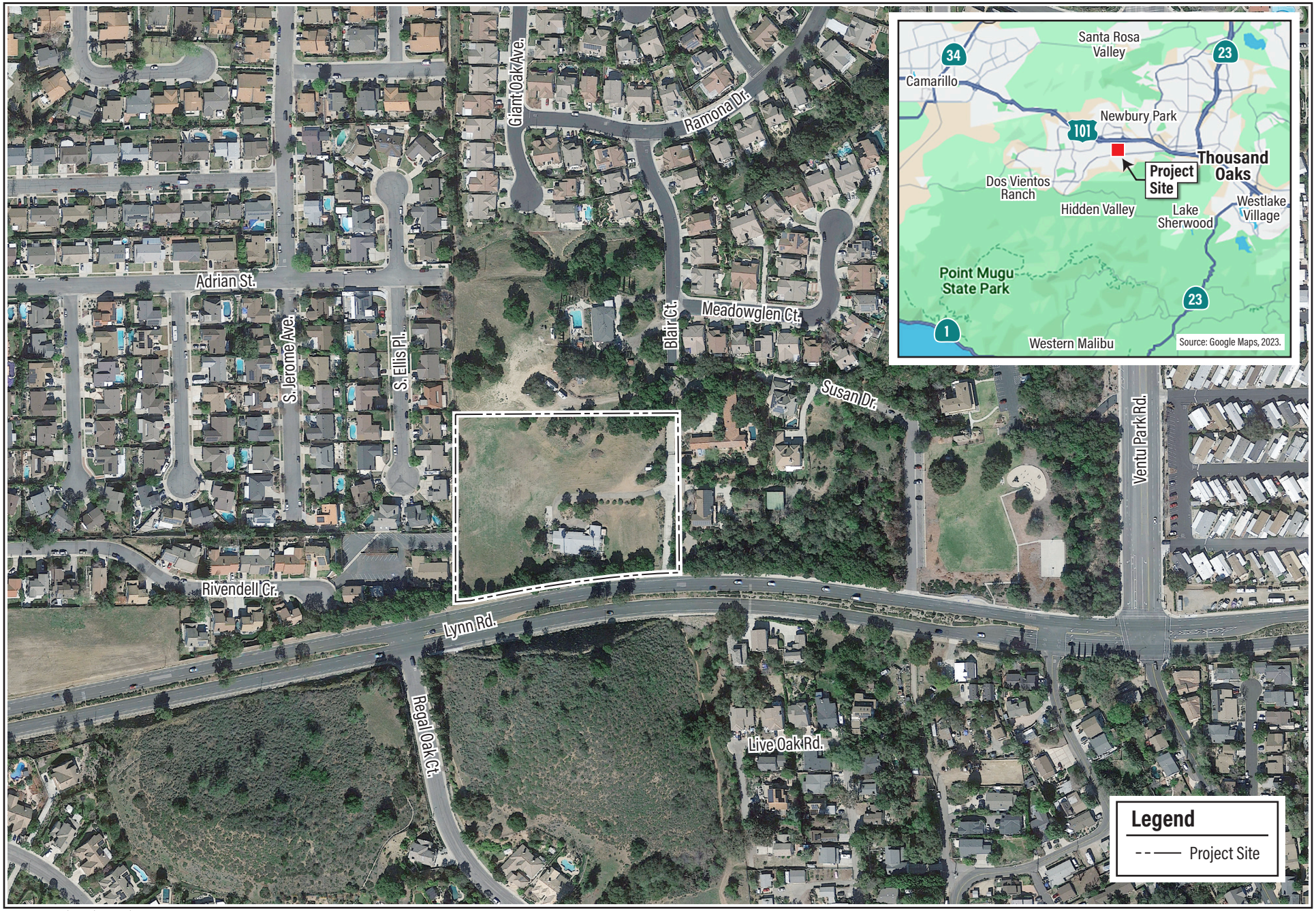
PROJECT LOCATION, EXISTING USES, SURROUNDING USES, AND PLANNING AND ZONING

The Project site is located at 1651 Lynn Road in the Newbury Park community of the City; more specifically located at the northwest corner of the intersection of Lynn Road and Blair Court, on approximately 4.61-acres. The Project site is comprised of an existing single-family residence with associated landscaping and a paved driveway and associated hardscape. The remainder of the Project site is undeveloped (refer to **Figure 1, Vicinity Map**, and **Figure 2, Site Plan**). The Project site is zoned Rural-Exclusive (R-E) and the General Plan land use designation is Neighborhood Low 2 (> 4.5 to 6 du/acre).[1] As shown in Figure 2, the Project site is bordered immediately by Lynn Road to the south, Blair Court to the east, and single-family residences to the north and west, as well as a religious institution (Salon Del Reino Kingdom Hall) to the southwest. Additional residential communities are located further north, south, east, and west of the Project site, and an open space area is also located south of the Project site beyond Lynn Road.

PROJECT COMPONENTS

The Project would require demolition of the existing single-family residence, and the Project site would be subdivided into nineteen (19) residential lots in order to construct eighteen (18) single-family residences, including removal and encroachment into the protected zone of various oak trees, new walls, hardscape, landscape, grading, a bio-retention basin, and a private road (that would be secured by a motorized security gate), as shown in Figure 2. **Table 1, Proposed Lot Areas and Building Footprints**, provides additional details of the planned subdivision. As shown in Table 1, the Project site would have a gross lot area of approximately 200,989.8 square feet (sf) across the 19 subdivided lots and including the private road that would be developed for the Project and the HOA-maintained area. The residences would consist of single-story residences and two-story residences. All houses would include an attached two-car garage.

[1] In cases where zoning standards and criteria are inconsistent with applicable, objective general plan standards for a site, the Housing Accountability Act (HAA) clarifies that if a proposed development project is consistent with the applicable objective general plan standards for the site, then the housing development project cannot be found inconsistent with the standards and criteria of the zoning. Additionally, under the HAA, if such an inconsistency exists, the local agency may not require rezoning prior to housing development project approval.



Source: Google Earth Pro, February, 2022.

1651 LYNN ROAD RESIDENTIAL SUBDIVISION PROJECT

envicom

Vicinity Map

FEET 0 150 300

FIGURE 1



Source: Pacific Coast Civil, Inc., Vesting Tentative Tract Map #6081, July 19, 2024.

Site Plan

FEET 0 40 80

FIGURE 2

Table 1
Proposed Lot and Building Area Details

Lot Number[a]	Lot Area (Gross Square Feet)	Lot Area (Gross Acreage)	Building Footprint	Building Area Per Lot (Square Feet)
1	10,420.35	0.24	1,851	3,056
2	5,514.84	0.13	1,813	2,488
3	5,549.78	0.13	2,696	2,011
4	5,093.42	0.12	1,804	2,651
5	5,787.02	0.13	1,813	2,488
6	5,859.94	0.13	1,804	2,651
7	19,457.63	0.45	2,696	2,011
8	12,391.76	0.28	2,696	2,011
9	5,361.81	0.12	1,804	2,651
10	5,908.04	0.14	1,813	2,488
11	6,464.44	0.15	1,804	2,651
12	11,231.48	0.26	1,851	3,056
13	6,998.50	0.16	1,851	3,056
14	6,965.56	0.16	1,851	3,056
15	7,907.55	0.18	1,804	2,651
16	8,209.48	0.19	1,813	2,488
17	8,848.09	0.20	1,851	3,056
18	17,862.86	0.41	2,696	2,011
Bio-filtration Lot	4,779.17	0.11	N/A	N/A
Private Street	40,378.03	0.93	N/A	N/A
Development Total	**200,989.76**	**4.61**	**36,311**	**46,531**

Sources:
Di Cecco Architecture, Inc., 1651 Lynn Road, Thousand Oaks, CA, Site Plan, July 19, 2024.
Pacific Coast Civil, Inc., Vesting Tentative Tract Map #6081, July 19, 2024.

Totals may not add due to rounding.

[a] The Bio-filtration Lot will be maintained by the Homeowners Association (an area of 0.11acres).

Vehicular and Pedestrian Access

The Project site is regionally accessible from the Ventura Freeway (Highway 101), which is located approximately 1.4 miles from the Project site. Local access to the Project site would be provided from Lynn Road to the south and Blair Court to the east. Direct access to the Project site is provided via the new private access road connecting directly to Blair Court, which extends north from Lynn Road. The proposed subdivision would be secured by a motorized security gate. The 18 single-family residences would all be accessed from the private road, which would terminate in a cul-de-sac within the subdivision. Sidewalks would be provided along the private road. In addition, the Project would include off-site improvements with the construction of a sidewalk along the Lynn Road Project site frontage as well as along the Blair Court Project site frontage, providing improved pedestrian access.

Landscaping

Each residential lot and the bio-retention basin lot would be landscaped with plants and/or trees. Landscaping would comply with Ventura County Fire Protection District Ordinance Number 32, Chapter 49, Requirements for Wildland-Urban Interface Fire Areas, and by extension, with the CCR, Title 14, Fire Safe Regulations. Landscaping would also comply with Ventura County Fire Department (VCFD) Standard 515 based upon vegetation characteristics. Each building would have a 10-foot Tree Free Zone to ensure compliance with regulations. The Project would plant multiple species to add unique character throughout each lot. Along the southern property line and adjacent to Lynn Road is an existing landscaped area consisting of mature trees, which shall be maintained by a Homeowners Association (HOA). The

landscaped area would partially screen the proposed development, as seen from Lynn Road. Landscaped areas would cover approximately 8,035 sf of the Project site.

Demolition and Construction

Demolition and construction for the Project would occur over approximately 15 months. Construction is expected to begin in early 2025, and the Project would be operational in 2026. Site demolition would involve the demolition of the existing one-story single-family residence and associated driveway and hardscaping, as well as the removal of 23 oak trees and the encroachment of 80 oak trees.[2] Following demolition, the grading phase would involve the cut and fill of approximately 15,000 cubic yards (cy) of soils; however, an estimated 1,000 cy of unsuitable rock material is anticipated to require removal and export from the site.

Exported materials are anticipated to be hauled to the Simi Valley Landfill & Recycling Center (SVLRC). This export would require 70 truck trips, using 14-cy capacity trucks. The construction phase would involve building construction and associated hardscaping (driveways, sidewalks, and walls, private road development, installation of utility connections and extensions), and landscape planting.

Table 2, Construction Details, conveys the phases of construction, phase durations, and types and numbers of equipment that are anticipated to be utilized during Project site development.

Table 2
Construction Details

Phase	Duration	Equipment Type [a]	(Number of Pieces)
Demolition	20 days	Concrete/Industrial Saw	1
		Excavators	3
		Rubber Tired Dozers	2
Site Preparation	10 days	Rubber Tired Dozers	1
		Tractors/Loaders/Backhoes	1
Grading	20 days	Excavators	1
		Graders	1
		Rubber Tired Dozers	1
		Tractors/Loaders/Backhoes	3
Building Construction	200 days	Cranes	1
		Forklifts	3
		Generator Sets	1
		Tractors/Loaders/Backhoes	3
		Welders	1
Paving	18 days	Cement and Mortar Mixers	2
		Pavers	1
		Paving Equipment	2
		Rollers	2
		Tractors/Loaders/Backhoes	1
Architectural Coating	18 days	Air Compressors	1

Source: CalEEMod Output, Appendix A.

[a] The Project would use off-road construction equipment with designed Tier 4 Final engines as a Project design feature for reduced emissions.

[2] According to the Oak Tree Report prepared by Jan C. Scow Consulting Arborists, LLC (September 12, 2023), the City has required that an access easement be granted through the northeast corner of the Project site for access to the property to the north. If this area is cleared for an access road and utilities, an additional 10 protected oak trees would be removed (Nos. 23-30, 32, and 33), and 2 would experience encroachment within the protected zone (Nos. 34 and 35). That is not a part of the Project.

REQUIRED APPROVALS

The Project would require the following approvals:

- Vesting Tentative Tract Map (VTTM) 2022-70793 for approval to subdivide the 4.30-acre parcel into 19 lots;
- Residential Planned Development (RPD) 2022-70851 approval for the construction of 18 single-family residences, including an internal private access road, new walls, hardscape, landscape, bio-retention basin, and grading, as well as modifications to the ODS as follows:
  - Modification to the ODS of the TOMC, to allow vehicular and pedestrian gated access to the Project site as otherwise prohibited by TOMC Section 9-4.2205(a)(4), and
  - Modification to the ODS of the TOMC, to allow for one residential flag lot as otherwise prohibited by TOMC Section 9-4.2205(a)(6);
- Protected Tree Permit (PTP) 2022-70874 for the removal of 23 oak trees and encroachment into the protected zone of 80 oak trees; and
- Underground Utility Waiver (UUW) 2024-70002 request to waive the requirement to underground existing overhead utilities to construct 18 single-family residences and associated development.

4.0 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY AND ENVIRONMENTAL CHECKLIST

1. Project title:
1651 Lynn Road Residential Subdivision Project

2. Lead Agency name and address:
City of Thousand Oaks
Community Development Department Planning Division
2100 Thousand Oaks Boulevard
Thousand Oaks, California CA 91362

3. Contact person and phone number:
Carlos Contreras, Senior Planner
E-mail: ccontreras@toaks.org
Telephone: (805) 449-2317

4. Project location:
The Project site is located at 1651 Lynn Road in Newbury Park, west of the intersection of Lynn Road and Ventu Park Road, on 4.61 acres within APNs 660-0-030-165 and 660-0-030-175.

5. Project Applicant name and address:
1651 Lynn Road, LLC
30699 Russel Ranch Road, Suite 100
Westlake Village, California 91362
Attention: Mr. Jeb Adams

6. General Plan Land Use designation:
Neighborhood Low 2 (> 4.5 to 6 density units per acre)

7. Zoning designation:
Rural-Exclusive (R-E)

8. Project Description:
The Project would subdivide 1651 Lynn Road and develop 18 single-family residences, including an internal private access road, walls, hardscape, landscape, a bio-retention basin, and grading in the City of Thousand Oaks (City), as well as the removal of oak trees, encroachment into the protected zone of oak trees, and a waiver from the requirement to underground associated utility lines. Please see Section 3.0, Project Description, for further detail.

9. Surrounding land uses and setting:
The Project site is located immediately south of the Project site. North, east, and west of the Project site are residences. To the south is Lynn Road and residences and open space beyond.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):
Approvals are only required from the City.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code § 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On February 28, 2024, the City Community Development Department sent a letter to the Native American tribe that is culturally affiliated with the Project area, notifying the tribe of the Project. No response/request for consultation was received from the Barbareño/Ventureño Band of Mission Indians of the Project. The City Community Development Department closed consultation on May 9, 2024. The relevant consultation correspondences are provided in the appendix to this document.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of 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 in 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 "potentially significant unless mitigated" 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 potentially 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. Therefore, an EIR Addendum will be prepared.

Name: Carlos Contreras

Title: Senior Planner, Community Development Department Planning Division

Signature: Carlos Contreras _____ Date: 8/30/24 _____

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS. 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 publicly accessible vantage points). 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 which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact Analysis

a. A significant impact may occur if a project introduces incompatible visual elements within a field of view containing a scenic vista or substantially blocks views of a scenic vista.

Less than Significant Impact. The Project site is currently zoned for residential uses and is partially developed with one residence located at the southern portion of the site. Single-family zoning designations and existing single-family residences are the primary land use surrounding the Project site, and additional residences and an open space area are located to the south of the Project site beyond Lynn Road. Lynn Road, which borders the Project site to the south, provides motorists with diverse views of Thousand Oaks, and in the immediate vicinity of the Project site, it provides motorists with views of open space and hillsides to the south of the Project site. The Project would subdivide the existing parcel into 19 single-family lots and develop 18 single-family residences and associated development, which would be consistent with the zoning and land use designation of the Project site. The southern boundary of the Project site along Lynn Road is heavily vegetated with mature oak trees, which act as a visual screen to views along Lynn Road in both the existing and proposed condition. The Project site would continue to be screened from Lynn Road following Project development. With regard to views of the Project site from the open space area located south of Lynn Road, the Project development would continue the pattern of residential development that exists north, south, east, and west of the Project site and would not change the character of the views from the open space area. Furthermore, site topography is characterized by an existing slope that descends from the eastern portion of the site to the western portion of the site, and the Lynn Road grade is approximately 20 feet above the proposed grade at the western portion of the site. Thus, the proposed one- and two-story residences would not be visible from Lynn Road, in that the residences would be sited at a lower elevation and the existing mature trees would partially screen the proposed residences. Therefore, the Project would have a less than significant impact on visual elements within a field of view containing a scenic vista.

Mitigation Measures

No mitigation measures are required.

b. A significant impact may occur if scenic resources within a City-designated scenic highway would be damaged or removed by development of a project.

Less than Significant Impact. The Project site is located within a City-designated scenic highway/corridor, and no scenic resources, such as rock outcroppings and historic buildings, are located on the Project site. However, scenic resources, such as trees, are located on the Project site. For the development of the Project, 23 oak trees would be removed during construction of the Project, and 80 oak trees would be subject to encroachment. The Applicant would be required to comply with the City's Oak Tree Permit application requirements including the preparation of an Oak Tree Protection Plan, and the replacement mitigation for the 23 oak tree removals includes the planting of 69 oak trees. While the Project would significantly impact protected oak trees on the Project site, the Project would comply with regulatory standards and would have a less than significant impact on scenic resources within a City-designated scenic highway.

Mitigation Measures

No mitigation measures are required.

c. A significant impact may occur if a project introduced incompatible visual elements on the site or visual elements incompatible with the character of the area surroundings.

Less than Significant Impact. The Project site is located along Lynn Road and is predominantly surrounded by existing residential communities to the north, east, and west. The proposed residential use would be consistent with the Project site's residential Rural-Exclusive (R-E) Zone and Neighborhood Low 2 (> 4.5 to 6 density units per acre (du/acre) General Plan land use designation. As discussed above, the Project would be partially screened from Lynn Road views due to the heavily vegetated southern portion of the Project site, which is to remain and would be maintained by the Homeowners Association, and the Applicant would be required to comply with the City's Oak Tree Permit and oak tree replacement requirements. As such, the Project would not introduce incompatible visual elements to the Project area, and impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

d. A significant impact may occur if a project introduced a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Less than Significant Impact. The Project site is located within an existing residential area that includes moderate levels of existing light and glare. Primary sources of nighttime light in the vicinity of the Project site are from existing residences and businesses, streetlights along Lynn Road, and headlights from vehicles traveling on streets. Glare produced during the day results from the reflection of the sun on glass surfaces of buildings and vehicles in the Project area.

The Project would add additional exterior lighting to the Project site, as well as additional glass surfaces and vehicles resulting from the increase in on-site residential units, which would incrementally add to the existing sources of light and glare in the Project area. However, light fixtures would be compatible with the existing development pattern of the surrounding area and would be in compliance with City standards that require shielded light fixtures, directed downward from projecting canopies, recessed doorways, and window openings, which are designed to create uniform illumination generally in a downward direction

and to prevent spillover on streets and adjacent properties. Therefore, the Project would not create a new source of substantial light or glare that is incompatible with adjacent uses or that would adversely affect day or nighttime view in the area, and impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES.				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the 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?	☐	☐	☐	☒

Impact Analysis

a-e. A project may result in a significant impact if it would convert Important Farmland to a non-agricultural use, conflict with zoning for agricultural uses or with a Williamson Act contract, conflict with zoning or cause re-zoning of timberland or Timberland Production areas, result in the loss or conversion of forest land, or otherwise involve or result in the conversion of Important Farmland or forest land to other uses.

No Impact. The Project site is designated Neighborhood Low 2 (> 4.5 to 6 du/acre) by the General Plan and is zoned (R-E). The Project site is currently partially developed with a single-family residence, which would be replaced by a higher-density residential land use with the Project. The Project site is not zoned for agricultural, forest, timberland, or timberland production uses. Furthermore, the Department of Conservation's California Important Farmland Finder[3] designates the Project site as "Urban and Built-Up land;" it is not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Project site is not enrolled in a Williamson Act Contract.[4] Therefore, the Project would result in no impact to agriculture and forestry resources.

[3] California Department of Conservation, California Important Farmland Finder, Accessed on November 27, 2023 at: https://maps.conservation.ca.gov/dlrp/ciff/.

[4] California Department of Conservation, California Williamson Act Enrollment, Accessed on November 27, 2023 at: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. 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 Project site is located in the South Central Coast Air Basin (Basin) and is under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). Air quality in the Basin is affected by the emission sources located in the region, as well as by the following three natural factors:

- A natural terrain barrier to emission dispersion north and east of the metropolitan Los Angeles area.
- A dominant on-shore flow transports and disperses air pollution by driving air pollution originating in industrial areas along the coast towards the natural terrain barrier, limiting horizontal dispersion. The effect of this on-shore flow is a gradual degradation of air quality from coastal to inland areas. The greatest impacts can be seen in the San Gabriel Valley and near Riverside at the foot of the San Gabriel Mountains.
- Atmospheric inversions limit dispersion of air pollution on a vertical scale. Temperature typically decreases with altitude. However, under inversion conditions, temperature begins to increase at some height above the ground. The temperature increase continues through an unspecified layer after which the temperature change with height returns to standard conditions. The inversion layer is typically very stable and acts as a cap to the vertical dispersions of pollutants.

The criteria pollutants for which federal and State standards have been promulgated and that are most relevant to air quality planning and regulation in the Basin are ozone (O_3) and fine suspended particulate matter (PM). These and other common air pollutants are briefly described below.

- **O_3** is a gas that is typically formed in the atmosphere when volatile organic compounds (VOCs)[5] and nitrogen oxides (NO_X) undergo slow photochemical reactions in the presence of sunlight. As such, emissions of VOCs and NO_X are considered to be O_3 precursors. 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. Individuals exercising

[5] The Ventura County Air Pollution Control District Ventura County Air Quality Assessment Guidelines specifies that within that document, VOC is synonymous with reactive organic gases (ROG) and reactive organic compounds (ROC).

outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the subgroups most susceptible to O_3 effects. Short-term exposures (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.

- **PM-10 and PM-2.5** consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively, that can lodge in the lungs when inhaled. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. Inhaled particulate matter can contribute to respiratory problems and can cause permanent lung damage. Inhalable particulates can also have a damaging effect on health by interfering with the body's mechanism for clearing the respiratory tract or by acting as a carrier of an absorbed toxic substance.
- **Carbon Monoxide (CO)** is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. CO is a health concern because it competes with oxygen, often replacing it in the blood and reducing the blood's ability to transport oxygen to vital organs. Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.
- **Nitrogen dioxide (NO_2)** is a compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X, a major contributor to O_3 formation. NO_2 also contributes to the formation of PM-10. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (2-3 years old) has been observed at concentrations below 0.3 parts per million (ppm).
- **Sulfur dioxide (SO_2)** is a toxic gas produced largely by the burning of sulfur-bearing fossil fuels. Sulfur oxides (SO_x) are a group of molecules made of sulfur and oxygen atoms and are pollutants that contribute to the formation of acid rain and particulate pollution. SO_2 is the component of greatest concern and is used as the indicator for all gaseous sulfur oxides. Volcanoes are a natural source of sulfur oxides, but 99 percent of the SO_2 in the atmosphere comes from human activity, such as burning coal, oil, and gas. The sulfur in coal and oil combine with oxygen when burned to make sulfur oxides. Processing mineral ores that contain sulfur and industrial burning of fossil fuels are also sources of sulfur oxides in the atmosphere.
- **Lead (Pb)** in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturers of batteries, paint, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities have become emission sources of greater concern. Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures

during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

- **Toxic Air Contaminants (TACs)** are airborne pollutants identified by the California Air Resources Board (CARB), which may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. TACs are not criteria pollutants and are regulated separately. The United States Environmental Protection Agency (USEPA) regulates TACs through technology-based requirements, which are implemented by State and local agencies. California regulates TACs through the air toxics program (Health and Safety Code [HSC] Section 39660 et seq.) and the Air Toxics "Hot Spots" Information and Assessment Act (HSC Section 44300 et seq.). Sources of TACs include some industrial and commercial activities, and mobile emissions from cars and trucks, particularly diesel particulate matter (DPM). The "Hot Spots" Act applies to stationary sources and requires operators of specified facilities (those that produce TACs) to submit emission inventories to the VCAPCD.

A summary of these major criteria pollutants of concern and their effects on public health is provided in **Table 3, Health Effects of Major Criteria Pollutants.**

Table 3
Health Effects of Major Criteria Pollutants

Pollutants	Sources	Primary Health Effects
Carbon Monoxide (CO)	• Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves	• Chest pain in patients with heart disease • Headache • Light-headedness • Reduced mental alertness
Nitrogen Dioxide (NO_2)	• See carbon monoxide sources	• Lung irritation • Enhanced allergic responses
Ozone (O_3)	• Motor vehicles • Industrial emissions • Consumer products Note: These sources emit NOx and VOC which are precursors for the formation of O_3 in the atmosphere when they react with sunlight.	• Respiratory symptoms • Worsening of lung disease leading to premature death • Damage to lung tissue
Particulate Matter (PM-10)	• Cars and trucks (especially diesels) • Fireplaces, woodstoves • Windblown dust from roadways, agriculture and construction	• Premature death & hospitalization, primarily for worsening of respiratory disease
Particulate Matter (PM-2.5)	• Cars and trucks (especially diesels) • Fireplaces, woodstoves • Windblown dust from roadways, agriculture and construction	• Premature death • Hospitalization for worsening of cardiovascular disease • Hospitalization for respiratory disease • Asthma-related emergency room visits, increased symptoms, increased inhaler usage
Sulfur Oxides (SO_x)	• Burning of coal and oil • Refining oil • Ore and metal processing	• Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits.

Pollutants	Sources	Primary Health Effects
Lead (Pb)	• Ore and metal processing • Leaded aviation fuel • Waste incineration	• Impaired mental functioning in children • Learning disabilities in children • Brain and kidney damage
Sources: California Air Resources Board, Sources of Air Pollution, Accessed on February 23, 2024 at: https://ww2.arb.ca.gov/resources/sources-air-pollution, and Common Air Pollutants at: https://ww2.arb.ca.gov/resources/common-air-pollutants		

Baseline Air Quality

The USEPA has set primary national ambient air quality standards (AAQS) for O_3, CO, NO_2, SO_2, PM-10, PM-2.5, and Pb. Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. In addition, the State has established health-based ambient air quality standards for these and other pollutants, some of which are more stringent than the federal standards. **Table 4, Federal and State Ambient Air Quality Standards,** lists the current federal and State standards for regulated pollutants.

Table 4
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Standards	California Standards
Ozone (O_3)	1 Hour	-	0.09 ppm
	8 Hour	0.07 ppm	0.07 ppm
Carbon Monoxide (CO)	8 Hour	9.0 ppm	9.0 ppm
	1 Hour	35 ppm	20 ppm
Nitrogen Dioxide (NO_2)	Annual	0.053 ppm	0.030 ppm
	1 Hour	0.10 ppm	0.18 ppm
Sulfur Dioxide (SO_2)	24 Hour	0.14 ppm	0.04 ppm
	1 Hour	0.075 ppm	0.25 ppm
Particulate Matter (PM-10)	Annual	-	20 µg/m^3
	24 Hour	150 µg/m^3	50 µg/m^3
Fine Particulate Matter (PM-2.5)	Annual	12 µg/m^3	12 µg/m^3
	24 Hour	35 µg/m^3	–
Lead	30-Day average	–	1.5 µg/m^3
	3-Month Average	0.15 µg/m^3	–
Source: California Air Resources Board, California and National Ambient Air Quality Standards, 2016, Accessed on February 23, 2024 at: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf Notes: ppm = parts per million; µg/m3 = micrograms per cubic meter.			

Data on existing air quality in the Ventura County portion of the Basin is available from the CARB, as measured at various monitoring locations. The monitoring station located closest to and most representative of air quality at the Project site is the Thousand Oaks Monitoring Station, located at 2323 Moorpark Road, approximately 3.2 miles northeast of the Project site. **Table 5, Ambient Air Quality**, summarizes the annual air quality data from 2018 – 2022 in the local airshed for the criteria pollutants of greatest concern in Ventura County. The NO_x and PM-10 measurements shown in Table 5 were taken at 5400 Cochran Street, Simi Valley, as these criteria pollutants are not recorded at the Thousand Oaks monitoring station location. Although the monitoring station is approximately 15 miles northeast of the Project site, it is the next closest representative station.

Table 5
Ambient Air Quality

Pollutant/Standard	2018	2019	2020	2021	2022
Ozone (O_3)					
Number of Days Standards Exceeded					
1-Hour > 0.09 ppm (S)	0	0	0	0	0
8-Hour > 0.07 ppm (F)	1	1	7	1	0
Maximum Observed Concentration					
Max. 1-Hour Conc. (ppm)	0.080	0.082	0.097	0.077	0.084
Max. 8-Hour Avg. (ppm)	0.073	0.074	0.084	0.073	0.068
Nitrogen Dioxide (NO_x)					
Number of Days Standards Exceeded					
1-Hour > 0.18 ppm (S)	0	0	0	0	0
Maximum Observed Concentration					
Max. 1-Hour Conc. (ppm)	0.103	0.084	0.093	0.098	0.091
Inhalable Particulates (PM-10)					
Number of Days Standards Exceeded					
24-Hour > 50 µg/m^3 (S)	6	4	--	3	0
24-Hour > 150 µg/m^3 (F)	0	0	0	0	0
Maximum Observed Concentration					
Max. 24-Hr. Conc. (µg/m^3)	110.5	127.9	90.5	103.7	45.8
Ultra-Fine Particulates (PM-2.5)					
24-Hour > 35 µg/m^3 (F)	1	0	1	0	0
Max. 24-Hr. Conc. (µg/m^3)	41.5	24.5	36.3	29.1	20.6

Sources:
California Air Resources Board, iADAM: Air Quality Data Statistics, Accessed on February 23, 2024 at: https://www.arb.ca.gov/adam/index.html
California Air Resources Board, Air Quality and Meteorological Information, Accessed on February 26, 2024 at: https://www.arb.ca.gov/aqmis2/aqmis2.php

Notes: S = State; F = federal; ppm = parts per million; mg/m^3 = micrograms per cubic meter of air; -- = insufficient data reported

As shown in Table 5, O_3 levels exceeded 1-hour federal or State standards on one day between 2018-2022 and exceeded 8-hour federal standards on 10 days within the same time period. PM-10 levels exceeded the State 24-hour standard on 13 days in 2018-2022, and the National 24-hour PM-10 standard was not exceeded. PM-2.5 levels exceeded federal 24-hour standards on two days from 2018-2022, and NO_x levels measured from 2018-2022 did not exceed National or State standards.

Project Emissions Modeling

Project-related air quality emission data was obtained using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.26, 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 emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts. The output produced using CalEEMod is included as **Appendix A, California Emissions Estimator Model Output**.

The Project consists of construction and operation of 18 single-family residences, a private access road, and a bio-retention basin. Construction emissions would be produced from equipment use, hauling/vendor trips, and vehicle worker trips. Operational emissions would be produced from energy use, equipment use, and vehicle emissions. Table 2, provided in Section 3.0, Project Description, illustrates the construction equipment and phase assumptions used.

a. A significant air quality impact may occur if a project is not consistent with the applicable Air Quality Management Plan (AQMP) or if a project would represent a substantial hindrance to implementing the policies or obtaining the goals of that plan.

No Impact. The applicable AQMP for the Project is the 2022 Ventura County AQMP.[6] The 2003 Ventura County Air Quality Assessment Guidelines from the VCAPCD (VCAPCD Guidelines) state that a project's consistency with the AQMP can be determined by comparing the actual population growth in the County with the projected growth rates used in the AQMP. If a project is consistent with the population forecasts used in the most recently adopted AQMP, it will show consistency with the AQMP. The AQMP relies on the Southern California Association of Government (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS) forecast for regional population growth.[7] The Project would result in population growth of approximately 50 people, which would be 0.3 percent of the projected growth; therefore, the Project growth is within the growth assumptions that are incorporated into the 2022 Ventura County AQMP and would not result in unplanned population growth, as discussed in Section XIV, Population and Housing. As such, the Project would not conflict with or obstruct implementation of the AQMP, and the Project would result in no impact.

Mitigation Measures

No mitigation measures are required.

b. A significant impact may occur if a project adds a considerable cumulative contribution to federal or State nonattainment pollutants.

Less Than Significant Impact. For projects located within the County, the VCAPCD Guidelines[8] provide VOC and NO_x thresholds that the VCAPCD has determined will: "individually and cumulatively jeopardize attainment of the federal one-hour ozone standard, and thus have a significant adverse impact on air quality in Ventura County," which are as follows:

1. VOC 25 pounds/day
2. NO_X 25 pounds/day

According to the VCAPCD Guidelines, construction-related emissions of VOC and NO_x are not counted toward the two significance thresholds, since these emissions are temporary. However, the VCAPCD Guidelines state that if a project's estimated construction-related emissions of ROG and NO_x would exceed 25 pounds/day, the VCAPCD recommends the following measures to mitigate ozone precursor emissions from construction motor vehicles:

[6] Ventura County Air Pollution Control District, 2022 Ventura County Air Quality Management Plan, December 13, 2022.

[7] While SCAG has recently adopted the updated 2024-2050 RTP/SCS, it has not been certified by the California Air Resources Board (CARB), and the 2022 AQMP is based on population, housing, and employment projections from the 2020-2045 RTP/SCS.

[8] Ventura County Air Pollution Control District Ventura County Air Quality Assessment Guidelines, Section 3.3 Recommended Significance Criteria, October 2003.

1. Minimize equipment idling time.
2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.
4. Use alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, if feasible.

Construction Emissions

Emissions from construction would be generated from construction equipment, worker vehicle trips, and vendor/hauling trips. Project design feature (PDF) PDF-AQ-1, which requires the use of off-road diesel-powered equipment that meets USEPA Tier 4 Final emissions standards, is included in these estimates. **Table 6, Construction Emission Estimates,** shows estimated emissions generated by construction activities for the Project.

Table 6
Construction Emission Estimates

Construction Thresholds	Maximum Daily Emissions (pounds/day) [a]					
	ROG	NO_X	CO	SO_2	PM-10	PM-2.5
Construction Emissions [b, c]	16.83	5.26	19.2	0.04	3.01	1.45
VCAPCD Thresholds	25	25	-	-	-	-
Exceeds Threshold? Yes/No	No	No	-	-	-	-

Source: CalEEMod Output, Appendix A.

[a] Maximum daily emissions for all years of construction. Summer or Winter season, whichever is greatest.
[b] The Project would use off-road diesel-powered equipment that meets USEPA Tier 4 Final emissions standards.
[c] Includes watering of exposed surfaces twice daily for dust suppression as required by VCAPCD Rule 55.

As shown in Table 6, the Project would not exceed the threshold of 25 pounds/day for either ROG or NO_x. As such, the Project would result in a less than significant air quality impact related to a considerable cumulative contribution to federal or State nonattainment pollutants during construction.

Operational Emissions

During operations, the Project would result in emissions of criteria pollutants from area sources (i.e., consumer products, architectural coatings, and landscaping equipment), energy sources (electricity and natural gas usage), and mobile sources (vehicle use), which were also calculated using CalEEMod.

Project details, including the proposed number of single-family units and vehicle trips generated from the Project, were applied to CalEEMod for determining operational emissions and are reported in the CalEEMod Output in Appendix A. **Table 7, Maximum Daily Operations Emissions,** shows operational emissions separated by the general emission sources.

Table 7
Maximum Daily Operations Emissions

Emissions Sources	Emissions (Pounds/Day)					
	ROG	NO_X	CO	SO_2	PM-10	PM-2.5
Summer Emissions						
Area	1.19	0.31	1.15	<0.01	0.02	0.02
Energy	0.01	0.20	0.08	<0.01	0.02	0.02
Mobile	0.73	0.54	4.90	0.01	1.09	0.28
Total	**1.93**	**1.05**	**6.13**	**0.01**	**1.13**	**0.32**
Winter Emissions						
Area	1.12	0.30	0.13	<0.01	0.02	0.02
Energy	0.02	0.20	0.08	<0.01	0.02	0.02
Mobile	0.77	0.61	4.89	0.01	1.09	0.28
Total	**1.91**	**1.11**	**5.1**	**0.01**	**1.13**	**0.32**
Maximum Total	**1.93**	**1.11**	**6.13**	**0.01**	**2.32**	**0.32**
VCAPCD Thresholds	25	25	-	-	-	-
Significant Impact? Y/N	**No**	**No**				

Source: CalEEMod Output, Appendix A.

Totals may differ from sums due to rounding.

As shown in Table 7, operational emissions produced as a result of the Project would be less than the 25 pounds/day threshold for ROG and NO_x. As such, the Project would result in a less than significant air quality impact related to a considerable cumulative contribution to federal or State nonattainment pollutants during operations.

Project Design Feature

PDF-AQ-1 The Project Applicant will use off-road diesel-powered equipment that meets United States Environmental Protection Agency (USEPA) Tier 4 Final emissions standards during the construction phase of the Project.

Mitigation Measures

No mitigation measures are required.

c. A project may have a significant impact if it would expose sensitive receptors to substantial pollutant concentrations, such as creating a human health hazard by exposing sensitive receptors to toxic air emissions.

Less Than Significant Impact. Sensitive receptors are those most susceptible to respiratory distress, such as children under 14, elderly over 65, persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases. The VCAPCD states that localized air quality impacts to sensitive receptors typically result from fugitive dust, CO, TACs, odors, and entrained fungal spores that cause San Joaquin Valley Fever. The Project's impacts related to each of these pollutants is detailed below and in the response to Question III(d).

Fugitive Dust

As shown in Table 6, based on the duration of construction activities and the equipment to be utilized onsite, the Project's short-term construction-related emissions of ROG or NOx would not exceed the VCAPCD guideline of 25 lbs/day and therefore would not trigger the need for mitigation measures. Additionally, VCAPCD Rule 55 requires projects to minimize construction fugitive dust emissions, which includes but is not necessarily limited to the following best management practices (BMPs):

- Apply water to disturbed soils of the site at least twice daily during construction.
- Require the use of a gravel apron and/or rumble pad at truck exit points to reduce mud and dirt trackout onto area roadways.
- All soil materials transported off-site shall be securely covered during transit.
- Apply non-toxic soil stabilizers according to manufacturers' specifications to all graded areas that remain inactive for ten days or more).
- Limit traffic speeds on all unpaved portions of the site to 15 mph or less by providing worker notification, signage, or other means.

Carbon Dioxide Hotspots

A CO hotspot is a localized concentration of CO that is above the State or national 1-hour or eight-hour CO ambient air standards. Localized CO "hotspots" can occur at intersections with heavy peak hour traffic that could cause local CO concentration to exceed federal or State AAQS. According to the VCAPCD Guidelines, a CO hotspot screening analysis should be conducted for any project with indirect emissions greater than the applicable ozone project significance thresholds that may significantly impact roadway intersections that are currently operating at, or are expected to operate at, Levels of Service E, or F. As shown above, the Project's emissions of ozone precursors ROG or NOx would not exceed the VCAPCD significance thresholds. As such, pursuant to VCAPCD Guidelines, a CO hotspot screening analysis for this Project would not be warranted and potential impacts would be less than significant.

Toxic Air Contaminants

Construction

A Construction Health Risk Assessment (HRA) was prepared by Air Quality Dynamics[9] (refer to **Appendix B, Construction Health Risk Assessment**) to evaluate the potential effects of diesel emissions generated at the site during construction. In 1998, diesel exhaust emissions in the PM-10 particle size range were identified by the State as a TAC, containing carcinogenic compounds. As such, the off-road PM-10 exhaust estimates reported by CalEEMod (Appendix A), which assumed diesel-powered construction equipment will meet USEPA-certified Tier 4 Final emission standards (required by PDF-AQ-1), were used to assess DPM exposures. The emission rates for both winter and summer scenarios were found to be commensurate.

The Construction HRA quantifies both carcinogenic risks and noncarcinogenic hazards for the maximum exposed sensitive receptor located in proximity of the Project site. A sensitive receptor is any residence including schools, daycare centers, and health facilities or similar live-in housing. To ensure a viable quantification of exposure, the technical approach used in the preparation of the Construction HRA was composed of all relevant and appropriate assessment and dispersion modeling methodologies presented by the USEPA, California Environmental Protection Agency, and VCAPCD.

To assess localized impact within the vicinity of the Project site, the HRA identified the construction phases, calendar year, and number of days of construction. Construction operations are reported to occur for 316 days over a 443-day period (1.21 years) based upon a five-day-per-week operational schedule.

[9] Air Quality Dynamics, 1651 Lynn Road Residential Subdivision Project: Construction Health Risk Assessment, July 15, 2024.

The Project site is bordered by Lynn Road to the south, Blair Court to the east and single-family residences to the north and west. Considered sensitive land uses, the following list identifies the location of residential occupancies situated within 500 feet of the Project site:

- Giant Oak Avenue, Blair Court, Susan Drive to the north;
- Lynn Road, Live Oak Road to the south;
- Blair Court, Meadowglen Court, Susan Drive to the east; and
- North Ellis Place, South Ellis Place, South Jerome Avenue, Rivendell Circle to the west.

For on-site construction, emission estimates were based upon the Ventura County profile generated by CalEEMod (Appendix A). As reported in the Construction HRA, the average daily PM-10 emissions during construction would be 0.0414 pounds per day. In order to assess the impact of DPM emissions, air quality modeling utilizing the American Meteorological Society (AMS)/USEPA Regulatory Model (AERMOD) was performed. AERMOD is a steady-state Gaussian plume model applicable to directly emitted air pollutants that employs best state-of-practice parameterizations for characterizing meteorological influences and atmospheric dispersion. AERMOD is the USEPA guideline model for the assessment of near-field pollutant dispersion.

Cancer Risk

Carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Any exposure, therefore, will have some associated risk. As a result, the State has established a threshold of one in one hundred thousand (1.0E-05) as a level posing no significant risk for exposures to carcinogens regulated under the Safe Drinking Water and Toxic Enforcement Act (Proposition 65). This threshold is also consistent with the maximum incremental cancer risk established by the VCAPCD for projects prepared under the auspices of CEQA.

Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. Under a deterministic approach (i.e., point estimate methodology), the cancer risk probability is determined by multiplying the chemical's annual concentration by its URF. The URF is a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It represents an upper-bound estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter (µg/m3) over a 70-year lifetime.[10]

To effectively quantify the dose through inhalation, the Construction HRA followed the Office of Environmental Health Hazard Assessment (OEHHA) recommendation to incorporate several discrete exposure sensitivity factors to account for variables such as age groups and pregnancy. **Table 8, Carcinogenic Risk/Maximum Exposed Residential Receptor**, shows the carcinogenic risk estimates for the maximum exposed residential receptor, which is located immediately east of the Project site along Susan Drive.

[10] The URF and corresponding cancer potency factor for DPM utilized in the assessment was obtained from the Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values, Accessed on March 7, 2024 at: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/healthval/contable10062023.pdf.

Table 8
Carcinogenic Risk/Maximum Exposed Residential Receptor

Age Group	Risk
Third Trimester	1.4E-07
0 to 2 years	1.6E-06
Total	**1.7E-06**

Source: Construction Health Risk Assessment, Appendix B.

Note: The value 1.7E-06 denotes cases of cancer of 0.17 out of 100,000 individuals exposed. The individual risk values by age group are rounded values. The total risk value represents the actual summation of risk for the identified occupancy.

As shown in Table 8, the cancer risk for the maximum exposed residential receptor would be below the significance threshold of one in one hundred thousand (1.0E-05). Therefore, the carcinogenic risk for the maximum exposed sensitive receptor would be a less than significant impact during construction.

Noncancer Risk

An evaluation of the potential noncancer effects of DPM exposure was also prepared by Air Quality Dynamics (refer to Appendix B). Under the point estimate approach, adverse health effects are evaluated by comparing the pollutant concentration with the appropriate Reference Exposure Level (REL). The chronic REL presented in the Consolidated Table of OEHHA/CARB Approved Risk Assessment Health Values was considered in the assessment. There are no available acute/8-hour reference exposure levels for DPM.

To evaluate the potential noncancer effects of DPM exposure, the hazard index approach was used. This method quantifies noncarcinogenic impacts using pollutant concentration (or dose) divided by the pollutant's toxicity value. Values that total or exceed 1.0 (i.e., unity), are presumed to be a health hazard, and thus is used as the threshold for a potential significant impact. No exposure frequency or duration adjustments are considered for noncarcinogenic exposures. The calculated hazard index value for the maximum exposed residential receptor would be 3.3E-03, which is well below the threshold level of 1.0 identified above. Therefore, the noncarcinogenic risk for the maximum exposed sensitive receptor would be a less than significant impact during construction.

Operations

Residential uses such as the Project do not typically entail substantial diesel truck use (the main source of DPM and therefore TACs); only occasional delivery or maintenance vehicles are associated with this land use. Therefore, the emissions of TACs associated with diesel exhaust during operations would be minimal, and impacts associated with TACs during Project operations would be less than significant.

San Joaquin Valley Fever

San Joaquin Valley Fever (formally known as Coccidioidomycosis) is an infectious disease caused by the fungus *Coccidioides immitis*. Infection is caused by inhalation of *Coccidioides immitis* spores that have become airborne when dry, dusty soil or dirt is disturbed by wind, construction, farming, or other activities. The Valley Fever fungus tends to be found at the base of hillsides, in virgin, undisturbed soil, and it is found in the southwestern United States. In its primary form, symptoms appear as a mild upper respiratory infection, acute bronchitis, or pneumonia. The most common symptoms are fatigue, cough, chest pain, fever, rash, headache, and joint aches, although 60 percent of people infected are asymptomatic and do not seek medical attention. In the remaining 40 percent, symptoms range from mild to severe. There is no recommended threshold for a significance for San Joaquin Valley Fever impact; however, according to the VCAPCD, the following factors may indicate a project's potential to create significant Valley Fever impacts:

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches).
- Dry, alkaline, sandy soils.
- Virgin, undisturbed, non-urban areas.
- Windy areas.
- Archaeological resources probable or known to exist in the area (Native American midden sites).
- Special events (fairs, concerts) and motorized activities (motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass).
- Non-native population (i.e., out-of-area construction workers).

According to the VCAPCD Guidelines, the Lead Agency should consider the factors above that are applicable to the project or the project site. Based on these or other factors, if a Lead Agency determines that a project may create a significant Valley Fever impact, the VCAPCD recommends that the Lead Agency consider the Valley Fever mitigation measures listed in the VCAPCD Guidelines to minimize fugitive dust, as well as minimizing worker exposure. The VCAPCD Guidelines provide the following list of measures to be considered if the Lead Agency determines a project site poses a risk of San Joaquin Valley Fever:

1. Restrict employment to persons with positive coccidioidin skin tests (since those with positive tests can be considered immune to reinfection).
2. Hire crews from local populations where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune.
3. Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations.
4. Require that the cabs of grading and construction equipment be air-conditioned.
5. Require crews to work upwind from excavation sites.
6. Pave construction roads.
7. Where acceptable to the fire department, control weed growth by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.
8. During rough grading and construction, the access way into the project site from adjoining paved roadways should be paved or treated with environmentally safe dust control agents.

The Project site is partially developed with an existing single-family residence and associated paving while the rest of the Project site is undeveloped. Therefore, development of the Project would disturb topsoil. However, the proposed development area is under five acres (which is relatively small in size), is surrounded by development, the northwestern and southern portions the site will remain undisturbed, and special events are not anticipated. In addition, the Project would be required by VCAPCD Rule 55 to implement measures to minimize fugitive dust during construction, including the application of water to exposed soils, which would minimize dust from dry soils or during windy conditions to minimize risk for *Coccidioides immitis* to be present and disturbed during construction. Due to the combination of these factors, the potential of the Project to result in substantial San Joaquin Valley Fever impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

d. A project may have a significant impact if it would create objectionable odors affecting a substantial number of people.

No Impact. Land uses typically associated with objectionable odors that can potentially adversely affect a substantial number of people include certain types of agriculture, sewage treatment plants, landfills, green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing, rendering plants, and certain types of food manufacturing. Based on the VCAPCD Ventura County Air Quality Assessment Guidelines (2003), a project may have a significant impact if it would generate an objectionable odor to a degree that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or to the public, or which would endanger the comfort, repose, health, or safety of any such persons or the public, or which would cause, or have a natural tendency to cause, injury or damage to business or property.

During construction, the application of certain materials (i.e., asphalt, paints, etc.) may generate odors that are common to construction projects. These odors would be temporary, intermittent, and mostly confined to the immediate vicinity of construction equipment or the surface in question. Such odors would dissipate into the air, and if they reach a sensitive receptor, would be diluted to well below a concentration that would cause an air quality concern. Further, odors produced by materials would begin to wane immediately after application and cease when the materials dry, and odors produced by machinery would only be present while machinery is operating.

The Project would develop residential land uses that entail none of the processes identified above that emit substantial odor. The Project would include residential trash, green waste, and recycling bins, to be emptied on a regular basis. As such, the Project would result in no substantial odor impacts during construction and operation.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations 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 the local or regional plans, policies, regulations by the California Department of Fish and Game 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?	☐	☐	☐	☒

Impact Analysis

The following analysis is based on the Biological Inventory Report (Biological Report) prepared by Pax Environmental, Inc. on February 1, 2024 (Updated March 28, 2024) (**Appendix C**), as well as the Oak Tree Report and Oak Tree Report Addendum, prepared by Jan C. Scow Consulting Arborists, LLC on September 13, 2023 and July 19, 2024, respectively (**Appendix D**).

a. A significant impact may occur if a project would result in a substantial adverse effect on any species identified as a candidate, sensitive or special-status species in local or regional plans.

Potentially Significant Unless Mitigation Incorporated. A portion of the Project site is developed with a single-family residence and associated hardscape and landscaping, while the remainder of the Project site is undeveloped. The Biological Report includes record searches for special-status plants, special-status wildlife, sensitive natural communities, critical habitat, and other sensitive resources species that could occur within the Biological Report study area. Senior Biologist Andy Fredell also conducted a field survey that consisted of meandering transects across the Project site with 100 percent visual coverage of the site. Following the survey, a determination of the likelihood of occurrence was made for special-status species that were not detected, based on species or habitat elements observed during the survey, as well as on putative flowering phenology (e.g., habitat type, elevation, slope, soil, etc.). The plant communities within the study area of the Biological Report include coast live oak (*Quercus agrifolia*) woodlands, upland mustards, and star thistles fields and ornamental/landscapes.

Summary of Field Survey Results

The coast live oak woodland (*Quercus agrifolia* woodland alliance) is dominant on the edges of the study area. The community is moderately disturbed with some shrub clearance having been conducted in the understory. Membership rules for this plant community include a greater than 50 percent relative cover of coast live oak. The occurrence of oak trees on the Project site and Project impacts to oak trees are addressed in response to Question IV(e), below.

The upland mustards or star thistle fields (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance) is dominant in the undeveloped portions of the study area. These areas appear to be cleared regularly for fire clearance. Dominant species include wild oats (*Avena fatua* and *Avena barbata*), ripgut brome (*Bromus diandrus*), tumbleweed (*Salsola tragus*), and coastal heron's bill (*Erodium cicutarium*). Native species that were observed at a lower percentage include Canada horseweed (*Erigeron canadensis*) and San Diego wreathplant (*Stephanomeria diegensis*).

Wildlife observed during the field survey were species that are commonly observed on undeveloped land in the Conejo Valley, including California scrub-jay (*Aphelocoma californica*), red tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), northern flicker (*Colaptes auratus*), western fence lizard (*Sceloporus occidentalis*), and California ground squirrel (*Otospermophilus beecheyi*). The site also provides suitable nesting habitat for birds, which may be utilized during the breeding season. The City recognizes that the bird breeding season, also referred to as the bird nesting season, extends from February 15 – September 15, but that it can begin as early as January 1 for raptors.

A complete list of plant and wildlife species observed during the field survey is included in Appendix C.

Special Status Plant Species

The California Natural Diversity Database (CNDDB) record search conducted for the Project identified several special status plant species that have low potential to occur in the study area of the Biological Report, including Braunton's milk-vetch (*Astragalaus brauntonii*), white-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*), Lyon's pentachaeta (*Pentachaeta lyonia*), and Nuttall's scrub oak (*Quercus dumas*). Based on the field survey conducted, none of these species were observed on the site.

Special Status Wildlife Species

The CNDDB record search identified that the study area of the Biological Report has low to high potential for special status species to occur on the Project site. The coastal whiptail (*Aspidoscelis tigris stejnegeri*) has a high potential to occur within the Project site, while Cooper's hawk (*Accipter cooperii*) and southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) have a moderate potential to occur. Several species also have a low potential to occur due to marginal habitat, including California legless lizard (*Anniella* spp.), southern California legless lizard (*Anniella stebbinsi*), pallid bat (*Antrozous pallidus*),

golden eagle (*Aquila chrysaetos*), California glossy snake (*Arizona elegans occidentalis*), burrowing owl (*Athene cunicularia*), Monarch butterfly (*Danaus plexippus plexippus* pop.1), white-tailed kite (*Elanus leucurus*), western mastiff bat (*Eumops perotis californicus*), coastal California gnatcatcher (*Polioptila calfornica californica*), and coast horned lizard (*Phrynosoma blainvillii*). Based on the field survey conducted, none of these species were observed on the site.

While no special status species were documented during the surveys, species with a moderate to high potential to occur include coastal whiptail lizard, southern California rufous-crowned sparrow, and Cooper's hawk. As determined by Pax Environmental, Inc., surveys for these species should be conducted prior to vegetation removal and ground disturbance. If presence is documented during these surveys, monitoring protocols should be implemented to minimize impacts. Following implementation of Mitigation Measures **MM-BIO-1** and **MM-BIO-2**, Project impacts to special status species would be reduced to less than significant.

Nesting Birds

Construction of the Project would remove and encroach upon trees that may potentially provide habitat for nesting birds, and construction activities also have the potential to disrupt avian nesting behavior. Therefore, the Project would be required to comply with existing biological resource regulations that protect nesting birds. Migratory nongame native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918 (50 Code of Federal Regulations [CFR] Section 10.13). In addition, Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests, including raptors and other migratory nongame birds (as listed under the federal MBTA). Following implementation of Mitigation Measures MM-BIO-2, Project impacts to nesting birds would be reduced to less than significant.

Mitigation Measures

MM-BIO-1: **Pre-Construction Surveys for Special-Status Wildlife.** Prior to the commencement of ground or vegetation disturbing activities, a minimum of two (2) pre-construction surveys for special-status wildlife species shall be conducted by City-approved qualified biologist(s) to determine the presence/absence of these species at the site. At a minimum, one survey shall be conducted within fourteen (14) days and a second survey shall be conducted within three (3) days prior to commencement of ground or vegetation disturbing activities. The pre-construction surveys must incorporate appropriate methods and timing to detect the species that may potentially occur at the site. If a special-status species is found, avoidance is the preferred option (e.g., waiting for the animals to leave the Project footprint). If avoidance is not possible, the species shall be captured and transferred to appropriate habitat and location where it would not be harmed by Project activities, preferably to open space habitats in the vicinity of the site. If a Federally or State listed species is found, the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), as applicable, and the City Planning Department shall be consulted prior to the start of Project activities. A letter report summarizing the methods and results of the surveys and relocation efforts, if applicable, shall be submitted to the City Planning Department, CDFW, and USFWS, as applicable, prior to issuance of a grading permit.

MM-BIO-2: **Pre-Construction Bird Surveys.** For construction activities initiated during the bird nesting season February 15 through September 15 (as early as January 1 for raptors), involving removal of vegetation, abandoned structures, man-made features, or other nesting bird habitat, a pre-construction nesting bird survey shall be conducted no more than five days prior to initiation of ground disturbance and vegetation removal. The nesting bird pre-

construction survey shall be conducted on foot and shall include an area on and around the construction site at a distance determined by a qualified biologist, including staging and storage areas. The minimum survey radii surrounding the work area shall be 500 feet. The survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in the Thousand Oaks region. If construction lapses for five days or longer, the qualified biologist shall conduct another focused survey before project activities are reinitiated. If nests are found, an avoidance buffer shall be determined by the qualified biologist, dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside the site. The qualified biologist shall observe the active nest to establish a behavioral baseline of the adults and nestlings, if present. The qualified biologist shall monitor the active nests, while construction activities are happening to detect signs of disturbance and behavioral change as a result of construction impacts, such as noise, vibration, odors, or worker/equipment motion. If signs of disturbance and behavioral changes are observed, the qualified biologist shall stop all construction work causing those changes and until a larger avoidance buffer is established or until it is determined that the nesting period is completed. The buffer shall be demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to demarcate the boundary. All construction personnel shall be notified of the buffer zone as a "Nesting Bird Area" and to avoid entering the buffer zone until a biologist determines that the nest is no longer active. No ground-disturbing activities shall occur within the buffer until the biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. A report summarizing the pre-construction survey(s) shall be prepared by a qualified biologist and shall be included on Project site plans and submitted to the City prior to the commencement of construction activities.

b. A significant impact may occur if a project would have a significant adverse effect on any riparian habitat or sensitive natural communities identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS).

Less than Significant Impact. No riparian habitat was identified on the Project site by Pax Environmental, Inc. The Biological Report identified three plant communities on the Project site; ornamental plant communities, upland mustards or star thistle fields, and coast live oak woodlands. The ornamental plant community includes intentionally planted species in a landscaped setting and is not a sensitive plant community. The upland mustards or star thistle field community is dominant on the Project site and appears to be cleared regularly for fire clearance. Two native species exist in the community, including Canada horseweed (*Erigeron canadensis*) and San Diego wreathplant (*Stephanomeria diegensis*). However, this plant community is not identified as a sensitive plant community.[11] Coast live oak woodlands are located primarily on the southern and northern edges the Project site; however, smaller oak woodlands are also located on the west and east boundaries of the Project site. While development of the Project would impact 103 protected oak trees (23 oak tree removals and 80 oak tree encroachments), which is evaluated below in response to Question IV(e), coast live oak woodland is not a sensitive plant community.[12] Therefore, the Project would result in a less than significant impact to riparian habitat and sensitive natural communities.

Mitigation Measures

No mitigation measures are required.

[11] California Department of Fish and Wildlife, California Natural Community List, Accessed on March 4, 2024 at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

[12] City of Thousand Oaks, 2045 General Plan Update Draft EIR, Page 4.3-9, November 2023.

c. A significant impact may occur if a project would have a substantial adverse effect on federally protected wetlands or waters of the U.S.

No Impact. The Biological Report did not identify any federally protected wetlands, wetland resources, or other waters of the United States as defined by Section 404 of the Clean Water Act on the Project site. Project construction activities would be confined to the Project site and Project site frontage (to construct a sidewalk off-site and along Lynn Road) would not impact on- or off-site natural riparian features. Therefore, the Project would result in no impact to federally protected wetlands or waters of the United States.

Mitigation Measures

No mitigation measures are required.

d. A significant impact may occur if a project would substantially interfere with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Less than Significant Impact. A wildlife corridor contains physical connections that allow wildlife to move between areas of suitable habitat in both undisturbed landscapes and landscapes fragmented by urban development. The Project site is developed with a residence, is surrounded by predominantly residential land uses, and is not mapped as a regional wildlife corridor by the City.[13] The nearest open space to the Project site is located to the south, across Lynn Road, which is a busy, four-lane roadway. As the Project site is surrounded by development and Lynn Road, the Project would not further fragment wildlife movement corridors. Therefore, the Project would have a less than significant impact on the movement of native resident or migratory wildlife species.

Mitigation Measures

No mitigation measures are required.

e. A significant adverse effect may occur if a project were to cause an impact that is inconsistent with local regulations pertaining to biological resources, such as the City Protected[14] and Heritage[15] Tree Ordinances ("Tree Ordinances").

Potentially Significant Unless Mitigation Incorporated. Chapter 4, Article 42 of the City of TOMC regulates the protection and preservation of native oak trees within City limits. Oak trees protected by Article 42 include, but are not limited to, valley oaks (*Quercus lobata*), coast live oaks (*Quercus agrifolia*), and scrub oaks (*Quercus berberidifolia*). Article 43 of the TOMC also regulates protection and preservation of "Landmark Trees," which are certain native tree species that have reached a particular size, or any tree designated as such by the City. The following trees are protected under Articles 42 and 43 of the TOMC:

- Oak trees that are larger than 2 inches in size when measured at breast diameter height (DBH) (4-1/2 feet) above the trees natural grade. If the tree has multiple trunks, the aggregate total diameter of all trunks shall exceed two inches in diameter.
- California Sycamore (*Platanus racemosa*) which exceeds 12 inches in diameter measured at DBH above the natural grade at the base of the tree.

[13] City of Thousand Oaks, General Plan 2045, Figure 7.2 Wildlife Corridors, November 2023.
[14] City of Thousand Oaks Oak Tree Ordinance (No. 937-NS), TOMC, Title 9, Chapter 4, Article 42.
[15] City of Thousand Oaks Heritage Tree Ordinance (No. 1217-NS), TOMC, Title 9, Chapter 4, Article 43.

- California Bay Laurel (*Umbellularia californica*) which exceed 8 inches in diameter measured at DBH above the natural grade at the base of the tree.
- California Black Walnut (*Juglans californica*) which exceeds 8 inches in diameter measured at DBH above the natural grade at the base of the tree.
- Toyon (*Heteromeles arbutifolia*) which exceeds 8 inches in diameter measured at DBH above the natural grade at the base of the tree.
- For multiple trunks of landmark trees, the sum of the diameters at DBH must exceed the required diameters listed above plus 2 inches.
- All designated historic trees.

The Project site contains a total of 126 protected oak trees, and development of the Project would result in the removal of 23 protected oak trees and the encroachment of 80 protected oak trees. The Project would not impact the remaining 23 protected oak trees.[16] To mitigate the removal of 23 oak trees, the Project implements mitigation measure **MM-BIO-3,** in compliance with the Oak Tree Planting and Replacement Program from the City's Oak Tree Preservation and Protection Guidelines. Encroachment of the 80 oak trees varies in level of severity from very minor to moderate. Following mitigation measure **MM-BIO-4,** the Project would reduce oak tree encroachment impacts to less than significant. The Project would be required to receive an Oak Tree Permit from the City and comply with design guidelines. The Project would result in a less than significant impact to oak trees, following implementation of mitigation measures MM-BIO-3 and MM-BIO-4.

Mitigation Measures

MM-BIO-3: **Oak Tree Replacement**. In compliance with the Oak Tree Planting and Replacement Program from the City's Oak Tree Preservation and Protection Guidelines and as conveyed by the Oak Tree Report Addendum, the following oak tree replacement planting shall be required to mitigate the removal of 23 oak trees from the Project site:

- 46 - 24" boxed coast live oak (*Quercus agrifolia*); and
- 23 - 36" boxed coast live oak (*Quercus agrifolia*).

With regard to the removal or encroachment of any tree that is located near a property line and/or extending over the property line, it is the Applicant's responsibility to notify the adjacent property owner(s) of the removal or encroachment that may affect jointly-owned or off-property trees.

The oak tree planting locations shall be provided by the Project landscape architect and approved by the City.

MM-BIO-4: **Oak Tree Protection**. The Applicant shall implement the specific tree protection measures and the general tree protection measures as listed in the Oak Tree Report. If there is a conflict between specific tree protection measures and general oak tree protection measures, the specific tree protection measures supersede.

[16] According to the Oak Tree Report prepared by Jan C. Scow Consulting Arborists, LLC (September 12, 2023), the City has required that an access easement be granted through the northeast corner of the Project site for access to the property to the north. If this area is cleared for an access road and utilities, an additional 10 protected oak trees would be removed (Nos. 23-30, 32, and 33), and 2 will be substantially impacted (Nos. 34 and 35). That is not a part of the Project.

f. A significant impact may occur if a project would be inconsistent with mapping or policies of an adopted or approved conservation plan.

No Impact. According to the CDFW and USFWS, no adopted or approved Natural Community Conservation Plan (NCCP)[17] or Habitat Conservation Plan (HCP)[18] areas are located in the City. Therefore, the Project would result in no impact related to conflicts with such plans.

Mitigation Measures

No mitigation measures are required.

[17] CDFW, Summary of Natural Community Conservation Plans (NCCPs), June 2021, Accessed on February 29, 2024 at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=15329&inline.

[18] USFWS, California Natural Community Conservation Plans, August 2023, Accessed on February 29, 2024 at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a. Cause a substantial adverse change in significance of a historical resource pursuant to CEQA Section 15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in significance of an archaeological resource pursuant to CEQA Section 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Impact Analysis

This analysis is based on the Cultural Resources Phase I Assessment[19] (provided in **Appendix E**) of the Project site prepared by Envicom Corporation that included record searches by the South Central Coastal Information Center (SCCIC) and California Native American Heritage Commission (NAHC), a review of historic maps and aerial images, and a pedestrian survey of the Project site. The record searches examined the Project site, plus a 0.25-mile buffer area (study area) around the Project site to account for cultural resources that may be immediately adjacent to the Project site and to determine the overall regional archaeological sensitivity of the Project area.

a. A project would have a significant impact if it would cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Section 15064.5.

No Impact. Examination of historic maps during preparation of the Cultural Resources Phase I Assessment included 13 historic United States Geological Survey (USGS) maps, dating from between 1900 and 1979. The 1900 Triunfo Pass USGS map shows no improvement within the Project site but does show limited developed within the local Project region. The oldest aerial photograph in the University of California at Santa Barbara (UCSB) Library historic aerial photography database is from 1947, which shows the Project area as undeveloped with no structures visible immediately around the Project site, but some residential structures towards the southeast. The 1950 Newbury Park and 1959 Los Angeles USGS maps show the same conditions as previously mentioned with limited additional development in the surrounding region. The current structure located on the Project site is not shown on the 1967 Newbury Park USGS map, and real estate records show that the building was constructed in 1977. Due to the date of construction, the existing residence is not a historic resource. Based on examination of historic maps and aerial photography, the Project would result in no impact to historic resources.

Mitigation Measures

No mitigation measures are required.

[19] Envicom Corporation, Cultural Resources Phase I Assessment for 1651 Lynn Road, September 30, 2022.

b. A significant impact may occur if a project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5.

Potentially Significant Unless Mitigation Incorporated. On June 7, 2022, as part of preparation of the Cultural Resources Phase I Assessment, Envicom Corporation submitted a request to the SCCIC to conduct a search of their database for cultural resources located within the study area. The record search included a request for all complete site records for cultural resources within or adjacent to the Project site, as well as copies of all cultural resource technical reports that intersected with all or part of the Project site. Envicom Corporation also contacted the NAHC on June 7, 2022, with a similar record search request of their Sacred Lands File (SLF). Envicom Corporation received the cultural resource record search results from the SCCIC on September 28, 2022 and from the NAHC on July 8, 2022.

The SCCIC record search found no previously identified cultural resources located within the Project site but identified two historical cultural resources within the study area. The first historic resource was recorded by W&S Consultants in 2002 and is referred to as the Haigh Pioneer Cemetery. The second historical resource was recorded by James Gilmore in 1975 and is the Grand Union Hotel, Stagecoach Inn, which is currently operated as the Stagecoach Inn Museum and historic site. This built environment structure is listed on the National Register of Historic Places and is also listed as California Historical Landmark Number 659. The museum site and surrounding property is managed by the Conejo Recreation and Park Department and includes several additional historical buildings and features that were not original to the location. Due to the distance from the Project site, neither of these historical resources would be impacted by Project development and further assessment was not recommended by the Cultural Resources Phase I Assessment. The SCCIC also identified eight reports involved within the Project study area that did not identify any specific cultural resources of concern for the Project.

The results from the 2022 NAHC record search also included negative findings. However, the NAHC provided a list of tribes with whom they suggest the Applicant or City consult. Envicom Corporation did not contact the tribes on the NAHC list, as communications with tribal representatives is the responsibility of the Lead Agency if the Project is required to perform tribal consultation under Assembly Bill (AB) 52. As applicable, the NAHC letter and this report shall be made a part of the Native American AB 52 consultation record. Refer to Section XVIII, Tribal Cultural Resources, for details regarding the AB 52 process for the Project.

Envicom Corporation archaeological resource staff performed a pedestrian survey of the Project site on April 7, 2023. Ground visibility was excellent, with most of the landscape surface being free of vegetation and consisting of bare earth, except for the residential development and paved driveway. No early historic or prehistoric artifacts or features were observed on the Project site surface during the survey.

The findings of the pedestrian survey were negative for cultural resources within the Project site, and examination of the SCCIC database of previously recorded cultural resources and the NAHC were both negative for cultural resources within the Project site as well. However, as the Project site will experience ground-disturbing activities, the potential for the inadvertent discovery of archaeological resources exists. The Project would result in a less than significant impact to archaeological resources following implementation of mitigation measure **MM-CUL-1**.

Mitigation Measures

MM-CUL-1: **Archaeological Discovery Protocol**. In the event that previously unknown and potentially significant intact archaeological deposits are encountered within an undisturbed context during grading, then a cultural/fossil resource "discovery" protocol shall be followed. If older historical or prehistoric features or artifact concentrations are encountered during

project grading within native soils or original context, then all work in that area shall be halted or diverted away from the discovery to a distance of 30-feet until a qualified senior archaeologist can evaluate the nature and/or significance of the find(s). If a senior archaeologist confirms that the discovery is potentially significant, then the Lead/Permitting Agency shall be contacted and informed of the discovery.

Construction shall not resume in the locality of the discovery until consultation between the senior archaeologist, the owner's Project manager, the Lead/Permitting Agency, and any other concerned parties (such as additional regulatory agencies or Native American Tribal Groups), takes place and reaches a conclusion approved by the Lead/Permitting Agency. If a significant cultural resource is discovered during earth-moving, complete avoidance of the find is preferred. However, if the discovery cannot be avoided, further survey work, evaluation tasks, or data recovery of the significant resource may be required by the Lead/Permitting Agency. The Lead/Permitting Agency may also require site monitoring, based on the discovery. All individual reports shall be submitted to the SCCIC.

c. A significant impact may occur if previously interred human remains would be disturbed during excavation of a project site.

Less than Significant Impact. A portion of the Project site is currently developed with a single-family residence and associated hardscape and landscaping, while the remainder of the Project site is undeveloped. No known human burials have been identified within the Project site and study area. As the Project would involve grading and ground moving activities and the site is in area of past human activity, the potential for discovery of human remains during construction period earthwork activities exists. If proper care is not taken during construction, damage to, or destruction of, these unknown remains could occur. The State of California Health and Safety Code Section 7050.5 addresses this possibility and requires that, in the event that human remains are uncovered, no further disturbance shall occur until the County Coroner has made a determination as to the origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98. The Coroner must be notified of the find immediately, together with the City and the property owner. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials and an appropriate re-internment site. With required compliance with Health and Safety Code Section 7050.5 , Project impacts to human remains would be less than significant.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VI. ENERGY				
Would the project:				
a. Result in 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?	☐	☐	☐	☒

Impact Analysis

a. A significant impact may occur if a project would result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

Less than Significant Impact.

Construction

During construction, the Project would use equipment associated with demolition, site preparation, grading, vertical construction, paving, and architectural coating. Construction equipment used on the site would include graders, dozers, scrapers, air compressors, cranes, forklifts, generators, pavers, and tractors equipped with front end loaders and/or backhoes. Construction also involves trucks for material and supplies delivery, as well as powered hand tools, including concrete saws. The majority of the equipment would likely be diesel-fueled. However, smaller equipment, such as welders and pumps, may be electric-, gasoline-, or natural gas-fueled, and cranes would likely be electric. For the purposes of this analysis, a majority of construction activities were considered to be diesel-fueled, and activities associated with worker trips were assumed to be gasoline-fueled.

According to the CARB on-road vehicle emissions factor model EMFAC2021(v1.0.2), Emissions Inventory,[20] the average fuel economy for light duty vehicles operating in Ventura County for the year 2025 (construction year) is approximately 25.78 miles per gallon for gasoline-fueled vehicles and approximately 10.24 miles per gallon for all categories of diesel-fueled vehicles. Based on these modeled emissions factors; worker, vendor, and hauling trips; and off-road construction equipment generated by CalEEMod, the Project consumption of diesel and petroleum-based gasoline during construction was calculated and is shown in **Table 9, Fuel Consumption During Construction**. The calculations are provided in the Fuel Consumption Worksheet of **Appendix F, Energy Calculations**.

[20] California Air Resources Board, EMFAC, Emissions Inventory, Accessed on March 22, 2024 at: https://arb.ca.gov/emfac/emissions-inventory/560a77269968d44f88b51eea2fdb5c80465c0e7e.

Table 9
Fuel Consumption During Construction

Energy Source	Quantity Demanded during Construction per Year
Transportation fuels [a]	
Gasoline	
On-road Worker Trips	1,893 gallons
Gasoline Total	1,893 gallons
Diesel	
On-Road Haul Trucks [b]	959 gallons
On-road Vendor Trucks [b]	458 gallons
Off-road Construction Equipment [c]	30,673 gallons
Diesel Total	32,090 gallons

Source: CalEEMod Output (Annual), Appendix A, and Energy Calculations, Appendix F.

[a] On-road mobile source fuel use based on VMT from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2021 web-based data for 2025 (construction year) for Ventura County.
[b] Vendor and haul trucks are assumed to be diesel.
[c] All emissions from off-road construction equipment were assumed to be diesel. Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (HP)-hour, based on the South Coast Air Quality Management District (SCAQMD) CEQA Air Quality Handbook, Table A9-3E.

As shown in Table 9, based on the CARB on-road vehicle emissions factor model EMFAC2021(v.1.0.2) and the CalEEMod output, Project construction would consume a total of 32,090 gallons of diesel fuel and 1,893 gallons of gasoline. In 2023, 12.5 billion gallons of gasoline and 2.7 billion gallons of diesel, including off-road diesel, was sold in California.[21] Construction-related fuel use for the Project would result in less than 0.01 percent of the fuel consumption in California. As discussed in Section II, Air Quality, the Project will utilize all Tier 4 Final construction equipment as part of Project design feature PDF-AQ-1, which will have more fuel-efficient engines as compared to previous equipment generations. In addition, Title 13, Sections 2449 and 2485 of the CCR require drivers of off-road diesel-fueled vehicles and diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds not to idle the vehicle's primary diesel engine longer than five minutes at any location.[22] Compliance with this regulation would prevent unnecessary consumption of energy from use of diesel fuel during construction. As such, the use of construction equipment and the transportation of materials and workers necessary during the temporary construction period would not represent a substantial proportion of annual gasoline or diesel fuel use in California.

In 2019, the City's residential, commercial, and industrial customers began receiving electricity sourced from the Clean Power Alliance (CPA). The City also selected the CPA's 100 percent clean energy option as the default; however, individual customers can choose one of three programs that the CPA offers: a standard product (40 percent renewable energy content), a 50 percent renewables product, or the 100 percent renewables product. Regardless of the selected option, Southern California Edison (SCE) delivers the power, maintains and builds the distribution network, installs and reads meters, responds to outages, and provides billing and customer service. During construction, the Project would consume a limited amount of electricity, mainly to power hand tools. Electrical service to the Project site is currently delivered by SCE, which would also deliver electrical service to the Project during construction and operations. Due to the temporary and limited amount of electricity that would be consumed during construction, the Project would not be expected to have an adverse impact on available electricity supplies or infrastructure during

[21] California Department of Tax and Fee Administration, Diesel Fuel Data, Facts, and Statistics, Accessed February 28, 2024 at: https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm.
[22] California Code of Regulations, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.

development. Natural-gas powered equipment and vehicles are not anticipated to be utilized during Project development; therefore, the Project would not result in an adverse impact on available natural gas supplies or infrastructure.

Energy consumption during construction would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and construction period energy impacts would be less than significant.

Operations

During operations, the Project would consume energy for vehicle trips, water conveyance, solid waste disposal systems, lighting, natural gas hearths, electronic equipment and devices, and heating, ventilation and air conditioning (HVAC) systems. The Project's estimated energy use during operations is summarized in **Table 10, Project Operations Energy Use**.

Table 10
Project Operations Energy Use

Energy Source	Quantity Demanded during Operations per Year
Electricity (SCE)[a]	114,125 kWh
Natural Gas (SoCal Gas)	781,664 kBtu / 7,817 therms
Transportation Fuels[b]	
Gasoline	19,857 gallons
Diesel	3,753 gallons

Source: CalEEMod Output (Annual), Appendix A and Energy Calculations, Appendix F.

Notes:
kWh = kilowatt-hours
kBTU = kilo-British Thermal Units

[a] While the source of electricity is the CPA, SCE delivers power to individual customers in the City. While the City encourages the electrification of new construction and has set the default power option to 100 percent clean energy, individual customers can select other options. Therefore, CalEEMod electricity defaults were not revised to assume 100 percent electrification or 100 percent clean energy and the electricity and natural gas demands shown here are conservative estimates as a result.

[b] Project gasoline and diesel use during operations are calculated based on the vehicle miles traveled (VMT) estimated by CalEEMod Annual Output. It is assumed that light-duty vehicles use gasoline, while heavy-duty (Gross Vehicle Weight Rating > 8,500 pounds) use diesel. CalEEMod estimates that light-duty vehicles account for approximately 93 percent of project VMT. Calculations shown in Mobile Fuel Use Worksheet, provided as part of Appendix F. Project gasoline and diesel use are calculated based on vehicle emissions factor model for the calendar year 2026 (operational year) from EMFAC2021(v1.0.2) (26.38 miles per gallon for gasoline-fueled vehicles and 10.27 miles per gallon for diesel-fueled vehicles).

As estimated by CalEEMod, and shown in Table 10, the Project's total electricity demand would be approximately 114,125 kilowatt-hours per year (kWh/year). As it does in the existing condition, SCE would deliver electricity service to the Project site during operations. In 2022, SCE provided 85,870 million kWh of electricity throughout its service area, including the Project site.[23] Therefore, the Project would consume approximately 0.1 percent of SCE's supply. In addition, Title 8, Chapter 16 of the TOMC is the adoption of California Green Building Standards Code (CALGreen, CCR Title 24, Part 11), which encourages sustainable construction practices in the categories of planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental air quality. A fee established by resolution of City Council in accordance with the Thousand Oaks Building Code Fee schedule for plan examination and permit fees shall be assessed to verify Project compliance with the mandatory measures of the TOMC and CALGreen. The Project would be required to comply with

[23] California Energy Commission, Electricity Consumption by Entity, Accessed on June 30, 2023 at: http://www.ecdms.energy.ca.gov/elecbyutil.aspx.

CALGreen, which requires that newly-constructed projects, and additions and alterations to existing buildings, shall recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition debris. The Project would also be required to comply with applicable State and City efficiency standards effective at the time building permit applications are submitted, namely, CALGreen, as well as the applicable version of the State's 2022 Building Energy Efficiency Standards (Energy Code), CCR Title 24, Part 6. The applicable standards require incorporation of energy and water efficiency features, including, but not limited to, structural efficiency; energy and water efficient fixtures, appliances, and lighting; energy efficient HVAC; and water efficient landscaping. As the Project would be required to comply with the TOMC, CALGreen, and the Energy Code, the Project would represent a small fraction of the amount of the electricity provided by SCE. Therefore, the Project would not result in a substantial increase in electricity demand.

The Southern California Gas Company (SoCalGas) provides natural gas services to the Project site and may continue to provide service to the Project. While the City encourages the electrification of new construction through the May 2024 Climate & Environmental Action Plan (CEAP), this has not yet been codified and is not required by the City. Therefore, CalEEMod electricity defaults were not revised to assume 100 percent electrification. If utilized, the total Project demand for natural gas would be approximately 7,817 therms per year (or 21.4 therms per day), as estimated by CalEEMod. According to the 2023 California Gas Report Supplement, SoCalGas daily total throughput in 2022 was 2,458 millions[24] (or approximately 25 millions of therms per day). The Project would represent 0.00009 percent of the SoCalGas supply, which would not result in a substantial increase in natural gas demand.

According to the CARB on-road vehicle emissions factor model EMFAC2021(v1.0.2), Emissions Inventory, the average fuel economy for light duty vehicles operating in Ventura County for the year 2026 is approximately 26.28 miles per gallon for gasoline-fueled vehicles and approximately 10.27 miles per gallon for all categories of diesel-fueled vehicles. CalEEMod estimates that the Project would generate approximately 545,734 VMT annually, 93 percent of which would be comprised of light-duty vehicles with a gross vehicle weight rating (GVWR) of up to 8,500 pounds, and approximately seven percent of which would be comprised of heavy-duty vehicles (GVWR greater than 8,500 pounds). Light-duty vehicles are considered to be gasoline-fueled and heavy-duty vehicles are considered to be diesel-fueled. As such, during operations, the Project would generate approximately 507,533 annual VMT with gasoline-fueled vehicles, and approximately 38,201 annual VMT with diesel-fueled vehicles. Based on the State's projected fleet fuel mileage for the year 2026, the Project's demand during operations for transportation fuels would be approximately 19,233 gallons of gasoline, and approximately 3,740 gallons of diesel fuel, annually. As discussed above, 12.5 billion gallons of gasoline and 2.7 billion gallons of diesel were sold in California in 2023. The Project's contribution to demand would be less than 0.01 percent of current demand for gasoline and diesel fuel.

As such, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and energy impacts during operations would be less than significant.

Mitigation Measures

No mitigation measures are required.

[24] Southern California Gas Company, 2023 California Gas Report Supplement, Table 13.

b. A significant impact may occur if a project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

No Impact. The City Building Division reviews Project site plans to verify compliance with applicable local and State energy codes prior to issuing a building permit. As discussed above, the Project is required to comply with Title 8, Chapter 16 of the TOMC, CALGreen, and the Energy Code. Therefore, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. 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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. 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 geological features?	☐	☒	☐	☐

Impact Analysis

The following analysis is based on the Geotechnical Report, provided in **Appendix G**, prepared by Gold Coast Geoservices, Inc., on January 31, 2024.[25]

[25] Gold Coast Geoservices, Inc., Geotechnical Report for 1651 Lynn Road, January 11, 2024.

a. i. A significant impact may occur if a project would 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. ii. A significant impact may occur if a Project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking.

Less than Significant Impact. According to the Geotechnical Report, no State-designated Alquist-Priolo Earthquake Fault Zones or active faults are located on the Project site. The closest significant fault to the Project is the Simi-Santa Rosa fault (located approximately 10 miles north of the Project site). According to the Thousand Oaks General Plan, the Project site is located within the Sycamore Canyon fault, but the fault has been determined to be an inactive fault.[26, 27] Additionally, Boney Mountain fault, which is also inactive, is located approximately one mile southeast of the Project site. The Project site is located within the seismically active southern California region and could experience ground shaking in the event of a nearby earthquakes originating from other faults located in Southern California. The potential for surface rupture of a known earthquake fault is low, as the Project site is not located on a known active fault. Furthermore, the Project would be required to be designed and constructed in accordance with the State of California Building Code (CBC) and TOMC building standards, which would reduce the potential for exposure of people or structures to seismic risks. Therefore, impacts related to Alquist-Priolo Earthquake Fault Zones and strong seismic ground shaking would be less than significant.

Mitigation Measures

No mitigation measures are required.

a. iii. A significant impact may occur if a project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction.

Less than Significant Impact. Liquefaction is a phenomenon in which loose, saturated, relatively cohesionless soil deposits lose shear strength during strong ground motions. Liquefaction factors include intensity and duration of ground motion, gradation characteristics of the subsurface soils, in-situ stress conditions, and the depth to groundwater. Liquefaction is typified by a loss of shear strength in the liquefied soil layers due to rapid increases in pore water pressure generated by earthquake accelerations. According to the Thousand Oaks General Plan Safety Element, the Project site is not located within a liquefaction zone. The Geotechnical Report also identified that the proposed building areas would not be located within areas designated by the State as having the potential for seismically-induced liquefaction hazards.[28] As such, the Project would result in a less than significant impact related to directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction.

Mitigation Measures

No mitigation measures are required.

[26] Inactive faults are geologic structures that can be identified but cannot cause and earthquake. Faults are commonly considered to be active if there has been movement observed or evidence of seismic activity during the last 10,000 years.
[27] City of Thousand Oaks, General Plan 2045, Figure 10.1 Seismic Faults, November 2023.
[28] City of Thousand Oaks, General Plan 2045, Figure 10.3 Liquefaction Risk Zones, November 2023.

a. iv. A significant impact may occur if a project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving landslides.

Less than Significant Impact. According to the Thousand Oaks General Plan Safety Element, the Project site is not located within a landslide risk zone.[29] The Geotechnical Report also identified that the proposed building areas would not be located within areas designated by the State as having the potential for seismically-induced landslide hazards and that the development would be adequately and safely removed from any slope areas so that seismic-induced landslide hazards are not considered to be potential hazards at the Project site. As such, the Project would result in a less than significant impact related to directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury or death involving landslides.

Mitigation Measures

No mitigation measures are required.

b. A significant impact may occur if a project would result in substantial soil erosion or the loss of topsoil.

Less than Significant Impact. Construction of the Project would require ground surface disturbance during site preparation and grading, which may cause soil erosion. The Project would be required to comply with VCAPCD Rule 55, which requires watering disturbed soils to reduce substantial soil erosion. In addition, the Project would be required to comply with the grading requirements of the TOMC (Title 7, Chapter 3), which includes erosion control and drainage requirements for construction projects involving earthwork. The Project would also be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which requires the Project to develop a Stormwater Water Pollution Prevention Plan (SWPPP) and includes additional BMPs to reduce erosion and topsoil loss from stormwater water runoff (refer also to Section X, Hydrology and Water Quality). As such, with required adherence to the regulations identified above, Project impacts related to substantial soil erosion or loss of topsoil would be less than significant.

Mitigation Measures

No mitigation measures are required.

c. A significant impact may occur if a project is built on a geologic unit or soil that is unstable, or that would become unstable as a result of a project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Less than Significant Impact. According to the Geotechnical Report, and as identified above, liquefaction and landslides would not represent hazards to the Project. The Project site is underlain by native soils, classified as residual soil, colluvium (gravity and sheetflow deposits), and Older Alluvium. The soil typically consists of dark brown clayey sand with gravel to sandy clay with gravel that is from medium dense to dense. The Older Alluvium, beneath the residual soils and beneath the colluvium, becomes very dense/stiff and is considered suitable as foundation bearing material. Lateral spreading on the ground surface during a seismic activity usually occurs along the weak shear zones within a liquefiable soil layer and has been observed to generally take place towards a free face (i.e., retaining wall, slope or channel) and to less extent on ground surfaces with a very gentle slope. Due to the lack of liquefiable soil, and as liquefaction is not identified as a potential hazards at the Project site, lateral spreading is not likely to occur on the Project site. Subsidence occurs when a large portion of the land is displaced vertically, usually due

[29] City of Thousand Oaks, General Plan 2045, Figure 10.2 Landslide Risk Zones, November 2023.

to the withdrawal of groundwater, oil, or natural gas. The Project site is not located within an area of known ground subsidence,[30] and the extraction of groundwater, gas, oil, or geothermal energy is not proposed with the Project. Therefore, the Project would result in a less than significant impact related to landslides, lateral spreading, subsidence, liquefaction, or collapse.

Mitigation Measures

No mitigation measures are required.

d. A significant impact may occur if a project is located on expansive soil, creating substantial direct or indirect risks to life or property.

Less than Significant Impact. Expansive soils are those which contain clay minerals which change in volume (shrink or swell) with changes in soil moisture content. When there is a change in the moisture content there will be movement, with anticipated shrinking or swelling. Differential shrinking or swelling can cause damage to foundation systems and concrete flatwork, which can cause cracks to develop in concrete and in interior walls. The Geotechnical Report determined that the soil underlying the Project site is in the medium expansion index range. The Geotechnical Report includes recommendations for development of the Project site, including provisions that address expansive soils. The Geotechnical Report is subject to the review and approval of the City, and the Project would be required to be constructed in accordance with the CBC, and the TOMC, which contains provisions to account for hazards that result from soil expansion (Section 8-1.17). As such, with required adherence to the recommendations of the Geotechnical Report and other State and City regulations, Project impacts related to expansive soils would be less than significant.

e. A significant impact may occur if a project site contains 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.

No Impact. The Project would connect to the City wastewater collection and treatment system rather than rely on an on-site wastewater treatment system. Therefore, the Project would result in no impact related to the capability of soils to support the use of septic tanks or wastewater disposal systems.

For informational purposes, the 1651 Lynn Road Phase I Environmental Site Assessment (Phase I ESA), included in **Appendix H,** observed a septic system on the Project site. When encountered during construction of the Project, the septic system shall be properly removed or abandoned in accordance with State and local requirements and, and in accordance with recommendations and approval of the City.

Mitigation Measures

No mitigation measures are required.

f. A project may result in a significant impact if it would directly or indirectly destroy a unique paleontological resource or site or unique geological features.

Potentially Significant Unless Mitigation Incorporated. As part of preparation of the Cultural Resources Phase I Assessment, the Dibblee 1993 geological maps for the Project site were examined. The Project site is dominated by the Conejo Volcanic Formation (Tcvb), which is igneous and non-fossil bearing. The Project site is surrounded by fossil-bearing Miocene sandstone formations (Tvcg) and Pleistocene alluvial

[30] United States Geologic Survey, Areas of Land Subsidence in California, Accessed on February 28, 2024 at: https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html.

material (Qoa); however, the intrusive Conejo Volcanic formation dominates the site subsurface, making the likelihood of encountering the fossil-bearing formations unlikely, especially given the shallow nature of the proposed residential construction. However, the potential for the inadvertent discovery of fossil resources exists. Following implementation of mitigation measure **MM-GEO-1**, the Project would result in a less than significant impact to paleontological resources.

Mitigation Measures

MM-GEO-1: **Fossil Discovery Protocol**. In the event that previously unknown and potentially significant intact fossil deposits are encountered within an undisturbed context during grading, then a fossil resource "discovery" protocol shall be followed. If significant fossils are encountered during Project grading within native soils or original context, then all work in that area shall be halted or diverted away from the discovery to a distance of 30-feet until a qualified senior paleontologist can evaluate the nature and/or significance of the find(s). If a senior paleontologist confirms that the discovery is potentially significant, then the Lead/Permitting Agency shall be contacted and informed of the discovery.

Construction shall not resume in the locality of the discovery until consultation between the senior paleontologist, the owner's Project manager, the Lead/Permitting Agency, and any other concerned parties (such as additional regulatory agencies), takes place and reaches a conclusion approved by the Lead/Permitting Agency. If a significant fossil resource is discovered during earth-moving, complete avoidance of the find is preferred. However, if the discovery cannot be avoided, further survey work, evaluation tasks, or data recovery of the significant resource may be required by the Lead/Permitting Agency. The Lead/Permitting Agency may also require site monitoring, based on the discovery. All individual reports shall be submitted to the Natural History Museum of Los Angeles County.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS.				
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?	☐	☐	☒	☐

Greenhouse gases (GHGs) can contribute to an increase in the temperature of the earth's atmosphere by absorbing infrared radiation transmitted by the sun, thereby trapping and retaining heat within the atmosphere. Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans over an extended period of time, as well as other associated changes in climate, such as substantial variations in wind patterns, precipitation, and the frequency and/or strength of storms.

The principal GHGs are CO_2, methane (CH_4), nitrous oxide (N_2O), ozone, and water vapor. The CEQA Guidelines define the following as GHGs: CO_2, CH_4, N_2O, sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Each GHG differs in its mass and ability to trap heat within the atmosphere based on factors such as capacity to directly absorb radiation, length of time in the atmosphere, and chemical transformations that create new GHGs. Because the warming potential of each GHG differs, GHG emissions are typically expressed in terms of CO_2 equivalents (CO_2e), providing a common expression for the combined volume and warming potential of the GHGs generated by an emitter. Total GHG emissions from individual sources are generally reported in metric tons (MT) and expressed as metric tons of carbon dioxide equivalents ($MTCO_2e$).

State AB 32, the Global Warming Solutions Act of 2006, established mandatory provisions and GHG reduction targets within specified time frames, including a requirement that California's GHG emissions be reduced to 1990 levels by 2020. The most recent target thresholds come from AB 1279, the California Climate Crisis Act, enacted September 16, 2022. It codifies various executive orders made after the establishment of AB 32 which set new target thresholds, resulting in the requirement for California to achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. AB 1279 also requires that statewide anthropogenic GHG emissions be reduced to at least 85 percent below 1990 levels by 2045.

As required by AB 32, CARB was tasked with preparing a scoping plan that identified strategies for reducing GHG emissions. The first Climate Change Scoping Plan was adopted in December 2008, and the document is updated every five years. The 2022 Climate Change Scoping Plan was finalized in December 2022 and is focused on the goal of obtaining carbon neutrality by 2045 or earlier. This is the first updated Scoping Plan that has added carbon neutrality as a science-based guide where it identifies technologically feasible, cost effective and equity-focused path to carbon net zero.

Senate Bill (SB) 375, the Sustainable Communities and Climate Protection Act, passed in 2008, requires CARB to develop and set regional targets for GHG emission reductions from passenger vehicles. These targets are embedded in the Scoping Plan and set on a regional basis. The regional MPOs are each tasked with preparing a SCS that will reduce GHG emissions to achieve the regional targets, if feasible to do so.

Each SCS is a component to a RTP, which regulates transportation financing within each region. The RTP and SCS must complement each other and accommodate the Regional Housing Needs Allocation (RHNA). SB 375 modified the RHNA requirements to align with production of the RTP/SCS. The purpose of this coordination is for each MPO to arrive at a mix of transportation and land use strategies that will direct the region's growth in such a way that emissions from car trips meet the GHG reduction targets.

The SCAG is the MPO for the County of Ventura (along with the Counties of Imperial, San Bernardino, Los Angeles, Orange, and Riverside). The 2020-2045 RTP/SCS, also referred to as Connect SoCal, is the most recent RTP/SCS adopted by SCAG. The 2020-2045 RTP/SCS is a long-range visioning plan that examines existing land use and transportation conditions throughout the SCAG region and forecasts how the plan will meet the region's transportation needs between 2020 and 2045, as well as achieve CARB's GHG emissions reduction targets. On September 3, 2020, SCAG's Regional Council adopted the 2020-2045 RTP/SCS. On October 30, 2020, CARB officially determined that the 2020-2045 RTP/SCS would achieve CARB's 2035 GHG emission reduction target of 19 percent below 2005 per capita emissions levels. SCAG recently adopted the updated 2024-2050 RTP/SCS; however, it has not been certified by the CARB and has therefore not yet been implemented.

In 2011, VCAPCD staff provided a report entitled "Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County" to the Ventura County Air Pollution Control Board by way of a letter dated November 8, 2011. This letter notes that the most common approach for determining the significance of GHG emissions for land use projects is a tiered approach involving: (1) applicability of any CEQA exemptions; (2) project consistency with a local climate action plan (CAP); and (3) application of an efficiency-based threshold and/or a bright line gap-based threshold based on capturing 90 percent of project GHG emissions. This passage refers to, and cites sections from, a 2008 CAPCOA white paper titled CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act that provides "a common platform of information and tools to address climate change in CEQA analyses, including the evaluation and mitigation of GHG emissions from proposed projects and identifying significance threshold options." The VCAPCD letter also states that "Given that Ventura County is adjacent to the South Coast AQMD [Air Quality Management District] jurisdiction and a part of the SCAG region, District staff believes it makes sense to set local GHG emission thresholds of significance for land use development projects at levels consistent with those set by the South Coast AQMD," and concludes that "unless directed otherwise by [the Air Pollution Control] Board, District staff will continue to evaluate and develop suitable GHG threshold options for Ventura County with preference for GHG threshold consistency with the South Coast AQMD and the SCAG region." However, to date, VCAPCD has not established quantitative significance thresholds for evaluating GHG emissions in CEQA analyses.

Locally, the City adopted its climate action plan (CAP), the CEAP, on May 7, 2024. The CEAP details the strategies and actions that the City will pursue to protect the environment and address the challenges of climate change. The CEAP actions are aimed at reducing the community's collective carbon emissions, sustaining a healthy environment and providing co-benefits like reducing air pollution, supporting local economic development, increasing the City's sustainability and resilience, and improving public health.[31]

a. A significant impact may occur if a project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Less than Significant Impact. As the VCAPCD intends to align future thresholds with the SCAQMD, thresholds established by the SCAQMD may serve for analysis of the Project. To date, however, no quantitative GHG emissions significance threshold for general use in the environmental review process that would apply to the Project has been adopted by a local, regional, or State agency per the requirements of

[31] City of Thousand Oaks, Climate & Environmental Action Plan, May 2024.

CEQA Guidelines Section 15064.7(b). The SCAQMD has adopted a threshold for heavy industrial projects of 10,000 $MTCO_2e$/year, and SCAQMD staff proposed a threshold of 3,000 $MTCO_2e$/year for residential, commercial, and mixed-use projects in 2008, but this threshold has not been adopted. Although a quantitative GHG threshold has not been adopted, the Project's annual GHG emissions from construction and operations were estimated using CalEEMod and are summarized below for informational purposes. The CalEEMod Output is provided in Appendix A.

Construction

During construction, GHG emissions would be generated by the use of heavy equipment and transportation of construction personnel and materials. The SCAQMD guidance document for GHG emissions analysis for construction recommends amortization of emissions over a 30-year project lifetime to evaluate significance on an annual basis.[32] The estimated generation of construction-related GHG emissions from the Project would be 322.25 $MTCO_2e$ /year. The Project's amortized construction-related emissions would therefore be 10.7 $MTCO_2e$ /year. The amortized construction emissions have been added to the Project's annual operational GHG emissions as shown in the discussion below.

Operations

Operation of the Project would result primarily in off-site GHG emissions from electricity use and vehicle trips. The total operational emissions plus the annualized construction emissions, as estimated by CalEEMod, are shown in **Table 11**, **Operational Greenhouse Gas Emissions.**

Table 11
Operational Greenhouse Gas Emissions

Generation Source	$MTCO_2e$/Year
Area Sources	4.5
Energy Utilization	59.6
Mobile Source [a]	189.0
Solid Waste Generation	4.2
Refrigerants	0.1
Water Consumption	2.7
Annualized Construction	10.7
Total Project GHG Emissions	**270.8**
Source: CalEEMod Output, Appendix A.	

As shown in Table 11, with the addition of amortized construction emissions, the Project's total annual GHG emissions are estimated to be approximately 281.7 $MTCO_2e$/year. As there are no quantitative thresholds that can be used to determine if the Project's GHG emissions would result in a significant impact, the Project's GHG impacts will be qualitatively evaluated in Section VIII(b) below based on CEQA Guidelines Section 15064.4(b)(3). There have been no adopted GHG emissions thresholds to date that the Project would exceed. However, the most applicable threshold would be the SCAQMD's proposed threshold of 3,000 $MTCO_2e$/year for residential, commercial, and mixed-use projects. Based on the SCAQMD's proposed threshold, the Project would not exceed the proposed quantitative threshold; therefore, the impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

[32] SCAQMD, Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October 2008.

b. A significant impact may occur if a project conflicted with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions for GHGs.

Less than Significant Impact. CEQA Guidelines Section 15064.4(b)(3) states that: "In determining the significance of a project's greenhouse gas 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 small 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. A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment: 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 (see, e.g., section 15183.5(b)). Such 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. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR [Environmental Impact Report] must be prepared for the project. 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."

To demonstrate the extent to which the Project complies with such plans, this evaluation provides an analysis of the Project's consistency with the following plans that have been adopted on a statewide, regional, and, local scale.

2022 Scoping Plan

As required by AB 32, CARB was tasked with preparing a scoping plan that identified strategies for reducing GHG emissions. The first Climate Change Scoping Plan was adopted in December 2008, and the document is updated every five years. The 2022 Climate Change Scoping Plan was finalized in December 2022 and is focused on the goal of obtaining carbon neutrality by 2045 or earlier. The Project would be required to comply with applicable regulations or requirements that are adopted and implemented for the purpose of reducing GHG emissions, such as complying with the energy conservation standards of CALGreen.

The majority of the strategies, goals, and actions identified in the 2022 Scoping Plan are to be implemented by public agencies on a broader scale throughout the State. Therefore, the Project would not be in conflict with applicable regulations adopted for the purposes of reducing GHG emissions, nor would it interfere with the ability of public agencies to implement such identified strategies, goals, and actions.

2020-2045 SCAG RTP/SCS[33]

As mentioned previously, CARB has determined that the 2020-2045 RTP/SCS would achieve CARB's 2035 GHG emission reduction target of 19 percent below 2005 per capita emissions levels. As the 2020-2045 RTP/SCS is the regional land use tool used by CARB to meet State GHG reduction targets, consistency or lack of conflict with the 2020-2045 RTP/SCS would indicate that a project aligns with the State's long-term climate goals. The 2020-2045 RTP/SCS meets State climate goals essentially by

[33] SCAG recently adopted the updated 2024-2050 RTP/SCS; however, it has not been certified by the CARB and has therefore not yet been implemented.

identifying the land use patterns that would result in the greatest housing/employment/transportation efficiencies thereby reducing VMT. A project would comply with the 2020-2045 RTP/SCS if it fulfilled the land use strategies of the plan, and it would conflict if its use or density directly contradicted the plan. The Project does not require any change to the zoning or General Plan designation of the Project site; therefore, it aligns with the land use assumptions that the 2020-2045 RTP/SCS is based upon. The land use at the Project site is also not changing, and the increase of population would be 0.3 percent of the SCAG's forecasted population growth; hence, the Project would not result in unplanned population growth (refer to Section XIV, Population and Housing). As such, the Project would not conflict with the RTP/SCS; therefore, the Project would align with the land use strategies of the plan which are determined to meet State strategies for the purpose of reducing the emissions for GHGs.

Climate & Environmental Action Plan

As described above, the City adopted the CEAP on May 7, 2024. The CEAP includes an implementation plan for its GHG savings measures, which consists of the timeline for each measure and the lead City Department and/or Division responsible for implementation (along with other participating partners, where applicable). The timeline is subject to change depending on resource availability, funding, and other factors. The implementation of each measure is schedule to occur before 2030; thus, the CEAP also includes the estimated annual GHG savings in 2030 that would be achieved by each measure, where possible. The CEAP focuses its GHG savings measures in the following sectors: building energy, transportation, solid waste, water, environmental, and adaptation and resilience. As with the Scoping Plan, the measures that are identified in the CEAP are to be implemented by the City, such as encouraging building electrification, pursuing viable transit options, increasing electric vehicle charging requirements, reducing food waste and increasing organics composting, transitioning to climate-appropriate landscaping, increasing tree planting, and providing appropriate regulations to allow for development of distributed energy resources in residentially- zoned areas and throughout City. As the City codifies these measures, the Project and similar developments would be required to implement the GHG emissions reduction features into their designs, or retrofit existing buildings where necessary, as a matter of regulatory compliance. As such, the Project would not conflict with the CEAP.

Project impacts regarding conflicts with plans, policies, or regulations adopted for the purpose of reducing GHG emissions would be less than significant.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX.HAZARDS AND HAZARDOUS MATERIALS. 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 one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site that is included on a list of hazardous materials 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 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?	☐	☐	☐	☒
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?	☐	☐	☒	☐

Impact Analysis

The following analysis is based on the 1651 Lynn Road Phase I Environmental Site Assessment, provided in Appendix H, prepared by PAX Environmental Inc., on January 31, 2024.[34]

a. A significant impact may occur if a project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of types of hazardous materials or quantities.

[34] PAX Environmental Inc., 1651 Lynn Road Phase I Environmental Site Assessment, January 31, 2024.

b. A significant impact may occur if a project would 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.

Less than Significant Impact. The Project site is developed with an existing single-family residence with associated hardscape and landscaping. The Project site also includes undeveloped land. During demolition, grading, and construction of the proposed residences, flammable and otherwise hazardous substances would be transported and used for construction activities, such as fuels for equipment and generators, oil, grease, paints, and solvents. The Project would comply with federal, State, and local regulations that dictate the appropriate transports, use, and disposal of these hazardous materials, including the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, California Hazardous Material Management Act, and Title 22 of the CCR. Residential uses such as the Project require the use of typical household cleaning agents and maintenance products during operations; however, the proposed 18 single-family residences would not use, store, or transport substantial quantities of hazardous materials, as compared to industrial or manufacturing uses, for example. Similar to construction, operation of the Project would be conducted in accordance with applicable federal, State, and local laws.

The Phase I Environmental Site Assessment did not identify Recognized Environmental Conditions (RECs), Historical RECs, Controlled RECs, or De Minimis conditions associated with the Project site. The Project would require the demolition of one existing single-family residence and associated hardscape, which was built in 1977. The Phase I Environmental Site Assessment states the use of asbestos-containing materials (ACM) in construction of the residence would be unlikely and that the property was not observed to contain ACM or lead-based paint (LBP) materials. Nevertheless, the Project would still comply with local, State, and federal regulations regarding ACM and LBP. According to Section 61.145, Standard for Demolition and Renovation under the CFR Title 40, Chapter I, Subchapter C, Part 61, Subpart M, National Emission Standard for Asbestos, the owner must thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos. Title 8, Building Regulations, Section 8-1.06, of the TOMC also states that, in order to obtain a demolition permit, the applicant must file a written application for a demolition permit, and associated preliminary site inspection, and pay all required fees. A construction and debris recycling plan and associated fee may also be required by the City Public Works Department. Demolition permits shall not be issued until the preliminary site inspection has been conducted and all necessary approvals are obtained from Building, Planning, Public Works and other agencies as required. This is a standard regulatory requirement that assures that if hazardous materials are located within the existing building, the TOMC and CFR Title 40 limit the effects of demolition by creating needed surveys and regulations to follow before demolition of the Project site structure. To obtain a Demolition Permit, a debris recycling plan needs to be approved by the City Public Works Department for the waste generated from the demolition of an existing building. As required by the regulations, the Project Applicant must provide a hazardous waste plan, approved by the City Public Works Department, before that department will issue a demolition permit. This will ensure proper disposal of hazardous materials, in this case materials potentially containing ACM and LBP.

The Phase I Environmental Site Assessment also identified septic systems on the Project site. As required by Title 8, Building Regulations, Section 8-4.13, Demolition Permits, of the TOMC, the Project Applicant is required to schedule an inspection of abandoned sewers, septic tanks, cesspools, and water wells immediately upon excavation and exposure and prior to fill in or cap off. Sewers, septic tanks, and cesspools are required to be filled or capped in accordance with the current edition of the California Plumbing Code, as adopted by the City.

With regulatory compliance, the Project would result in less than significant impacts regarding health hazards to the public or environment through routine use, transport, or disposal of hazardous materials as

well as regarding the creation significant hazards through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Mitigation Measures

No mitigation measures are required.

c. A significant impact may occur if a project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

No Impact. The closest existing school to the Project site is the King of Glory Preschool, which is located approximately 0.8 miles northwest of the Project site. The Montessori Stars Preschool is located approximately 1.1 miles west of the Project site. As such, the Project would result in no impact related to potential hazards within one-quarter mile of existing school facilities.

Mitigation Measures

No mitigation measures are required.

d. A significant impact may occur if a project is located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result would create a significant hazard to the public or the environment.

No Impact. The Project site and areas located within 1,000 feet of the Project site are not located on the Department of Toxic Substances Control's (DTSC's) EnviroStor database[35] list of clean-up sites. Based on review of the State Water Resources Control Board's (SWRCB's) GeoTracker database,[36] no SWRCB clean-up sites are located within 1,000 feet of the Project site. The Project site is not listed by the SWRCB as a solid waste disposal site with waste constituents above hazardous waste levels outside the management unit.[37] The Project site is not listed by the SWRCB as a site for which a Cease and Desist Order (CDO) or Clean-up and Abatement Order (CAO) is active.[38] According to the CalEPA, the hazardous waste facilities that are identified in Health and Safety Code Section 25187.5 are those for which the DTSC has taken or contracted with others for corrective action, because a facility owner/operator has failed to comply with a date for taking corrective action, or because the DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment. This list is currently comprised of two facilities, neither of which includes the Project site. The two listed sites are AAD Distribution & Dry Cleaning Inc. in Vernon and the Marquardt Co. in Van Nuys.[39] As the Project site is not located on or near a hazardous material site compiled by Government Code Section 65962.5, the Project would result in no impact related to such regulated sites.

[35] Department of Toxic Substances Control, EnvirStor, Accessed on December 8, 2023 at: https://www.envirostor.dtsc.ca.gov/public/map/?global_id=38330005.
[36] State Water Regional Control Board, GeoTracker, Accessed on December 8, 2023 at: https://geotracker.waterboards.ca.gov/map/?global_id=T0607302824.
[37] CalEPA, Sites Identified with Waste Constituents above Hazardous Waste Levels Outside the Waste Management Unit, Accessed on December 8, 2023 at: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf.
[38] CalEPA, List of "Active" CDO and CAO from Water Board, Excel file accessed on December 8, 2023 at: https://calepa.ca.gov/sitecleanup/corteselist/.
[39] CalEPA, Cortese List, Accessed on February 9, 2024 at: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/.

Mitigation Measures

No mitigation measures are required.

e. A project may result in a significant impact if it would be 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, and result in a safety hazard or excessive noise for people residing or working in the project area.

No Impact. The Project site is not located within two miles of a public use airport and is not located with an airport land use plan. The closest airport to the Project site is the Camarillo Airport, which is located approximately nine miles west of the Project site.

Mitigation Measures

No mitigation measures are required.

f. A project would normally have a significant impact if it would interfere with an emergency response plan or emergency evacuation plan.

Less than Significant Impact. The Project would construct 18 single-family residences, including a private road off of Blair Court. In the vicinity of the Project site, the Ventura Freeway (Highway 101) is an evacuation route for the City.[40] As the Project would be constructed on an infill lot, surrounded by residences and streets, it would not modify or block current emergency or evacuation routes or site ingress and egress. During construction, the majority of equipment and vehicles would be staged on the Project site. However, as described in Section XVII, Transportation, the Project would implement Project design feature PDF-TR-1 if deemed necessary by the City, which includes a Construction Traffic Management Plan, in the event that off-site construction-related work may impact public roadways (associated with staging or construction of the sidewalk off-site and along the Lynn Road frontage and along the Blair Court Project site frontage). Therefore, traffic flows along Lynn Road and access from Blair Court would not be impeded by Project construction activities. During operation, the Project would add only 18 residences to the Project site, representing 170 average daily trips (ADT) (refer to Section XVII, Transportation), which would not significantly affect traffic and access. In the case of an emergency or evacuation order, residents of the Project would travel from the private road to Blair Court and then travel on Lynn Road northeast for approximately 1.4 miles until reaching Ventura Freeway. Furthermore, the Project's private road and cul-de-sac would be constructed to City standards, as required, assuring adequate road, turn, and turnaround widths to accommodate emergency response vehicles. Development of the Project would not impede or impair adopted emergency response plans or emergency evacuation routes; therefore, the Project would result in a less than significant impact.

Mitigation Measures

No mitigation measures are required.

g. A significant impact may occur if a project is located in proximity to wildland areas and would pose a potential fire hazard, which could affect persons or structures in the area in the event of a fire.

[40] City of Thousand Oaks, General Plan 2045, Appendix B: Emergency Evacuation Analysis, November 2023.

Less than Significant Impact. As shown on the City's General Plan Safety Element[41] and California Department of Forestry and Fire Protection (CalFire) Maps,[42] the Project site is located within land classified as a Very High Fire Hazard Severity Zone (VHFHSZ). An isolated open space area, bisected by Regal Oak Court, is located south of the Project site and Lynn Road; however, this open space area is bordered by Lynn Road to the north and by residences to the east, west, and south. Beyond the residences to the south lies a larger, more contiguous open space area. The Project would be constructed on an infill lot, surrounded by residences and streets. The Project would subdivide the existing parcel into 19 lots and would develop 18 single-family homes with associated hardscape and landscape. While the Project site is located in a VHFHSZ, the Project would be designed in compliance with the CCR, Title 24, known as the CBC, as well as TOMC building standards. The CBC includes specifications for building materials and construction methods, such as ignition-resistant roofing, attic vents, eaves, decks and exterior siding, doors, and windows, which reduce the likelihood that burning embers from a wildland fire ignite buildings. The Project plans must also be reviewed and approved by the VCFD, assuring that the Project site provides adequate hydrants, fire flow, and fire apparatus access, as well as adequate defensible space and a fuel modification zone. As the Project site is immediately surrounded by residences and streets and would be designed to comply with applicable regulations of the CBC, TOMC, and VCFD, the Project would result in a less than significant impact regarding proximity to wildland areas and potential fire hazards.

Mitigation Measures

No mitigation measures are required.

[41] City of Thousand Oaks, General Plan 2045, Figure 10.6: Fire Hazard Severity Zones, November 2023.

[42] CalFire, Very High Fire Hazard Severity Zones in LRA as Recommended by CALFIRE: Thousand Oaks. Accessed on November 30, 2023 at: https://osfm.fire.ca.gov/media/6024/thousand_oaks.pdf.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY. 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 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?	☐	☐	☒	☐

Impact Analysis

The following analysis is based on the Infiltration Feasibility Report, provided in **Appendix I**, prepared by Gold Coast Geoservices, Inc. on May 9, 2024,[43] and Vesting Tentative Tract Map #6081, prepared by Pacific Coast Civil, Inc. on July 19, 2024.

[43] Gold Coast Geoservices, Inc., Geotechnical Analysis and Infiltration Feasibility Report for Tentative Parcel Map #6081, 1651 Lynn Road, May 9, 2024.

a. A project may result in a significant impact if it would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

Less than Significant Impact.

Construction

A portion of the Project site is currently developed with a single-family residence and associated hardscape and landscaping, while the remainder of the site is undeveloped. According to the Geotechnical Report (Appendix G), Project site drainage is by topographically controlled sheetflow runoff to the north, and no concentrated flows occur during or following seasonal rainstorms. No drainage courses occur within or adjacent to the Project site, and no groundwater seeps or springs occur within or adjacent to this site. The highest historical groundwater level at the Project site vicinity exceeds 50 feet. Nevertheless, prior to beginning major construction activities, including demolition of the existing structure, the Project would be required to obtain NPDES coverage under the General Permit for Storm Water Discharges Associated with Construction Activity (known as the Construction General Permit, or CGP) from the SWRCB. If grading for the Project encounters the water table below the site, coverage under the Los Angeles Regional Water Quality Control Board (RWQCB) Groundwater from Construction and General Dewatering Permit (NPDES No. CAG994004, Order R4-2013-0095) would be required prior to any discharge to stormwater infrastructure or nearby receiving waters. To obtain coverage under the CGP, the Project would also be required to prepare and submit a SWPPP, which would include a list of BMPs to reduce or eliminate discharges of sediment or pollutants from the site during construction activities. The Project would be required to comply with the terms of the CGP throughout construction activities.

Operation

All runoff into existing or new City stormwater infrastructure would be required to comply with the components of the Regional Phase I MS4 Permit (NPDES No. CAS004001, Order R4-2021-0105, the 'Regional Permit'), which applies to the City. One of the components of the Regional Permit is the Countywide Stormwater Quality Management Program, which includes design features that the Project would be required to implement during operations to reduce and treat stormwater runoff from the Project. The Regional Permit is written in order to enforce the water quality standards and waste discharge requirements of the Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan).

Gold Coast Services, Inc. determined that the geotechnical conditions at the Project site are not suitable for Low Impact Development (LID) infiltration. As discussed in greater detail in Appendix I, Infiltration Feasibility Report, the volcanic bedrock that underlies the Project site would prohibit infiltration, as well as potentially result in groundwater mounding, wherein the lateral migration of stormwater could potentially damage off-site properties. Gold Coast Services, Inc. recommends that the Project instead utilize bio-infiltration and rainwater harvesting for LID stormwater management. As such, the Post-Construction Stormwater Management Plan for the Project, which would be prepared in compliance with the Countywide Stormwater Quality Management Program, would implement a bio-retention basin along the northwestern portion of the Project site and a vegetated swale along the southern portion of the Project site to capture and treat stormwater.

As CGP and post-construction compliance would be required of the Project, the Project would correspondingly comply with the water quality standards and waste discharge requirements of the Basin Plan. Thus, Project impacts to surface and groundwater quality during construction and operations would be less than significant.

Mitigation Measures

No mitigation measures are required.

b. A project may result in a significant impact if it would substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Less than Significant Impact. During construction, the Project would not decrease groundwater nor interfere with groundwater recharge, as the highest historical groundwater level at the Project site vicinity exceeds 50 feet and Project development would not require excavation to such depths. During operations, the Project would be served by existing water supply infrastructure and does not propose to construct any on-site water production wells. The Project would increase the impervious surface of the Project site but would comply with SWPPP requirements and follow guidelines in the Ventura County Technical Guidance Manual for Post-Construction Stormwater Quality Control Measures. In compliance with NPDES and LID requirements to reduce impacts to recharge and runoff, the Project would reduce pollutant loading to both groundwater and runoff, and where possible, increase recharge. As such, the Project would not result in the depletion of existing groundwater resources or interference with groundwater recharge.

Mitigation Measures

No mitigation measures are required.

c.i. A project may have a significant impact on surface water hydrology if it would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on site.

c.ii. A project may have a significant impact on surface water hydrology if it would 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.

iii. A project may have a significant impact on surface water hydrology if it would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would create or contribute runoff which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

c.iv. A project may have a significant impact on surface water hydrology if it would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner that would impede or redirect flood flows.

Less than Significant Impact. As previously described, a portion of the Project site is currently developed with a single-family residence and associated hardscape and landscaping, while the remainder of the site is undeveloped. To obtain coverage under the CGP, the Project would be required to prepare and submit a SWPPP, which would include a list of BMPs to reduce or eliminate discharges of sediment or pollutants from the site during construction activities. Development of the Project would increase the impervious surface area of the site; however, runoff would be directed to LID features (i.e., the bio-retention basin and vegetated swale) and ultimately to the City municipal stormwater system. The Project would implement

post-construction runoff control and LID features, as required, which would treat and reduce stormwater runoff from the site, as well as control the volume of runoff from the site. The LID BMPs are subject to the review and approval of the City Public Works Department, to ensure that water is captured and treated, and to ensure that the volume of runoff leaving the site is not increased. In addition, all runoff from the site would be required to comply with the Regional Permit during operations. Therefore, impacts from increased runoff related to flooding, erosion, siltation, and pollution would be less than significant.

d. A significant impact may potentially occur if a project would risk the release of pollutants from project inundation due to location in a flood hazard, tsunami, or seiche zone.

Less than Significant Impact. According to the City of Thousand Oaks General Plan Safety Element, the Project site is not located within an 100-year flood zone or a dam inundation area.[44] The National Flood Hazard Layer designates the Project site as being located in Zone X, which is an area of minimal flood hazard.[45] Tsunamis, which are sea waves generated by large-scale sea floor displacements (such as from large earthquakes), and seiche, which is the oscillation of the surface of an enclosed water body generated by an earthquake, are unlikely to affect the Project site, as it is not located on the coast (approximately nine miles from the coast) and no lakes or reservoirs are located in the Project vicinity (Lake Sherwood is located approximately three miles to the southeast). As such, the Project would result in a less than significant impact related to inundation due to flood hazard, tsunami, or seiche zones.

Mitigation Measures

No mitigation measures are required.

e. A project may have a significant impact if it conflicted with or obstructed implementation of a water quality control plan or sustainable groundwater management plan.

Less than Significant Impact. As described by the General Plan 2045 Draft EIR,[46] the City overlies the Conejo Basin and Thousand Oaks Area Basin, both of which are classified as a Very Low Priority basin by the Department of Water Resources. The Sustainable Groundwater Management Act requires local agencies to form groundwater sustainability agencies to manage groundwater resources in High and Medium Priority basins. Accordingly, the Conejo Basin and Thousand Oaks Area Basin, including the Project site, are not subject to a sustainable groundwater management plan. Therefore, the Project would not conflict with or obstruct implementation of a sustainable groundwater management plan.

The Project site is located in the jurisdiction of the Los Angeles RWQCB, whose Basin Plan functions as a master water quality control planning document. The Basin Plan includes programs of implementation to achieve water quality objectives. As previously discussed and directed by the Basin Plan, the Project would be required to comply with the requirements of the CGP, Regional Permit, and TOMC, which assure that the Project would be designed and constructed with features that minimize potential impacts to water quality in accordance with the programs in the Basin Plan. Therefore, the Project would not conflict with or obstruct implementation of a water quality control plan.

The Project would result in a less than significant impact related to conflicts with a sustainable groundwater management plan or water quality control plan.

[44] City of Thousand Oaks, General Plan 2045, Figure 10.4 FEMA Flood Hazard Zones and Figure 10.5 Dam Inundation, November 2023.
[45] FEMA's National Flood Hazard Layer Viewer, FIRMette, accessed on March 5, 2024 at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd.
[46] City of Thousand Oaks, 2045 General Plan Update Draft EIR, November 2023.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. LAND USE AND PLANNING. 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?	☐	☐	☒	☐

Impact Analysis

a. A significant impact may occur if a project would be sufficiently large or otherwise configured in such a way as to create a physical barrier within an established community.

No Impact. The Project site is located on Lynn Road in the Newbury Park community, at the northwest corner of the intersection of Lynn Road and Blair Court, on approximately 4.61-acres. The Project site is comprised of a single-family residence with associated hardscape and landscaping, and the remainder of the Project site is undeveloped. The Project site is zoned R-E, and the General Plan land use designation is Neighborhood Low 2 (> 4.5 to 6 du/acre). Residential communities are located north, east, and west of the Project site, and additional residences and an open space area are also located south of the Project site beyond Lynn Road. Therefore, the Project would not represent a physical barrier within an established community. As such, no impact would occur regarding the division of an established community.

Mitigation Measures

No mitigation measures are required.

b. A significant impact may occur if a project causes a significant environmental impact due to an inconsistency with applicable land use plans, policies or regulations that are adopted for the purpose of avoiding or mitigating an environmental effect.

Less than Significant Impact. The Project site is located within the City and is subject to the land use designations and zoning regulations of the General Plan and TOMC. The Project site is located on Lynn Road in the Newbury Park community, at the northwest corner of the intersection of Lynn Road and Blair Court, on approximately 4.61-acres. As described above, a single-family residence is currently located on the Project site, and it would be removed to accommodate development of 18 single-family residences, a bio-retention basin, and a private road. The Project site is zoned R-E, and the General Plan land use designation is Neighborhood Low 2 (> 4.5 to 6 du/acre). The Project site is also located within SCAG's planning area, which is the federally-designated MPO for the region. The Project is therefore also subject to the SCAG's 2020-2045 RTP/SCS. Lastly, the Project site is located within the planning area of the VCAPCD, which implements the AQMP.

Regional Plans

SCAG is responsible for reviewing regionally significant local plans, projects, and programs for consistency with SCAG's adopted regional plans. The Project would increase the population within the City by 50 residents, which would not exceed the SCAG population growth forecast (see Section XIV, Population and

Housing) and would result in a less than significant impact regarding conflicts with SCAG's 2020-2045 RTP/SCS. Project consistency with the VCAPCD's AQMP is evaluated in Section III, Air Quality. As described therein, the Project would be consistent with the AQMP and would result in no impact regarding conflicts with the AQMP.

City of Thousand Oaks General Plan

The General Plan is a comprehensive, long-range declaration of purposes, policies, and programs to guide development of the City. General Plan land use designations provide a measurement of the maximum development intensity allowed within each designation, using dwelling units per acre (du/acre) for residential uses. The Project would require VTTM and RPD approval to subdivide the existing parcel into 19 lots and to construct 18 residences and a bio-retention basin; however, the Project would be consistent with the site's General Plan land use designation of Neighborhood Low 2, which allows > 4.5 to 6 du/acre at a maximum height of 35 feet. Per the General Plan, the Neighborhood Low 2 designation allows for single-family neighborhoods at a slightly higher density than the Neighborhood Low 1 land use designation. The purpose of this land use designation is to maintain the character and development pattern of these existing single-family neighborhoods, while allowing infill development of a similar scale. The Project would also comply with the maximum allowable height, which is 35 feet, and would develop residences that are similar in mass and scale to the existing surrounding residences. The following General Plan Land Use Element goals and policies would apply to the Project. As shown in this evaluation, the Project would be consistent with the General Plan; therefore, the Project would not conflict with the General Plan land use designation.

General Plan Land Use Element Applicable Goals and Policies

Citywide Urban Structure and Pattern of Development

- Goal LU-1: Create a land use pattern of development that preserves existing neighborhoods while providing opportunities for targeted infill projects in strategic locations to enhance the quality of life, preserve the natural environment, and ensure the long-term fiscal viability of Thousand Oaks.
    - Policy 1.1 Overall City structure. Establish a clearly defined urban pattern of development and open space by maintaining the single-family residential character of established neighborhood areas.
    - Policy 1.2 Complete community. Strive to maintain a diverse and balanced mix of uses in the City, so that Thousand Oaks is a "complete community" with a diversity of housing for all stages of life and income levels; improve alignment of educational attainment opportunities with high-paying employment opportunities, open space, public facilities that meet residents' needs, and retail and services to support daily life.
    - Policy 1.3 Balance character and infill. Maintain community character while promoting infill development that brings needed housing, amenities, and jobs to the City.
    - Policy 1.4 Infill locations. Focus most new development in areas identified in the "Areas-Specific Guidance."

Goal LU-1 Consistency Discussion

The Project site is located at the northwest corner of the intersection of Lynn Road and Blair Court in the Newbury Park community, on approximately 4.61-acres. The Project site is currently comprised of one single-family residence with associated hardscape and landscaping. Single-family residential communities are located north, east, and west of the Project site, and an open space area and additional single-family communities are located south of the Project site and Lynn

Road. Commercial centers are located within one mile of the Project site, at the intersection of Northeast Kelley Road and Newbury Road and at the intersection of Giant Oak Avenue and Newbury Road. Therefore, the Project site, which is an infill site, would be developed with a higher-density residential use with the Project, in proximity to open space and commercial uses, consistent with Goal LU-1 of the Land Use Element.

Residential Neighborhoods

- Goal LU-2: Preserve and enhance existing neighborhoods throughout the City.
  - Policy 2.3 Sustainable residences. Encourage sustainable building practices during new construction or when buildings are substantially renovated.
  - Policy 2.5 Sustainable residential landscaping. Encourage property owners to use sustainable and climate-appropriate landscaping by incorporating natural materials and native vegetation and trees to enhance the urban forest and provide shade and habitat for fauna.
  - Policy 2.6 Circulation connectivity. Seek opportunities to enhance existing residential neighborhoods by improving pedestrian and bicycle access and infrastructure, installing traffic calming measures, and creating new connections between adjacent streets, subdivisions and commercial areas.
  - Policy 2.7 Access to neighborhood amenities. Improve sidewalks and bike lanes within neighborhoods and along routes to retail areas, schools, parks, and other points of interest to promote active transportation. Improve active transportation-related street amenities, including bike parking, lighting, and seating along major routes.

Goal LU-2 Consistency Discussion

The Project is required to comply with Title 8, Chapter 16 of the TOMC, CALGreen, and the Energy Code, which assure energy and water efficient construction. In addition, while Project development would result in the removal and encroachment of oak trees, the Applicant would be required to comply with the City's Oak Tree Permit application requirements including the preparation of an Oak Tree Protection Plan, and the replacement mitigation for the oak tree removals, thereby maintaining native vegetation and the urban forest. Furthermore, the Project site is regionally accessible from the Ventura Freeway (Highway 101), which is located approximately 1.4 miles from the Project site. Local access to the Project site would be provided from Lynn Road, Blair Court, and ultimately the new private access road. The 18 single-family residences would have direct access from the private road, and sidewalks would be provided along the private road. In addition, the Project would construct a sidewalk off-site and along the Lynn Road Project site frontage as well as along the Blair Court Project site frontage, providing improved pedestrian access. As such, the Project would be consistent with Goal LU-2 of the Land Use Element.

- Goal LU-3: Promote a diversity of housing types for Thousand Oaks residents through all stages of life.
  - Policy 3.1 Diversity of housing. Promote a diversity of housing types in locations throughout the City, specifically in neighborhood areas that contain goods and services, parks and open space, and public schools in a walkable setting.
  - Policy 3.2 Housing for different life stages and incomes. Encourage new housing types for all residents including young professionals, older adults, and middle- and low-income families.

- Policy 3.6 Universal Design. Encourage the use of Universal Design principles in new construction and rehabilitation of housing.

Goal LU-3 Consistency Discussion

As previously described, the Project site is currently comprised of one single-family residence with associated hardscape and landscaping. The Project would develop a higher-density residential use on the Project site, which would increase the availability of housing options in the City. Furthermore, the proposed residences would be located within one mile of open space and commercial centers, and the Project would improve vehicular and pedestrian access to the Project site by providing a new private road and sidewalks along the new private road as well as a sidewalk off-site and along the Lynn Road Project site frontage and along the Blair Court Project site frontage. Lastly, the Project would utilize Universal Design principles, including the provision of a subdivision that would be secured by a motorized security gate, in addition to providing both single-story and two-story design options. Therefore, the Project would be consistent with Goal LU-3 of the Land Use Element.

- Goal LU-4: Support the creation of safe, affordable, and sanitary housing for all ages, income levels, and abilities.
  - Policy 4.1 New housing in very high fire hazard zones. Discourage developing housing on undeveloped land within the City's Very High Fire Hazard Severity Zones.
  - Policy 4.2 Incentives for healthy housing. Create incentives for new and rehabilitated residential buildings to be designed and constructed to consider the health of residents, such as:
    - Siting buildings to encourage walking;
    - Designing buildings to allow for high levels of natural light and air; and
    - Providing safe connections to parks, trails, schools, and recreation.
  - Policy 4.3 Barriers and buffers. Require design features such as site and building orientation, trees or other landscaped barriers, artificial barriers, ventilation and filtration, construction, and operational practices to reduce air quality impacts to new residential development from high-volume roadways.
  - Policy 4.4 Air quality of homes. For new residential land uses that cannot be sited at least 500 feet away from high-volume roadways, require design mitigation, such as:
    - Design residential units with individual heating, ventilation, and air conditioning (HVAC) systems to allow adequate ventilation even with windows closed;
    - Locate air intake systems for HVAC systems as far away from existing air pollution sources as possible;
    - Use High Efficiency Particulate Air (HEPA) air filters in the HVAC system and require a maintenance plan to ensure the filtering system is properly maintained;
    - Use sound walls, berms, and vegetation as physical barriers; and
    - Notify new potential home buyers and renters of risks from air pollution.
  - Policy 4.5 Affordable housing stock. Increase the number and diversity of affordable housing units in the City and encourage housing of varying income levels and unit sizes/ floor plans.

- Policy 4.6 Affordable housing locations. Focus on locating affordable housing close to areas with retail and services and in high resource areas as identified in the TCAC/HCD [Tax Credit Allocation Committee/Housing Community Development] Opportunity Map.

Goal LU-4 Consistency Discussion

The Project site is developed with one single-family residence, which would be replaced with 18 single-family residences. The TCAC/HCD opportunity map identifies areas in every region of the State whose characteristics have been shown by research to be associated with positive economic, educational, and health outcomes for low-income families (particularly long-term outcomes for children). As such, the opportunity map is intended to inform efforts to advance the affirmatively furthering fair housing objective of increasing access to opportunity. While the 2024 TCAC/HCD Opportunity Map designates the majority of the City as "high resource" and "highest resource" areas, with the Project site and surrounding area designated as a "highest resource" area,[47] the General Plan cannot require that a specific parcel be used for affordable housing; however, the Applicant would be required to pay an in-lieu fee per the City's Inclusionary Housing Ordinance. Overall, the Project would replace an underutilized site designated for housing with a higher-density residential use, thereby increasing the available housing stock in the City, which supports State and local goals to increase housing opportunities.

The proposed residences would be located within one mile of open space and commercial centers. The Project would also improve vehicular and pedestrian access to the Project site by providing a new private road and sidewalks along the new private road as well as a sidewalk off-site and along the Lynn Road Project site frontage and along the Blair Court Project site frontage, which would encourage walking by providing additional connections to off-site parcels. While Lynn Road is not identified as a high-volume roadway in the General Plan, the Project would maintain the trees and other vegetation along the southern boundary of the Project site, which would partially screen the Project site from Lynn Road.

As discussed in greater detail in Section XX, Wildfire, according to the General Plan Safety Element[48] and CalFire Maps,[49] the Project site is located within land classified as a VHFHSZ. The Project site, however, immediately surrounded on all sides by roadways and/or development. Across the street (Lynn Road) of the Project site lie parcels of open space that bring the Project site into a VHFHSZ. While the Project site is located in a VHFHSZ, the Project would be designed in compliance with the CCR, Title 24, known as the CBC, as well as TOMC building standards. The CBC includes specifications for building materials and construction methods, such as ignition-resistant roofing, attic vents, eaves, decks and exterior siding, doors, and windows, which reduce the likelihood that burning embers from a wildland fire ignite buildings. The Project plans must also be reviewed and approved by the VCFD, assuring that the Project site provides adequate hydrants, fire flow, and fire apparatus access, as well as adequate defensible space and a fuel modification zone.

Based on the preceding information, the Project would be consistent with Goal LU-4 of the Land Use Element.

[47] California State Treasurer, 2024 CTCAC/HCD Opportunity Map. Accessed on April 26, 2024 at: https://belonging.berkeley.edu/final-2024-ctcac-hcd-opportunity-map.

[48] City of Thousand Oaks, General Plan 2045, Figure 10.6 Fire Hazard Severity Zones, November 2023.

[49] CalFire, Very High Fire Hazard Severity Zones in LRA as Recommended by CALFIRE: Thousand Oaks. Accessed on November 30, 2023 at: https://osfm.fire.ca.gov/media/6024/thousand_oaks.pdf.

City of Thousand Oaks Municipal Code and Zoning

The TOMC zoning for the Project site is R-E 1AC, which allows for the development of one single-family residential use on a minimum 1-acre lot, with a Precise Plan of Design application. As described above, the General Plan land use designation of Neighborhood Low 2 for the site would allow > 4.5 to 6 du/acre, or 19 to 25 residences on 4.30-acres. However, due to existing site conditions and characteristics, that include but are not limited to, protected oak trees, topography, and access, the proposed Project includes 18 residences, which is below 4.5 du/acre. In cases where zoning standards and criteria are inconsistent with applicable, objective general plan standards for a site, the Housing Accountability Act (HAA) clarifies that if a proposed development project is consistent with the applicable objective general plan standards for the site, then the housing development project cannot be found inconsistent with the standards and criteria of the zoning. Additionally, under the HAA, if such an inconsistency exists, the local agency may not require rezoning prior to housing development project approval. Therefore, the Project would not require a zone change. The Project would also comply with TOMC Section 9-3.301, which requires a VTTM for subdivisions of five or more lots. As the Project would be consistent with the applicable, objective general plan standards of the Project site, as described above, pursuant to the HAA, the Project would not conflict with the TOMC zoning designation of the Project site.

In addition to demonstrating that the Project would not conflict the City land use or zoning designation of the Project site, the CEQA analysis must also demonstrate that the Project would not conflict with an applicable land use plan or other plan adopted for the purpose of avoiding or mitigating environmental effects. As shown throughout Chapter 4.0, Initial Study/Mitigated Negative Declaration, of this document, the Project would comply with all applicable federal, State, and local regulations, as well as implement necessary mitigation measures, such that the Project would not result in significant and unavoidable impacts. Therefore, the Project would result in a less than significant impacts related to conflicts with an applicable land use plan or other plan adopted for the purpose of avoiding or mitigating environmental effects.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of future 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?	☐	☐	☐	☒

Impact Analysis

a-b. A significant impact may occur if a project site is located in an area used or available for extraction of a regionally important mineral resource, or if a project would convert an existing or future regionally important mineral extraction use to another use or would affect access to a site used or available for regionally important mineral resource extraction.

No Impact. The Project site is designated Neighborhood Low 2 (> 4.5 to 6 du/acre) and is zoned R-E by the City. According to the Department of Conservation California Geological Survey,[50] the Project site is located within a Mineral Resource Zone (MRZ)-1. The Project site is not designated as a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan. No mineral resources are known to exist within the Project site, the Project site is not currently used for mineral extraction, and the Project would not result in the loss of availability of known mineral resources or locally important mineral resource recovery site. As such, the Project would result in no impact associated with the loss of availability of a known mineral resource or a locally important mineral resource recovery site.

Mitigation Measures

No mitigation measures are required.

[50] Department of Conservation, California Geological Survey, Mineral Land Classification Map, Special Report 145, Plate 1.17, 1981.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. NOISE. 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?	☐	☐	☐	☒

The following analysis is based on the Noise and Vibration Technical Study (Noise Study), provided in **Appendix J**, prepared by Envicom Corporation in April 2024.[51,52]

Noise Fundamentals

Noise is defined as any unwanted or undesirable sound that disrupts or interferes with the normal auditory environment. It is often characterized by its loudness, pitch, frequency, and duration. Noise can be subjective, as what one person considers noise may not be perceived the same way by another. In various contexts, noise can refer to any sound that is considered disturbing, irritating, or harmful to human health and well-being. Noise pollution, for example, is the presence of excessive or intrusive noise in the environment that can have negative effects on individuals, communities, and ecosystems.

Sound perceived by humans is a vibration that propagates longitudinally through an elastic medium such as air, which is also known as an acoustic wave or pressure wave. This longitudinal wave is comprised of an amplitude, frequency, and wavelength. The amplitude of a sound wave can be defined as the loudness or the amount of maximum displacement of vibrating particles of the medium from their mean position when the sound is produced. Sound pressure level is the most common descriptor used to describe the perceived "loudness" of an ambient sound level. The standard measurement unit of sound pressure is called a decibel (dB). The frequency of sound is the number of oscillations per second and is measured in hertz (Hz). Frequency and pitch are often used synonymously – the higher the frequency, the higher the pitch. Lastly, the wavelength is simply the size of a wave measured from one peak to the next. The wavelength

[51] Envicom Corporation, Noise and Vibration Technical Study, February 2024.

[52] The February 2024 Noise and Vibration Technical Study is based on the prior version of the Project site plan, which included one lot dedicated to a community pool area. The July 2024 site plan omits the community pool area and includes one lot dedicated to a bio-retention basin. In addition, the July 2024 site plans increase the residential building area by approximately 3,810 square feet. However, as the Project's construction and operations distances to the closest sensitive receptor did not change, the construction timeline and construction equipment list/type/duration of use did not change, and the nature of the Project land use did not change, the 2024 site plan revisions do not result in an increase in the previously identified noise and vibration impacts.

of a sound is inversely proportional to its frequency, and therefore, the higher the frequency, the shorter the wavelength.

A healthy and typical audible range for adult humans is between 20 Hz and 20,000 Hz. However, the human response to frequencies within the audible range are not all the same and tends to drop below 20,000 Hz with aging. To address this, the A- weighted scale is applied (dBA). The scale assigns a weight to the decibel value of sound based on the sensitivity of the ear at a particular frequency. Generally, the human ear naturally deemphasizes frequencies below 1,000 Hz and emphasizes frequencies between 1,000 Hz and 5,000 Hz. The human ear therefore has a natural "pick-up" in the frequencies that make consonant sounds in human speech.

Because the decibel is based on a logarithmic scale, a doubling of a sound source is perceived as a 3 dBA increase which is often referred to as the just noticeable difference threshold in an outdoor or uncontrolled environment. A change in 1 to 3 dBA is detectable under quiet, controlled, laboratory conditions. A change of 5 dBA is readily perceptible to most people and a change in 10 dBA is perceived as a doubling (or halving) of the sound. Another example is to consider that a 10 dBA increase is 10 times more intense than 1 dBA, a 20 dBA increase is 100 times more intense, a 30 dBA increase is 1,000 times more intense, and so on.

Variations in noise exposure over time are expressed in terms of a steady-state energy level equivalent to the energy content of the time period, called L_{eq}. Because human receptors are more sensitive to unwanted noise intrusion during the evening and at night hours, additional dB increments are added to noise levels in a 24-hour noise descriptor: either the Day-Night Average Level (L_{dn}) or the Community Noise Equivalent Level (CNEL). The L_{dn} metric adds a penalty of 10 dB for the nighttime hours of 10:00 p.m. to 7:00 a.m., while CNEL adds both the 10 dB nighttime penalty and a penalty of 5 dB for the evening hours of 7:00 p.m. to 10:00 p.m. The Governor's Office of Planning and Research (OPR) provides guidelines for noise and land use compatibility. These guidelines provide a range of acceptable noise levels for specific land use categories measured in CNEL or L_{dn}. The guidelines categorize noise exposures as "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable." The City has established its own criteria for land use and noise compatibility, which are detailed below in **Table 12, Land Use Compatibility Guidelines with Urban Noise Environments**.

Table 12
Land Use Compatibility Guidelines with Urban Noise Environments

Land Use Category	Community Noise Equivalent Level (CNEL), dB				
	Clearly Acceptable	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low density, single-family, duplex, mobile homes	< 55	55-60	60-65	65-75	< 75
Residential – Multifamily (including residential components of mixed-use developments)	< 55	55-60	60-65	65-75	< 75
Commercial – Motels, Hotels, Transient Lodging	< 60	60-65	65-70	70-80	< 80
Schools, libraries, churches, hospitals, nursing homes	-	<60	60-70	70-80	< 80
Amphitheaters, concert halls, auditoriums, meeting halls	-	-	< 65	65-70	< 70

Land Use Category	Community Noise Equivalent Level (CNEL), dB				
	Clearly Acceptable	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Sports arenas, outdoor spectator sports	-	-	< 70	70-75	> 75
Playgrounds, neighborhood parks	< 55	55-67	67-75	-	> 75
Golf courses, riding stables, water recreation, cemeteries	< 55	55-75	75-80	-	> 80
Office buildings, business, commercial and professional	< 60	60-65	65-75	< 75	-
Industrial, manufacturing, utilities, agriculture	< 65	65-70	70-80	< 80	-

Notes:
Clearly Acceptable = The noise environment is suitable for this use.
Normally Acceptable = Noise may be considered a problem by some people, but normal building construction will usually provide adequate protection of interior spaces.
Conditionally Acceptable = New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply or air conditioning, will normally suffice.
Normally Unacceptable = New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.
Clearly Unacceptable = New construction or development should generally not be undertaken.

The Thousand Oaks General Plan Noise Element identifies and appraises noise concerns in the City's jurisdiction. The noise elements must recognize guidelines established by the State Office of Noise Control. The City establishes their own thresholds of significance, which are provided in **Table 13, Thresholds of Significance for Long-term Noise Increases** and **Table 14, Construction Noise Thresholds of Significance**. The General Plan Noise element also establishes noise-related objectives and policies to which the Project would be subject.

Table 13
Thresholds of Significance for Long-term Noise Increases

If the CNEL for existing + proposed project + cumulative conditions at a noise-sensitive land use is projected to be:	A project or cumulative noise impact would be significant if the CNEL would increase by the following amounts at a noise-sensitive land use:	The project alone would make a substantial contribution to a significant cumulative impact if the CNEL would increase by the following amounts at a noise-sensitive land use:
Less than 55 dBA	Not significant for any change in noise level	Not significant for any change in noise level
55-60 dBA	Equal to or greater than 3.0 dBA	Equal to or greater than 1.0 dBA
60-70 dBA	Equal to or greater than 1.5 dBA	Equal to or greater than 0.5 dBA

Source: City of Thousand Oaks, General Plan 2045, Table 11.3 Threshold of Significance for Long-Term Noise Increases, November 2023.

Notes:
A noise-sensitive use is a use for which the upper limit for the "normally acceptable" noise level range shown in City of Thousand Oaks General Plan Table 11.2 is 65 CNEL or lower.

Table 14
Construction Noise Thresholds of Significance

Land Use Type	$L_{eq(8hr)}$		CNEL
	Day	Night	
Residential	80 dBA	70 dBA	75
Commercial	85 dBA	85 dBA	80
Industrial	90 dBA	90 dBA	85

Source: City of Thousand Oaks, General Plan 2045, Table 11.4, Construction Noise Thresholds of Significance, November 2023.

Notes: A noise-sensitive use is a use for which the upper limit for the "normally acceptable" noise level range shown in Table 11.2 is 65 CNEL or lower.

The City regulates excessive community noise through TOMC under Title 5, Chapter 21, Noise. The TOMC regulates powered equipment in Section 5-21.02: "Powered equipment in residential areas," which states the following:

> "Between the hours of 9:00 p.m. and 7:00 a.m. of the following day, no person shall operate any lawn mower, backpack blower, lawn edger, riding tractor, or any other machinery, equipment, or other mechanical or electrical device, or any hand tool which creates a loud, raucous or impulsive sound, within any residential zone or within any commercial zone which can be heard from any inhabited real property in a residential zone."

As stated in the Noise Element of the General Plan, the City limits the impact of construction noise by regulating the hours of construction activity. TOMC Section 8-11.01, "Construction activities restricted to certain hours," states the following:

> "It shall be unlawful for any person to engage in or conduct any activity in the construction of any building or structure, the moving of earth, or the laying of any pavement, including, but not limited to, the making of any excavation, clearing or grading of surface land, and loading or unloading material, equipment, or supplies, except between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday, unless a permit for each work at different hours or days has first been issued by the Public Works Director."

In addition, TOMC Section 4-3.804(a) requires vehicles propelled by an internal combustion engine on private property to have state-approved spark arrestors or a noise-muffling device approved by the State.

The Project site is bound by Lynn Road to the south and residential uses to the north, east, and west. The primary noise source in the Project vicinity is traffic along Lynn Road. To establish existing conditions, the analysis references existing traffic noise contours from the General Plan 2045 Draft EIR, which were derived from average daily traffic data provided by Iteris in 2023. **Table 15, Existing Traffic Noise Contours**, presents the modeled CNEL noise level at 50 feet and the distances to the 60, 65, and 70 CNEL noise contours. According to these contours, part of the project site falls within the 65 and 60 CNEL noise contours, while the northern section of the site lies outside the 60 CNEL contour.

Table 15
Existing Traffic Noise Contours

SR-101	ADT Volumes	dBA CNEL at 50 Feet	Distance in Feet to CNEL Contours		
			70 dBA	65 dBA	60 dBA
Lynn Road between Ventu Park Road and Wendy Drive	17,693	71.1	59	172	273
Ventu Park Road - SR-101 and Lynn Road	5,480	62.9	17	36	78
Source: City of Thousand Oaks, 2045 General Plan Update Draft EIR, November 2023.					

The nearest sensitive receptors within 500 feet of the Project site boundary are comprised of single-family homes to the north, east, and west, along with additional homes to the southeast across Lynn Road. Furthermore, a religious institution is situated on a lot adjacent to the western boundary. It is important to note that in the impact analysis, the measured distances to noise sources may differ based on their exact locations within the Project site. The potential for noise impacts is directly related to the distance between a noise source, such as HVAC units or construction equipment, and a sensitive receptor. Beyond the mentioned receptors, no other sensitive establishments such as hospitals or schools are located within 500 feet of the Project site.

Vibration Fundamentals

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. Because the motion is oscillatory, there is no net movement of the vibration element and the average of any of the motion metrics is zero. Displacement is the most intuitive metric. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed. Although displacement is easier to understand than velocity or acceleration, it is rarely used for describing ground-borne vibration. Most transducers used for measuring ground-borne vibration use either velocity or acceleration. Furthermore, the response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration.

The typical frequency range of most ground-borne vibrations that can be felt by humans is less than 1 Hz to a high of 200 Hz. Common vibration metrics used to assess vibration are the root mean square (rms vibration decibel in VdB) and peak particle velocity (PPV). PPV is often used in monitoring of construction vibration (such as blasting) and to assess potential architectural damage since it is related to the stresses that are experienced by buildings. The units for PPV in the United States are normally inches per second (in/sec). VdB is commonly used when assessing the human response (also referred to human annoyance) to vibration as it uses the arithmetic average of the squared amplitude of the signal. Like noise, groundborne vibration attenuates with distance. Vibration attenuation varies depending on the soil type, compaction, and vibration frequency.

Traffic, including heavy trucks traveling on a highway, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. However, there have been cases in which heavy trucks traveling over potholes or other discontinuities in the pavement have caused vibration high enough to result in complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface. In describing vibration in the ground and in structures, the motion of a particle (i.e., a point in or on the ground or structure) is used.

a. A project may result in a significant noise impact by generating a substantial temporary or permanent increase in ambient noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance.

Less than Significant Impact.

Construction

Project-related construction noise is generated from on-site noise sources (construction equipment) and off-site mobile sources (transportation of workers and materials). Construction activities for the Project are anticipated to occur between 7:00 a.m. and 7:00 p.m., Monday through Friday, within the allowable daytime hours specified in Chapter 11, Section 8-11.01 of the TOMC. A significant construction noise impact would occur if Project construction activities would exceed the daytime construction noise limit of 80 dBA L_{eq} and a CNEL of 75 dBA at the nearest residential receptors, as reflected in the Noise Element's Table 11.4. Construction is prohibited on Sundays.

Construction Vehicles

The transport of workers and materials to and from the construction site would incrementally increase noise levels along access roadways in the Project vicinity. Individual construction vehicle pass-bys and haul trucks may create momentary noise levels of up to 85 dBA (L_{max}) at 50 feet. According to the Project plans, the grading activities for cut and fill are designed to balance soil quantities. Nonetheless, there might be a need to remove approximately 70 truckloads of unsuitable rock material. Beyond the haul truck movements, the Project will temporarily increase the number of trips made by construction workers and vendors. It is estimated, using the defaults from the CalEEMod, that there will be up to 20 additional trips per day during the paving phase.

To evaluate the temporary rise in traffic noise on the main access roads, Lynn Road and Ventu Park Road, the daily construction-related trips have been logarithmically compared to the existing ADT. Table 15 shows the current ADT on Lynn Road and Ventu Park Road to be 17,693 and 5,480, respectively. The addition of either 20 daily trips from workers and vendors or 70 haul truck trips is anticipated to cause a minimal traffic noise increase of less than 0.1 dBA CNEL. Noise increases of less than 3 dB are indiscernible to the human ear in outdoor settings. Moreover, these construction-related trips will end once construction of the Project is completed. Therefore, noise from temporary construction trips would be less than significant.

Construction Equipment

Construction occurs in discrete activity phases, and construction noise generated from Project activities varies based on the type of equipment used, the location of the equipment relative to sensitive receptors, and acoustical usage factor.[53] Each construction activity (e.g., demolition, grading, building construction) can involve the use of different construction equipment (equipment mix), and therefore each activity can emit distinct noise characteristics. Construction noise is often dominated by the loudest piece of construction equipment, and the dominant noise source for non-impact equipment is typically the engine. Impact noise sources such as hammering work-piece noise can also be noticeable.

The CalEEMod default construction equipment mix provided (see Table 2 in Section 3.0, Project Description) was used to model construction noise by activity phase. The equipment mix was modeled using the Roadway Construction Noise Model. Average construction noise levels for each activity phase were modeled using the top three loudest pieces of equipment. To calculate average (L_{eq}) noise level at

[53] Usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.

sensitive receptors, the distance from to the nearest receptors were measured from the Project site's acoustical center. **Table 16, L_{eq} Construction Equipment Noise Level at Adjacent Receptors**, shows the construction noise levels per construction phase at a distance of 50 feet and at the nearest sensitive receptors. Modeling details and spreadsheets are provided in Appendix J.

Table 16
L_{eq} Construction Equipment Noise Level at Adjacent Receptors

Modeled Equipment per Construction Activity	Construction Noise Levels in dBA L_{eq}[1]			
	RCNM reference Noise Levels[1]	Receptor to North	Receptor to East	Receptor to West
Distance	***50 feet***	***200 feet***	***275 feet***	***260 feet***
Demolition	85	73	70	70
Grading	85	73	70	70
Site Preparation	82	70	67	68
Building Construction	83	71	68	68
Architectural Coating	74	62	59	59
Paving	83	70	68	68
Maximum Noise Level at Receptors		**73**	**70**	**70**
Exceeds Residential Construction Daytime Noise Threshold of 80 dBA L_{eq}?		**No**	**No**	**No**

Source: RCNM and CalEEMod construction defaults.

Notes: See Appendix A for distances and calculations.
[1] dBA L_{eq} is rounded to the nearest whole number.

The General Plan states that construction noise should not exceed 75 dBA CNEL at residential receptors. As shown in Table 16, the Project site and surrounding receptors are within 60 and 65 dBA CNEL noise contour. To calculate the CNEL attributable to daytime construction noise, the loudest phase in Table 18 was assumed to occur between the allowable construction hours of 7:00 a.m. to 7:00 p.m. **Table 17, CNEL Construction Noise Levels at Adjacent Receptors**, shows the CNEL due to construction during the loudest phase at each adjacent residential home. As shown in Table 17, Project-related construction would not exceed 75 dBA CNEL threshold.

Table 17
CNEL Construction Noise Level at Adjacent Receptors

Noise Source	dBA		
	Receptor to North	Receptor to East	Receptor to West
Existing CNEL	60	65	65
Demolition/Grading L_{eq}	73	70	70
Cumulative CNEL	71	73	73
Exceeds Residential Construction Daytime Noise Threshold of 75 dBA CNEL?	**No**	**No**	**No**

Notes:
See Appendix A for distances and calculations.
CNEL = Community noise equivalent level.

As such, construction noise levels at the nearest sensitive receptors would not exceed the 80 dBA Leq threshold or the 24-hour limit of 75 dBA CNEL. Therefore, construction noise impacts would be less than significant.

Operations

The Project would generate on-site and off-site operational noise. Off-site operational noise would arise from Project trip generation, contributing to incremental increases in traffic noise along Lynn Road. On-site operational noise sources encompass noise generated by HVAC equipment.

Operational Traffic

Access to the Project site is primarily through Lynn Road and Ventu Park Road. The daily trips generated by the Project were estimated using the trip generation rate of 9.43 from the ITE Land Use Code 210 for Single-Family Detached Housing, resulting in an average of 170 daily trips.

To assess traffic noise increases due to the Project, the "existing plus project" traffic volumes were logarithmically compared to the "existing no project" traffic volumes. This same methodology was used in determining the Project's contribution to the cumulative increase ("cumulative plus project" traffic volumes compared to "cumulative no project"). Traffic noise volumes for existing conditions are shown above in Table 15 and traffic noise increases are detailed in **Table 18, Existing and Future Traffic ADT Volumes** and **Table 19, Traffic Noise Increases.**

Table 18
Existing and Future Traffic ADT Volumes

Roadway Segment	ADT			
	Existing No Project	Existing Plus Project	Cumulative	Cumulative Plus Project
Lynn Road - Ventu Park Road and South Wendy Drive	17,693	17,863	19,300	19,470
Ventu Park Road - SR-101 and Lynn Road	5,480	5,650	7,100	7,270
Source: Institute of Transportation Engineers Trip Generation 11th Edition; City of Thousand Oaks, 2045 General Plan Update Draft EIR, November 2023.				

Table 19
Traffic Noise Increases

Roadway Segment	dBA CNEL				Exceeds Significant Threshold?
	Existing Ambient at 50 feet	Project Noise Increase	Cumulative Noise Increase	Applicable Threshold	
Lynn Road - Ventu Park Road and South Wendy Drive	71.1	0.04	0.4	1.5	No
Ventu Park Road - SR-101 and Lynn Road	62.9	0.12	1.2	1.5	No

As shown in Table 19, the Project would result in a traffic noise increase of up to 0.12 dBA CNEL on roadways in the Project vicinity and the cumulative traffic noise increase would be up to 1.2 dBA CNEL. Therefore, Project-related and cumulative traffic noise impacts would not exceed the applicable threshold of 1.5 dBA CNEL for existing environments between 60 to 70 dBA CNEL or greater. Therefore, traffic noise impacts would be less than significant.

Operational Equipment

The Project is anticipated to have HVAC equipment on the ground next to each home. For a conservative analysis, it is assumed that HVAC equipment would be installed in the rear of each single-family home, closest to the nearest adjacent residential property lines. Though specific HVAC equipment models and sound specifications are not available, based on similar residential projects, this analysis references Carrier's

GH5S size 36 and size 42 models. These units generate noise levels between 66 and 61 dBA at a distance of five feet.

The nearest residential receptor property line to the proposed single-family homes is approximately 25 feet to the west. Point noise sources such as stationary equipment attenuate at minimum rate of 6 dB per doubling of distance. Therefore, HVAC noise levels would be reduced to 52 dBA or less at 25 feet. The Project site is situated partially within the 65 and 60 dBA CNEL noise contour and the remaining northern portion of the Project site is outside the 60 dBA CNEL noise contour. Assuming continuous operation of the HVAC units (24 hours), the CNEL associated with HVAC at the nearest residential receptor would be 59 dBA or less. The CNEL would not exceed the existing ambient noise levels of 60 to 65 dBA CNEL. Therefore, impacts would be less than significant.

Cumulative Noise Impacts

Construction

Construction vibration damage could lead to a cumulative impact if equipment from the nearby approved project at 1617 Susan Drive and the proposed Project were to operate within 25 feet of each other and an off-site structure—potentially exceeding the Federal Transit Administration's (FTA's) vibration impact threshold of 0.2 in/sec PPV. The two nearest structures to the Project site and planned and approved project are approximately 15 to 20 feet to the west. As previously discussed, no vibratory rollers are proposed to operate within 25 feet, and all other equipment would not exceed the 0.2 in/sec PPV at 15 to 20 feet. Therefore, cumulative vibration impacts would be less than significant.

Given that the Project's VdB levels are well below the FTA criterion of 80 VdB, it is presumed that the adjacent planned and approved residential project at 1617 Susan Drive, which is similar in scale, would produce comparable vibration levels during construction. Considering the smaller scale of both projects and the distance to the nearest residential receptors, cumulative vibration annoyance impacts are expected to be less than significant.

Operations

As shown in the preceding analysis, the Project would result in a traffic noise increase or 0.4 dBA CNEL along Lynn Road from Ventu Park Road to Wendy Drive and 1.2 dBA CNEL along Ventu Park Road from SR-101 to Lynn Road. Additionally, the Project's contribution to the cumulative traffic noise increase would be 0.04 dBA CNEL along Lynn Road between Ventu Park Road and Wendy Drive, and 0.1 dBA CNEL along Ventu Park Road between SR-101 and Lynn Road. These incremental increases fall below the established significance thresholds of 1.5 dBA CNEL and 0.5 dBA CNEL, respectively. As discussed, stationary noise such as HVAC noise would be below existing noise conditions and thus would not significantly contribute to the cumulative noise. Therefore, cumulative operational noise impacts of the Project would be less than significant.

Mitigation Measures

No mitigation measures are required.

b. A significant noise impact may occur if a project would expose people to or generate excessive ground-borne vibration or ground-borne noise levels.

Less than Significant Impact. Groundborne vibration generated by construction activities can exhibit varying intensities depending on the type of equipment being used. These vibrations emanate from the operation of construction machinery and travel through the ground, resulting in a spectrum of effects that range from imperceptible to humans to potentially causing physical impacts on nearby structures. The

attenuation of groundborne vibration is influenced by several factors, including the distance from the vibration source, soil properties, the frequencies of the vibrations, the structural characteristics of buildings, and the depth of the vibration sources.

The City has not adopted a quantitative significance threshold for vibration impacts. To assess potential vibration impacts, the FTA criterion of 0.2 in/sec peak particle velocity (PPV) is applied, specifically for non-engineered timber and masonry buildings, which is relevant to the surrounding residential structures. This criterion is used to evaluate the potential vibration-related impacts resulting from construction activities on nearby residential structures. To estimate the vibration levels experienced by the nearest residential structures, reference vibration levels provided by the FTA for various construction equipment are used.

Construction Vibration

Due to the proximity of construction equipment operations, such as grading, to the Project site's perimeter, vibration levels at nearby buildings are estimated by measuring from the site's edge to these structures. For vibratory rollers, however, the relevant distance is from the proposed private road to the residential buildings. **Table 20, Vibration Damage Levels at Nearby Residential Structures**, shows vibration levels in PPV at nearby residential structures to indicate if there is a significant impact as a result of the Project.

Table 20
Vibration Damage Levels at Nearby Residential Structures

Vibratory Construction Equipment	Vibration Levels, PPV (in/sec)				
	FTA Reference Level	Residential Buildings			
		North	East	South	West
Distance in feet	*25 feet*	*300 feet*	*100 feet*	*NA*	*125 feet*
Vibratory Roller	0.210	0.005	0.026	NA	0.019
Distance in feet	*25 feet*	*165 feet*	*65 feet*	*NA*	*15 feet*
Large Bulldozer	0.089	0.005	0.021	NA	0.191
Loaded Trucks	0.079	0.004	0.018	NA	0.164
Jackhammer	0.035	0.002	0.008	NA	0.075
Small Bulldozer	0.003	0.000	0.001	NA	0.006

Source: FTA 2018.

Notes: in/sec = inches per second; PPV = peak particle velocity

As shown in Table 20, vibration levels would not exceed the 0.2 in/sec PPV threshold at the nearest residential structures. Therefore, construction period vibration impacts would be less than significant.

The City does not have a quantifiable vibration annoyance threshold; therefore, the FTA vibration annoyance criterion of 80 VdB for infrequent events is used in this analysis. When measuring VdBs for assessing annoyance from construction activities, it's appropriate to take measurements from the center of the construction site rather than the edge, as is typically done for PPV. Unlike PPV, which focuses on instant damage potential, VdB is more concerned with long-term annoyance and discomfort experienced by nearby residents. Measuring from the center accounts for the movement of construction equipment and activities, providing a more accurate representation of the overall vibration levels experienced in the surrounding area over time.

The nearest residential receptors from the center of the site include the adjacent single-family home to the north (scheduled for redevelopment into new residential units) and the single-family homes to the west. The distance from the center of the site to these receptors is approximately 200 feet. As shown in **Table 21, Vibration Annoyance Levels at Nearby Residential Receptors**, VdB levels at this distance would be

reduced to 67 VdB or less. Therefore, vibration annoyance impacts during construction would also be less than significant.

Table 21
Vibration Annoyance Levels at Nearby Residential Receptors

Vibratory Construction Equipment	VdB Levels		
	FTA Reference Level	Residential Buildings	
		North	West
Distance in feet	*25 feet*	*200 feet*	*200 feet*
Vibratory Roller	94	67	67
Large Bulldozer	87	60	60
Loaded Trucks	86	59	59
Jackhammer	79	52	52
Small Bulldozer	58	31	31

Source: FTA 2018.

Notes: VdB = Vibration Decibel

Operational Vibration

The Project would not have significant sources of operational vibration, such as rail systems or railroad tracks. Therefore, vibration impacts would be less than significant.

Cumulative Vibration Impacts

Construction

Construction vibration damage could lead to a cumulative impact if equipment from the nearby approved project at 1617 Susan Drive and the proposed Project were to operate within 25 feet of each other and an off-site structure, potentially exceeding the FTA's vibration impact threshold of 0.2 in/sec PPV. The two nearest structures to the Project site and planned and approved project are approximately 15 to 20 feet to the west. As previously discussed, no vibratory rollers are proposed to operate within 25 feet, and all other equipment would not exceed the 0.2 in/sec PPV at 15 to 20 feet. Therefore, cumulative vibration impacts would be less than significant.

Given that the Project's VdB levels are well below the FTA criterion of 80 VdB, it is presumed that the adjacent planned and approved residential project at 1617 Susan Drive, which is similar in scale, would produce comparable vibration levels during construction. Considering the smaller scale of both projects and the distance to the nearest residential receptors, cumulative vibration annoyance impacts are expected to be less than significant.

Operations

The Project would not have significant sources of operational vibration, such as rail systems or railroad tracks. Therefore, the Project's cumulative vibration impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

c. A project located within two miles of a public airport or public use airport may result in a significant impact if it would expose people residing or working in the project area to excessive noise levels.

No Impact. The Project site is located approximately nine miles east of the Camarillo Airport. The Project would result in no impacts related to excessive noise from a public airport or public use airport.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. Would the project:				
a. 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)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

Impact Analysis

a. A significant impact may occur if a project would induce substantial unplanned population growth in an area, either directly or indirectly.

Less than Significant Impact. The Project would subdivide the existing parcel and develop 18 single-family residences on the Project site. The SCAG 2020-2045 RTP/SCS forecasts for population and employment growth in the City are shown in **Table 22, Population and Employment Growth Forecast**.

Table 22
Population and Employment Growth Forecast

Year	City Population	City Employment
2016	129,500	70,100
2045	144,700	80,000
Net Growth	15,200	9,900
Source: SCAG 2020-2045, Demographics and Growth Forecast, Table 14: Jurisdiction-Level Growth Forecast, Adopted September 3, 2020.		

As shown in Table 22, SCAG forecasts the City population and employment to increase from 2016 to 2045 by 15,200 people and 9,900 jobs. Since the Project would provide housing in the City, it would increase the City population, conservatively assuming that these individuals do not already reside elsewhere within the City. Within the City, the average household size is 2.75 persons per household.[54] **Table 23, Proposed Housing and Estimated Population**, shows population growth from the Project using the City's average household size from the Housing Element.

Table 23
Proposed Housing and Estimated Population

Housing	Number of Houses	Average Household Size [a]	Estimated Population
Single-family Residences	18	2.75	50
[a] Household size is from the City of Thousand Oaks 2021-2029 Housing Element, sourced from U.S. Census, 2010, (Table DP-1); and American Community Survey, 2015-2019 (Table b11001, B11003).			

[54] City of Thousand Oaks, 2021-2029 Housing Element, Adopted January 2022 and Revised September 2023.

As shown in Table 23, the proposed 18 single-family residences would generate approximately 50 additional residents within the City. This increase in residents does not include the existing residents on the Project site, as these residents are assumed to remain within the City. The population growth projected from the Project would represent 0.3 percent of SCAG's forecasted growth, so it would not exceed SCAG's growth forecast.

The Thousand Oaks 2021-2029 Housing Element, as part of the City's General Plan, includes Regional Housing Needs Allocation (RHNA) goals to plan future growth. The current RHNA was adopted by SCAG and allocates 2,621 housing units as the regional housing need for the City. The Project would provide 18 single-family houses but remove an existing single-family house. Therefore, the Project would add a net of 17 housing units to help the City meet the RHNA goal.

The Project would provide housing to help the City achieve RHNA housing goals and would not exceed expected growth of the City. As such, the Project would not introduce unplanned population growth in the area, and the Project would result in a less than significant impact.

Mitigation Measures

No mitigation measures are required.

b. A significant impact may occur if a project would result in the displacement of existing housing units or people, necessitating the construction of replacement housing elsewhere.

Less than Significant Impact. The Project site currently includes one single-family residence. The Project proposes to demolish this residence and subdivide the lot in order to develop 18 single-family residences. While the Project would remove one housing unit, it would develop 18 single-family residences. The Project does not represent a substantial loss in housing necessitating the construction of replacement housing elsewhere, as it would provide a net increase of 17 housing units in the City. The Project would have a less than significant impact regarding the displacement of existing housing units or people necessitating the construction of replacement housing elsewhere.

Mitigation Measures

No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. PUBLIC SERVICES.				
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☒	☐
d. Parks?	☐	☐	☒	☐
e. Other public facilities?	☐	☐	☒	☐

Impact Analysis

a. A project may have a significant impact on fire protection if it requires the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service, the construction of which could cause significant environmental impacts.

Less than Significant Impact. The Project site is located within the City and is served by the VCFD, which consists of approximately 600 employees and 33 fire stations throughout the County and serves approximately 850,000 people.[55] The VCFD provides fire protection, medical aid, rescue, and other services to the County as well.

The VCFD has a goal of a first unit on scene within 8 minutes and 30 seconds for suburban areas 90 percent of the time and first unit on scene in 12 minutes for rural areas 90 percent of the time.[56] The strategy of crew deployment is to spread crews across a community for quick response to keep emergencies small and with positive outcomes, without spreading the crews so far apart that they cannot amass together quickly during a major emergency. Actual VCFD response levels are dependent on type of incident location, weather conditions, existing or potential emergencies, resources available and information provided.

The Project proposes to subdivide an existing lot and build 18 single-family residences that is accessible from Blair Court and a new private road. Two VCFD stations are located within three driving miles of the Project site. Fire Station 35 is the nearest station, located approximately 2.2 driving miles from the Project site. The station is staffed with seven firefighters daily and houses a fire engine, ladder truck engine, a reserve engine (which is an Office of Emergency Services Engine), and a command truck.[57] The second closest station to the Project site is Fire Station 30, located at 325 West Hillcrest Drive, approximately 2.4 driving

[55] Ventura County Fire Department, About the VCFD, Accessed on November 28, 2023 at: https://vcfd.org/about-vcfd/#:~:text=Who%20We%20Are,Protection%20District%20Law%20of%201987.
[56] City of Thousand Oaks, Latigo Hillcrest Project Environmental Report, July 2023.
[57] Ventura County Fire Department, Station 35, Accessed on November 28, 2023 at: https://vcfd.org/station-35/.

miles from the Project site. Station 30 is also the headquarters for Division 3 and Battalion 3. Station 30 is staffed daily by three firefighters and the chief officers, and it is equipped with a fire engine, battalion vehicle, paramedic squad vehicle, and brush engine.[58]

The Project site is surrounded by existing residential neighborhoods, which are already served by the VCFD. The Project would expand the neighborhood by a net of 17 single-family residences. Therefore, the proposed development would not result in a substantial increased demand for VCFD services. Based on the Project's close proximity to existing VCFD fire stations, which assure short response times, the adequacy of VCFD emergency personnel and facilities at this and other stations in the vicinity, as well as the regulatory review process, which would assure final development plans meet fire safety codes and that the required facility fees are paid, the Project's potential fire protection service impacts would result in a less than significant impact related to the need for additional or altered facilities that may cause physical changes to the environment.

Mitigation Measures

No mitigation measures are required.

b. A project may have a significant impact if it requires new or expanded police station facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times or other performance objectives for police protection.

Less than Significant Impact. The Project site is served by the Ventura County Sheriff's Department (VCSD) for law enforcement and police service. The VCSD East County Police Services and Thousand Oaks Police Department share a 58,000-square-foot facility located at 2101 East Olsen Road, which is located approximately 10.2 miles from the Project site. The station is staffed with six full-time patrol cars and six 12-hour cars, which totals 12 cars staffed by 12 officers at heightened hours. The VCSD's average response time in the City is two to three minutes for "priority one," or emergency-related, calls.[59] The Project would increase the population by approximately 50 people, as shown in Table 23 in Section XIV, Population and Housing. The increase of 50 residents from the City population of 129,500 would be a .04 percent increase from the current population. This nominal increase in demand would not measurably increase response times nor warrant the construction of new police facilities to achieve increased response times. Therefore, the Project would not adversely affect VCSD response times or the cause the need for new police facilities to serve the Project site. As such, the Project would result in a less than significant impact.

Mitigation Measures

No mitigation measures are required.

c. A significant impact may occur if a project includes substantial employment or population growth, which could generate a demand for school facilities.

Less than Significant Impact. The Conejo Valley Unified School District (CVUSD) provides public education facilities within the City. The CVUSD maintains 17 elementary schools, one kindergarten through 8th grade school, four middle schools, three comprehensive high schools, one online-blended school (grades 8 through 12), and one continuation school. In addition, the CVUSD also offers preschool, early childcare, transitional kindergarten, magnet schools, a homeschool program, the Century Academy, and other academic alternatives, including adult education opportunities.[60] The Project would introduce housing,

[58] Ventura County Fire Department, Station 30, Accessed on November 28, 2023 at: https://vcfd.org/station-30/.
[59] City of Thousand Oaks, Latigo Hillcrest Project Environmental Impact Report, July 2023.
[60] Conejo Valley United School District, About Us, Accessed on June 9, 2023 at: https://www.conejousd.org/domain/45.

which would increase student enrollment in the CVUSD. The Project site is located within the school enrollment boundaries of Madrona Elementary School, Redwood or Sequoia Middle Schools (the Project site is located in School Option Area Number 1), and Newbury Park High School.[61] Based on student generation rates associated with single-family residences, **Table 24, Project Student Generation**, shows the estimated numbers of students that would potentially attend the CVUSD schools that serve the area.

Table 24
Project Student Generation

Grade Level	Residential Units	Student Generation Rates	Students Generated
Elementary (K-5)	18 single-family units	0.1549	3
Middle School (6-8)	18 single-family units	0.0976	2
High School (9-12)	18 single-family units	0.1511	3
		Total Students Generated	**8**
Student Generation Rates Source: Conejo Valley Unified School District, Conejo Valley Unified School District Measure 1, Facilities Master Plan 2017.			

As shown in Table 24, the Project would generate approximately three elementary and three high school students and two middle school students, for a total of eight students.

Additionally, to address the impact of students generated by new development on school facilities, development impact fees paid pursuant to SB 50 (Government Code Section 65995) are deemed full and complete mitigation for impacts to school facilities caused by new development. The amount of development impact fees is set forth in a school district's School Facilities Needs Analysis. The payment of the appropriate residential and commercial/industrial development impact fees in effect at the time of project approval will be a regulatory requirement for implementing projects pursuant to California Government Code. Revenues received from development impact fees would provide CVUSD funding for future school facility construction, operation, and maintenance to accommodate future enrollment. The environmental impacts associated with any such school expansions or new school developments would occur separately and are not the responsibility of the Project Applicant. As a result, the Project would result in a less than significant impact regarding school facilities.

Mitigation Measures

No mitigation measures are required.

d. A significant impact may occur if the recreation and park services available could not accommodate a project-related population increase and the proposed project resulted in the construction of new recreation and park facilities that create significant environmental impacts.

Less than Significant Impact. The Project site is located within an existing neighborhood accessible from Lynn Road and Blair Court. The Conejo Recreation and Park District (CRPD) provides the City of Thousand Oaks with parks and recreation services. Park facilities within vicinity of the Project site include Stagecoach Inn Park and Museum, Lynn Oaks Park, Newbury Gateway Park, Walnut Grove Equestrian Center, and Walnut Grove Park.[62]

[61] Conejo Valley Unified School District, My School Locator, Accessed on November 28, 2023 at: https://www.myschoollocation.com/conejovalleyusd/.

[62] Conejo Recreation and Park District, Parks, Accessed on November 29, 2023 at: https://www.crpd.org/parks-reservations/parks/.

Quimby Fees, also referred to as the Park Dedication Fee, require dedication of land, payment of fees, or both, for park and recreational purposes as a condition of a residential development permit.[63] In accordance with TOMC Section 9-1603, every subdivider who subdivides a parcel map shall dedicate a portion of such land or pay a fee for the purpose of providing park and recreational facilities. The parcel would be subdivided and develop 18 single-family residences, requiring approval of a VTTM and RPD. As such, conditions of approval will be applied to the Project, requiring the Applicant to pay the Park Dedication Fee, and Project impacts related to recreation and park facilities would be less than significant.

Mitigation Measures

No mitigation measures are required.

e. A significant impact may occur if a project would generate a volume of demand on existing library services or other public services that would necessitate the construction of new or physically expanded library facilities or other public facilities, such public roadways.

Less than Significant Impact. The City has a City-owned library system that is funded by an assessment of homeowners. The main library facility in the City is the Grant R. Brimhill Library, located at 1401 East Janss Road. The library system also includes the Newbury Park Branch Library, located at 2331 Borchard Road. The Newbury Park Branch Library is located closer to the Project site (located approximately 0.76 miles from the Project site) than the Grant R. Brimhill Library. The Project would subdivide an existing parcel and develop 18 single-family residences. The population of the City would increase by only 50 people with the Project. As such, the Project would result in a less than significant impact related to a substantial increase in demand for library services or the necessity of new library facilities.

Furthermore, the Project site is currently accessible from Lynn Road and Blair Court. The Project proposes no changes to public roads, but it would provide sidewalks along the Project site frontages abutting Lynn Road and Blair Court, and it would also construct a private road, terminating in a cul-de-sac, to access all of the proposed single-family homes. During construction, equipment and vehicle staging is anticipated to be accommodated primarily on-site. However, as described in Section XVII, Transportation, temporary, partial lane closures along Lynn Road and/or Blair Court may be required during construction of the sidewalk improvements, during trenching for utility service connections, and/or in the event that additional staging areas are necessary. With the exception of the proposed sidewalks, the Project would not necessitate the construction of new or physically expanded public facilities, including public roadways. Development of the sidewalks is considered throughout Chapter 4.0, Initial Study/Mitigated Negative Declaration, of this document, which concludes that the Project, including sidewalks, would not result in significant impacts following the implementation of the specified mitigation measures. The Project would result in a less than significant impact related to library services and other public facilities, including public roads.

Mitigation Measures

No mitigation measures are required.

[63] Conejo Recreation and Park District, Quimby Fees, Accessed on November 29, 2023 at: https://www.crpd.org/planning/quimby/.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. RECREATION.				
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?	☐	☐	☒	☐

Impact Analysis

a-b. A significant impact may occur if a project includes substantial employment or population growth, which would increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or require the construction or expansion of recreational facilities that may have an adverse physical effect on the environment.

Less than Significant Impact. In 1962, two years before the incorporation of the City, the CRPD was established as a special district to create local parks and recreation programs for the growing population of the Conejo Valley, including areas now incorporated into the City.[64] Today, the CRPD provides park and recreational services throughout a 65-square-mile service area that generally corresponds with the City's Planning Area (some residents in the Sphere of Influence area along Potrero Road are not served by the CRPD). The CRPD provides numerous recreational facilities within the area for a variety of active and passive recreation opportunities.[65]

The Project site is located within an existing neighborhood accessible from Lynn Road. Park facilities within vicinity of the Project site include Stagecoach Inn Park and Museum, Lynn Oaks Park, Newbury Gateway Park, Walnut Grove Equestrian Center, and Walnut Grove Park.[66]

Quimby Fees, also referred to as the Park Dedication Fee, require dedication of land, payment of fees, or both, for park and recreational purposes, as a condition of a residential development permit.[67] As described in response to Question XV(d), above, the Project Applicant would pay the required Park Dedication Fee; therefore, Project impacts related to the expansion or construction of recreation and park facilities would be less than significant.

Mitigation Measures

No mitigation measures are required.

[64] CRPD, Administration, Accessed on November 29, 2023 at: https://www.crpd.org/about-us/administration/.
[65] City of Thousand Oaks, General Plan 2045, November 2023.
[66] Conejo Recreation and Park District, Parks, Accessed on November 29, 2023 at: https://www.crpd.org/parks-reservations/parks/.
[67] Conejo Recreation and Park District, Quimby Fees, Accessed on November 29, 2023 at: https://www.crpd.org/planning/quimby/.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. TRANSPORTATION. 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 uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

Impact Analysis

a. A significant impact may occur if a project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Less than Significant Impact. The Project site is located at 1651 Lynn Road, at the northwest corner of the intersection of Lynn Road and Blair Court. The Project site is comprised of a single-family residence with associated hardscape and landscaping. The General Plan land use designation for the Project site is Neighborhood Low 2, and the City zoning for the Project site is R-E. As previously described, the Project site is accessed from Lynn Road and Blair Court. There is no sidewalk along the Project site frontages (northern side of Lynn Road and western side of Blair Court), but a sidewalk exists on the southern portion of Lynn Road (eastbound). Lynn Road contains bicycle lanes (Class II)[68] on both the eastbound and westbound sides of the road. The Thousand Oaks Active Transportation Plan proposes bikeway improvements along sections of Lynn Road to upgrade the bicycle lane to Class IV.[69] There are no bus stops or other public transit facilities along the portion of Lynn Road in which the Project site is located.

Construction of the Project would generate traffic from equipment and materials delivered to the Project site, in addition to generating construction worker trips. Construction-related vehicles would access the Project site via Lynn Road and Blair Court. Equipment staging and worker parking would primarily occur on the Project site. The Project would generate a maximum of 20 construction worker trips per day, based on default values provided by CalEEMod (Appendix A). Based on the existing condition, the Project assumes 70 total hauling trips for approximately 1,000 cubic yards of export over the five-day site preparation period. Temporary, partial lane closures along Lynn Road and/or Blair Court may be required during construction of the sidewalk improvements, during trenching for utility service connections, and/or in the event that additional staging areas are necessary. If deemed necessary by the City, the Applicant will implement Project

[68] Class II: Bicycle Lanes - One-way, dedicated right-of-way bicycle facilities that follow the same direction of traffic as adjacent motor vehicles.
Class IV: Separated Bikeways (Cycle Tracks) – Dedicated right-of-way bicycle -specific routes and physically separated from motor vehicle traffic and designed to be distinct from adjoining sidewalks.

[69] City of Thousand Oaks, General Plan 2045, Figure 5.2 Thousand Oaks Active Transportation Plan Proposed Bikeway Network, November 2023.

design feature PDF-TR-1, which includes a Construction Traffic Management Plan, to address construction activities within the public right-of-way. A such, the Project would result in a less than significant impact related to construction period conflicts with City programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

As previously described, local access to the Project site would be provided from Lynn Road, Blair Court, and ultimately the new private road. The proposed subdivision would be secured by a motorized security gate. The 18 single-family residences would all be accessed from the private road, which would terminate in a cul-de-sac within the subdivision. Sidewalks would be provided along the private road. In addition, the Project would construct a sidewalk off-site and along the Lynn Road Project site frontage as well as along the Blair Court Project site frontage, providing improved pedestrian access. The private road and all sidewalks would be constructed in accordance with City standards (including the City's Road Design and Construction Standards) and would be subject to City Public Works Department review and approval.

During operations, and according to the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, Single-Family Detached Housing (Land Use #210) generates 9.43 ADT per unit, A.M. peak trip generation is 0.70 trips/dwelling unit, and P.M. peak trip generation is 0.94 trips/dwelling unit. As such, the Project's 18 residences would generate approximately 170 ADT, including 13 A.M. peak hour trips and 17 P.M. peak hour trips. While the Project's vehicle trips would incrementally increase traffic volumes on roadways in the vicinity, 170 ADT would not be anticipated to substantially affect operation of the local circulation system.

The City General Plan and Active Transportation Plan include goals and policies for both vehicle and non-vehicle modes of transportation. The Project would align with these goals and policies, as it would provide sidewalks along portions of Lynn Road and Blair Court where none currently exist, thereby improving pedestrian access and safety. The Project would not permanently alter local roadways or public transportation facilities in a manner that would impede access or circulation or conflict with the General Plan or Active Transportation Plan. Therefore, operation of the Project would result in a less than significant impact related to operational period conflicts with City programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, or pedestrian facilities.

Project Design Feature

PDF-TR-1 If deemed necessary by the City, the Applicant will prepare and submit a detailed Construction Traffic Management Plan to the City for review and approval. The Construction Traffic Management Plan will formalize how construction shall be carried out and identify specific actions that will be required to reduce effects on the surrounding community. The Construction Traffic Management Plan will be based on the nature and timing of the specific construction activities and other simultaneous projects in the vicinity of the Project site, if any, and shall include, but not be limited to, the following elements, as appropriate:

- Advanced notification to adjacent property owners and occupants.
- Prohibition of construction worker parking on adjacent residential streets.
- Temporary pedestrian, bicycle, and vehicular traffic controls during construction activities adjacent to the Project site to ensure adequate traffic flow and traffic safety on public rights-of-way. These controls may include, but are not limited to, alternate routing, or the placement of traffic cones, traffic barriers, and/or trained flag people.
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets.
- Scheduling of construction-related deliveries, haul trips, etc., to occur outside the commuter peak hours, as feasible.

Mitigation Measures

No mitigation measures are required.

b. A significant impact may occur if a project would conflict or be inconsistent with the CEQA Guidelines, Section 15064.3, subdivision (b).

Less than Significant Impact. On September 27, 2013, Governor Jerry Brown signed SB 743, which went into effect in January 2014. SB 743 directed the Governor's Office of Planning and Research to develop revisions to the CEQA Guidelines by July 1, 2014 to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic levels of service (LOS). This started a process that changed transportation impact analysis under CEQA. These changes include elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. The updated text of the new CEQA Guidelines Section 15064.3 relates to the determination of the significance of transportation impacts, alternatives, and mitigation measures. Specifically, CEQA Guidelines Section 15064.3 establishes VMT as the most appropriate measure of transportation impacts. In November 2018, the California Natural Resources Agency finalized the updates to the CEQA Guidelines, and the updated guidelines became effective on December 28, 2018.

Accordingly, the City's Administrative Policy and Procedure No. 12-14.009 on VMT Analysis for CEQA Compliance (Adopted July 1, 2020) states that a project will be determined to have a less than significant impact, and no further transportation impact analysis will be required, if it meets the following screening criteria: if it generates less than 100 P.M. peak hour trips based on the ITE 10th Edition Trip Generation Manual or most current edition published at the time the project application is submitted (now the 11th edition).

Construction Trips

The construction process would entail demolition, site preparation, grading, vertical construction, paving, and architectural coating. During construction, worker vehicles and delivery trucks would enter and exit the site from Lynn Road and Blair Court. The Project would generate a maximum of 20 construction worker trips per day based on default trips provided by CalEEMod (Appendix A). Hauling trips may be required to remove unsuitable rock material and the estimated export would be 1,000 cubic yards resulting in 70 hauling trips over the five-day site preparation phase (14 hauling trips per day). Construction trips would be temporary and would result in a less than significant VMT impact.

Operational Trips

As stated above, during operations, and according to the ITE Trip Generation Manual, 11th Edition, Single-Family Detached Housing (Land Use #210) generates 9.43 ADT per unit, A.M. peak trip generation is 0.70 trips/dwelling unit, and P.M. peak trip generation is 0.94 trips/dwelling unit. As such, the Project's 18 residences would generate approximately 170 ADT, including 13 A.M. peak hour trips and 17 P.M. peak hour trips. The City Public Works Department also confirmed that a transportation impact analysis and VMT analysis are not required for the Project.[70] Therefore, the Project would not meet the threshold/criteria for transportation impact analysis preparation, and the Project operational VMT impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

[70] City of Thousand Oaks Public Works Department, RPD 2022-70851, 1651 W Lynn Road, Public Works Comments, June 13, 2023.

c. A significant impact may occur if a project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Less than Significant Impact. As previously described, the Project would construct a private road with a cul-de-sac for ingress and egress, and each residence would be provided with driveway access to the new private road. The private road would be accessed from Blair Court and would have an electronically operated gate at the entrance. The Project would also provide sidewalk improvements along portions of Lynn Road and Blair Court where none currently exist at the Project site frontages. Construction of the private road, as well as the Project's sidewalk improvements along portions of Lynn Road and Blair Court, would comply with the City's Road Design and Construction Standards and Standard Land Development Specifications.[71] These improvements are also subject to the review and approval of the City Public Works Department, as well as the VCFD. The Project proposes no changes to the existing circulation of Lynn Road and Blair Court; however, either road may be temporary impacted during construction to accommodate construction of the sidewalks, as well as worker vehicles, construction equipment, and materials. If deemed necessary by the City, the Applicant will implement Project design feature PDF-TR-1, which includes a Construction Traffic Management Plan, to address construction activities within the public right-of-way and assure adequate traffic flow and traffic safety during the construction period. As such, the impact would be less than significant.

Mitigation Measures

No mitigation measures are required.

d. A significant impact may occur if a project would result in inadequate emergency access.

Less than Significant Impact. Lynn Road provides access to Highway 101, which provides primary emergency access in the region. The City's Safety Element designates Lynn Road and Highway 101 as evacuation routes. Project Construction may temporarily impact Blair Court and/or Lynn Road, and if so, the Project would implement Project design feature PDF-TR-1, which includes a Construction Traffic Management Plan, to assure adequate traffic flow and traffic safety during the construction period. During operations, access to the new residences would be located from Blair Court and the Project's new private road, via an electronically operated gate. Construction of the private road and sidewalk improvements would comply with the City's Road Design and Construction Standards and Standard Land Development Specifications.[72] These improvements are also subject to the review and approval of the City Public Works Department, as well as the VCFD, to assure adequate emergency access to all the structures. The Project would not modify the existing circulation routes within the vicinity of the Project site. Therefore, Project impacts related to emergency access would be less than significant.

Mitigation Measures

No mitigation measures are required.

[71] City of Thousand Oaks Public Works, Road Design and Construction Standards and Standard Land Development Specifications, May 15, 2018.

[72] City of Thousand Oaks Public Works, Road Design and Construction Standards and Standard Land Development Specifications, May 15, 2018.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, 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.	☐	☒	☐	☐

Impact Analysis

This analysis is based on a Cultural Resources Phase I Assessment[73] (provided in Appendix E) prepared by Envicom Corporation for the Project, which included record searches by the SCCIC and NAHC, a review of historic maps and aerial images, and a pedestrian survey of the Project site. The record searches examined the Project site, plus a 0.25-mile study area around the Project site to account for cultural resources that may be immediately adjacent to the Project site and to provide regional context. Refer to Section V, Cultural Resources, for additional detail.

a. and b. A significant impact may occur if a project would cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074 and that is listed, or eligible for listing, in the California Register of Historical Resources, or in a local register of historical resources; or that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant.

Potentially Significant Unless Mitigation Incorporated. As discussed in Section V, Cultural Resources, the results of the SCCIC and NAHC database record searches were negative for cultural resources within the Project site; however, the Project site is located within a region known to be sensitive for prehistoric Native American cultural resources. The historic maps and aerial photograph databases were also negative

[73] Envicom Corporation, Cultural Resources Phase I Assessment for 1651 Lynn Road, September 30, 2022.

for older historic cultural resources being located within the Project site. Additionally, the pedestrian survey was negative for cultural resources, including tribal cultural resources.

Although the SCCIC and NAHC record searches did not yield positive results for cultural resources at the Project site or the adjacent surroundings, the NAHC provided a list of tribes that may have knowledge of tribal cultural resources in the surrounding area. Envicom Corporation did not contact the tribes on the NAHC list, as consultation with tribal representatives is the responsibility of the Lead Agency under AB 52. As applicable, the NAHC letter and this MND shall be made a part of the Native American AB 52 consultation record.

On February 28, 2024, the City Community Development Department sent a letter to the Native American tribe that is culturally affiliated with the Project area, notifying the tribe of the Project, as required under AB 52. No response/request for consultation was received from the Barbareño/Ventureño Band of Mission Indians of the Project. The City Community Development Department closed consultation on May 9, 2024. The relevant consultation correspondences are provided in **Appendix K, Tribal Consultation**.

No tribal cultural resources have been identified within the Project site or immediately surrounding the Project site. Nevertheless, the Mitigation Monitoring and Reporting Program of the City 2045 General Plan Update Final EIR includes a mitigation measure that addresses the unanticipated discovery of tribal cultural resources. As the Project involves ground disturbance and the potential to encounter previously undiscovered buried cultural resources of Native American origin, mitigation measure **MM-TCR-1** is required. Project impacts to tribal cultural resources would be less than significant following implementation of mitigation measure MM-TCR-1.

Mitigation Measures

MM-TCR-1: Suspend Work Around Tribal Cultural Resources Identified During Construction. In the event that cultural resources of Native American origin are identified during ground disturbance during construction of a project implemented under the City of Thousand Oaks 2045 General Plan Update, all earth-disturbing work in the vicinity of the find shall be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find as a cultural resource and an appropriate local Native American representative is consulted. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and, thus, significant under the California Environmental Quality Act, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with local Native American group(s). The mitigation plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, the plan shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS. 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?	☐	☐	☐	☒

Impact Analysis

a. A significant impact may occur if a project would require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects.

Less than Significant Impact. The City is supplied with potable water though four purveyors, which include the City of Thousand Oaks Municipal Service Center, California-American Water Company, California Water Service Company, and Camrosa Water District.[74] The Project site is located in the service area of the City of Thousand Oaks Municipal Service Center. The City of Thousand Oaks currently serves the wastewater collection needs of the Project area and would serve the Project site. Wastewater generated from the Project site would be conveyed to the Hill Canyon Treatment Plant. The Project area includes existing residential and commercial development; therefore, water and wastewater infrastructure already exist in the Project site vicinity. According to the City Public Works Department (refer to **Appendix L, Utilities Correspondence**), there is a 12-inch City water main located approximately 164 feet east of the existing single-family residence located at the Project site, as well as inside the Project site boundary. The existing

[74] City of Thousand Oaks, Water Purveyors in the City of Thousand Oaks, November 9, 2009.

12-inch mainline currently is within Blair Court, which is a privately owned road inside a 20-foot easement for water purposes dedicated to the City. An eight-inch water main is also located approximately 200 feet to the west of the single-family residence within the Project site. In addition, there is an existing eight-inch City wastewater main located in Blair Court, northeast of the Project site. The wastewater mainline placed in Blair Court is also located within a 20-foot and 40-foot easement designated for road and utility purposes. The Project would locate connecting pipes underground that would connect to these existing water and wastewater lines. Connection to the water and wastewater mains is permitted subject to a City encroachment (right-of- way) permit, which includes the payment of permit fees, an approved Construction Traffic Management Plan (as set forth in Project design feature PDF-TR-1), and a water and wastewater service-lateral plan and profile construction drawings to be reviewed and approved by the City Public Works Department. The design, review, and permit process would ensure that infrastructure is of adequate capacity and design to provide service to the proposed development.

The Project site is served with natural gas by SoCalGas and with electricity by the CPA and SCE. The Project would provide connections to the existing natural gas and power infrastructure. As discussed in Section VI, Energy, the Project's increase in natural gas and electricity demand would be nominal. With regard to telecommunications, the Project site is located in area with existing residential and commercial development; therefore, the Project site would connect to the available regional telecommunications infrastructure. As such, the Project would not require or result in the need for expanded natural gas, power, or telecommunications infrastructure.

Based on the information provided above, Project impacts related to new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities would be less than significant.

Mitigation Measures

No mitigation measures are required.

b. A significant impact may occur if a project did not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

Less than Significant Impact. The Calleguas Municipal Water District (CMWD) is an authorized wholesaler of treated surface water and buys most of its water from the Metropolitan Water District of Southern California (MWD), which is treated at the Jensen Water Treatment Plant.[75] The CMWD distributes water on a wholesale basis to its retail water purveyors. In the City, retailers include the City of Thousand Oaks Municipal Service Center, California-American Water Company, California Water Service Company, and Camrosa Water District. As previously stated, the City of Thousand Oaks Municipal Service Center is the retailer of water to the Project site.

The MWD receives the water from the Sacramento and Colorado Rivers conveyed from the California Aqueduct (part of the State Water Project, operated by the California Department of Water Resources) and Colorado River Aqueduct (operated by MWD), respectively. The CMWD only receives water from the State Water Project. The CMWD stores water that is not immediately redistributed at Lake Bard, which holds 10,000 acre feet (AF) of water, or at Las Aquifer Storage and Recover Well Field.

The 2020 Urban Water Management Plan (UWMP) provides an assessment of water availability, supply, and demand for the City until 2045 for dry and normal years. The UWMP projects that the water supply

[75] Calleguas Municipal Water District, Water Resources and Quality, Accessed on March 4, 2024 at: https://www.calleguas.com/water-resources-and-quality/index.asp.

for 2025 normal year, dry year, and multiple dry years will be 10,691 AF.[76] The City's Water Master Plan identifies the Project site as "developable vacant land," and states that the projected water demand increase of all developable vacant land in the City would be 80 AFY (which would be 19 percent of the average annual demand through City buildout, 414 AF per year).[77] Based on the City's Water Master Plan, the proposed residential use would generate 440 gallons per day per unit (gpd/unit). Since the Project would construct 18 single-family residences, water demand generated by the Project would be 7,920 gpd or 8.9 AF per year. The Project would represent 0.08 percent of the City's water supply and 11 precent of the projected developable vacant land demand. As such, the City has sufficient water availability to supply the Project for the reasonably foreseeable future during normal, dry, and multiple dry years, and Project impacts to water supply would be less than significant.

Mitigation Measures

No mitigation measures are required.

c. A significant impact may occur if a project would result in a determination by the wastewater treatment provider, which serves or may serve the project, that it does not have adequate capacity to serve a project's projected demand in addition to the provider's existing commitments.

Less than Significant Impact. The City of Thousand Oaks currently serves the wastewater collection needs of the Project areas and would serve the Project site. Wastewater generated from the Project would be conveyed to the Hill Canyon Treatment Plant. Currently, the Hill Canyon Treatment Plant treats an average of eight million gallons per day (mgd) of wastewater, with the capacity to treat 14 mgd. Therefore, the Hill Canyon Treatment Plant has an excess capacity of approximately six mgd.[78] The Project would develop 18 single-family residences. Assuming that wastewater generation is approximately 80 percent of the total water demand (which is 7,920 gpd), the Project would generate 6,366 gpd (or 0.006 mgd). The Project would use 0.1 percent of the available six mgd capacity. Therefore, the Project would result in a less than significant impact regarding wastewater.

Mitigation Measures

No mitigation measures are required.

d. A significant impact may occur if a project were to increase solid waste generation to such a degree that the existing and projected landfill capacity would be insufficient to accommodate the additional solid waste.

Less than Significant Impact. Solid waste generated within the City is recycled, reused, and transformed at waste-to-energy facilities or disposed of at landfills. The SVLRC would serve the Project site during the construction period, as it accepts construction debris. The SVLRC is permitted to accept up to 3,000 tons per day (tpd) of waste and can accept 6,250 tons per day of recyclable materials.[79] The primary landfill used

[76] City of Thousand Oaks, 2020 Urban Water Management Plan, June 23, 2021.
[77] City of Thousand Oaks, Water Master Plan (Second Edition), February 2018.
[78] City of Thousand Oaks Department of Public Works, Hill Canyon Treatment Plant, Accessed on March 4, 2024 at: https://www.toaks.org/departments/public-works/operations/hill-canyon-treatment-plant.
[79] Waste Management, Simi Valley Landfill, Accessed on March 4, 2024 at: https://www.wm.com/location/california/ventura-county/landfill/index.jsp#:~:text=The%20SVLRC%20is%20permitted%20to,6%2C250%20tons%20of%20recyclable%20materials.

for waste generated within the City is the Calabasas Landfill,[80] which would serve the Project site during operations. The Calabasas Landfill has a maximum permitted capacity of 3,500 tpd.[81]

Construction

The Project is required to divert at least 65 percent of construction waste, in accordance with CALGreen Section 5.408, as well as the City's Construction & Demolition Debris Recycling Ordinance (No. 1639-NS). The remaining construction waste would be taken to the SVLRC, which is permitted to accept up to 3,000 tpd. **Table 25, Demolition and Construction Solid Waste Generation**, shows solid waste generated during demolition and construction of the Project, which would be temporary.

Table 25
Demolition and Construction Solid Waste Generation

Type of Use	Size	Generation Rate	Total Waste (pounds)	Total Waste (tons)
Demolition				
Single-Family Residence and Associated Paving				543[a]
			Total Demolition Waste Generation	**543**
			Diversion of 65% for Recycling[b]	353
			Remaining 35% for Landfill Disposal	**190**
Construction				
18 Single-Family Residences	45,586 sf	4.39 lbs/sf[c]	200,123	100
Export[d]				1,688
			Total Construction Waste Generation	**1,788**
			Diversion of 65% for Recycling	1,162
			Remaining 35% for Landfill Disposal	**626**
			Total Demolition and Construction Waste for Landfill Disposal	**816**

[a] CalEEMod Output, Appendix A.
[b] Regulatory requirement by the City of Thousand Oaks, Ordinance No. 1639-NS, December 12, 2017.
[c] United States Environmental Protection Agency, Office of Resource Conservation and Recovery, Report No. EPA530-R-09-002, Estimating 2003 Building-Related Construction and Demolition Materials Amount. Table 2-1, Summary of Residential Construction Job Site Surveys of C&D Materials.
[d] Export/Import expected to be balanced on site, but there is a potential need to remove and export unsuitable rock material, estimated to be 1,000 cy, or approximately 1,688 tons.

As shown in Table 25, the Project would generate approximately 816 tons of waste that would be sent to the landfill during demolition and construction of the Project. As project demolition and construction is anticipated to take approximately 316 days, according to CalEEMod (Appendix A), the estimated tonnage generated per day would equate to approximately 2.56 tpd. The Project would represent 0.09 percent of the permitted daily capacity at SVLRC. As such, the demolition and construction solid waste generated by the Project would not exceed the daily permitted capacity of the local solid waste facility, and impacts would be less than significant during construction.

Operations

The Project would develop 18 single-family residences, the occupants of which would generate typical household waste, including recyclables and green waste from landscaping. The Calabasas Landfill's

[80] City of Thousand Oaks and Arakelian Enterprises, Inc., Provision of Residential and Commercial Solid Waste, Recyclable Materials and Organic Waste Collection Services, Exhibit 13, Collection Services Operation Plan, adopted January 1, 2022.
[81] Cal Recycle, SWIS Facility/Site Activity Details Calabasas Landfill (19-AA-0056), Accessed on March 5, 2024 at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3579?siteID=1041.

maximum permitted throughput is 3,500 tpd, and the landfill currently averages 1,000 tpd of throughput.[82] Cal Recycle provides a solid waste generation rate for single-family residences of 11.4 pounds (lbs) per day per unit.[83] With 18 single-family residences, the Project would generate 205.2 lbs per day or 0.103 tpd. Additionally, the Project is required to comply with AB 939, also known as the Integrated Waste Management Act, which requires that California cities, counties, and approved regional solid waste management agencies enact plans and implementing programs to divert 50 percent of their solid waste by the year 2000. Therefore, only 102.6 lbs per day or 0.05 tpd of solid waste generated by the Project would be sent to the Calabasas Landfill daily. Therefore, the Project would use 0.001 percent of the Calabasas Landfill's maximum daily throughout, and the Project's solid waste impact during operations would be less than significant.

Mitigation Measures

No mitigation measures are required.

e. A significant impact may occur if a project would generate solid waste not disposed of in accordance with applicable regulations.

No Impact. As described above, the Project would comply with CALGreen and the City's Construction & Demolition Debris Recycling Ordinance (No. 1639-NS) during construction and with AB 939 during operations to reduce the amount of landfilled solid waste. As of 2022, and in accordance with SB 1383, jurisdictions are required by the State to provide organic waste collection services to all single-family (and multi-family) residences of all sizes and businesses that generate organic waste. Building permit applicants in the City, including the Project Applicant, are required to submit a Waste Management Plan before receipt of a building permit to assure that projects meet all applicable federal, State, and local laws, statutes, and ordinances regarding the proper disposal of solid waste. As such, the Project would result in no impact related to conflicts with applicable solid waste regulations.

Mitigation Measures

No mitigation measures are required.

[82] Los Angeles County Sanitation Districts, Calabasas Landfill Gas-to-Energy Facility, Accessed on March 5, 2024 at: https://www.lacsd.org/services/solid-waste/energy-recovery-and-fueling-facilities/landfill-gas-to-energy-facilities/calabasas-landfill-gas-to-energy-facility#:~:text=The%20landfill%20began%20operation%20in,averages%201%2C000%20tons%20per%20day.

[83] Cal Recycle, Estimated Solid Waste Generation Rates, Accessed on March 5, 2024 at: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or land 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 downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Impact Analysis

The City is located within Ventura County, situated within the Conejo Valley, a high plateau surrounded by hills. The City covers an area of approximately 55 square miles, with the bulk of development located within the floor of the valley. The valley is roughly nine miles inland from the Pacific Ocean, bordered by the Conejo Hills to the west/northwest, the Santa Monica Mountains to the south, and the Simi Hills to the north and east. Elevations in the valley range from 600 to 900 feet above average mean sea level (AMSL), with nearby peaks rising up to an additional 1,000 feet. Wildfires are of particular concern in areas designated as a VHFHSZ in Southern California. As shown on the City's General Plan Safety Element[84] and CalFire Maps,[85] the Project site is located within land classified as a VHFHSZ.

The Wildland-Urban Interface (WUI) is the transition zone between human development and natural, undeveloped land. It is the area where structures intermingle with wildland vegetation or are in the vicinity of large areas of wildland vegetation. The WUI is where the majority of wildfire building losses occur, because it creates a condition where fire can move easily between structural and vegetative fuel. California addresses the WUI issue through identification and regulation of Fire Hazard Severity Zones (FHSZs). Although the CBC defines the WUI as any area within a FHSZ, many areas in the State within a FHSZ would not be considered WUI, according to the latest research on the topic.[86] This includes the Project site,

[84] City of Thousand Oaks, General Plan 2045, Figure 10.6 Fire Hazard Severity Zones, November 2023.
[85] CalFire, Very High Fire Hazard Severity Zones in LRA as Recommended by CALFIRE: Thousand Oaks. Accessed on November 30, 2023 at: https://osfm.fire.ca.gov/media/6024/thousand_oaks.pdf.
[86] University of Wisconsin, Madison SILVIS LAB, Wildland-Urban Interface Change 1990-2010, Accessed November 30, 2023, at: http://silvis.forest.wisc.edu/data/wui-change/.

which is immediately surrounded on all sides by roadways and/or development, but across the street (Lynn Road) of which lies isolated parcels of open space, which are also immediately surrounded by a roadway and development. It is the larger open space area located to the south of these areas that brings the Project site into a VHFHSZ.

The City located within the jurisdiction of the Ventura County Fire Prevention District (VCFPD), and fire prevention and suppression services are provided by the VCFD. As described in response to Question XV(a) in Section XV, Public Services, the VCFD has approximately 600 employees and 33 fire stations throughout Ventura County. Battalion 3 commands the Conejo Valley area, and its headquarters is located at Fire Station 30 at 325 West Hillcrest Drive in the City. The Battalion Chief commands the eight fire stations located in the Conejo Valley that serve the City. The battalion headquarters are roughly 2.4 driving miles from the Project site, and the nearest fire station to the Project site is VCFD Station 35, which is approximately 2.2 driving miles away.

The VCFD has a goal of a first unit on scene within 8 minutes and 30 seconds for suburban areas 90 percent of the time and first unit on scene in 12 minutes for rural areas 90 percent of the time.[87] The strategy of crew deployment is to spread crews across a community for quick response to keep emergencies small and with positive outcomes, without spreading the crews so far apart that they cannot amass together quickly during a major emergency. Actual VCFD response levels are dependent on type of incident location, weather conditions, existing or potential emergencies, resources available and information provided.

Wildfires near a VCFD station are first addressed by that station. Response levels are based on type of incident, location, weather conditions, existing or potential emergencies, resources available and the information the VCFD is working with. Staffing levels and the staffing of specialized resources are adjusted according to existing or potential conditions. The closest available resource, plus the closest available resources of the type needed, respond to incidents. The response team to a wildland fire is 5 Engines, 1 Battalion Chief, and 1 water tender.[88] Once on the site personnel determine the needs of the incident and responses are adjusted accordingly. In extraordinary wildfire circumstances mutual aid and automatic aid agreements are key for a rapid response, and this is true for all firefighting operations throughout the state.

Lynn Road, which runs east-west south of the Project site and provides access to the Ventura Freeway (Highway 101), would provide primary emergency access to the site. The City's Safety Element designates Lynn Road and Highway 101 as evacuation routes.

State Regulations

The Governor's Office of Emergency Services (OES) oversees and coordinates emergency response preparedness of other State agencies and produces the State of California State Hazard Mitigation Plan. The 2023 State Hazard Mitigation Plan represents the State's primary hazard mitigation guidance document that includes discussions on wildfire and structural fire hazards and provides mitigations for effective wildfire suppression planning. The Hazard Mitigation Plan also includes goals and objectives related to reducing risks associated with wildfire. The OES also regulates the Standardized Emergency Management System (SEMS), which creates the statewide framework within which the State, counties, and local governments coordinate responses during emergency events.

CalFire is the California Department of Forestry and Fire Protection. It is dedicated to the fire protection and stewardship of over 31 million acres of the State's wildlands. Sections 51175 – 51189 of the California Government Code define CalFire's responsibility for identifying FHSZs throughout California. The FHSZs

[87] City of Thousand Oaks, Latigo Hillcrest Project Environmental Report, July 2023.

[88] Ventura County Fire Department, Emergency Response, Accessed November 30, 2023, at: https://vcfd.org/services/operations/emergency-response/.

on CalFire maps are based on fuel loading, slope, fire history, weather, and other factors, as directed by the California PRC, Sections 4201 – 4204, and the California Government Code, Sections 51175 – 51189. FHSZs are ranked from Moderate to Very High and are designated within a Federal Responsibility Area, State Responsibility Area (SRA), or Local Responsibility Area (LRA), which indicate the jurisdiction as belonging to a federal agency, CalFire, or local agency, respectively. The agency that performs firefighting activities can be different from the responsible agency if there is a contract agreement in place. Local agencies have the responsibility to designate, by ordinance, VHFHSZ within their jurisdictions, per Sections 51178.5 and 51179 of the Government Code. The Project site is located within a VHFHSZ, as stated above, as well as an LRA.

The Board of Forestry and Fire Protection (Board) is a Governor-appointed body within CalFire. It is responsible for developing the general forest policy of the State, determining guidance policies for CalFire, and represents the State's interest in federal forestland within California. The Board is charged with developing policy to protect all wildland forest resources in California not under federal jurisdiction. The Board is also responsible for reviewing the safety element of cities or counties that contain VHFHSZs. The Board responds with findings and recommended changes regarding policies and land use in VHFHSZs that will protect life, property, and natural resources from unreasonable risks associated with wildfires, and the methods and strategies for wildfire risk reduction and prevention within VHFHSZs.

The Office of the State Fire Marshal (OSFM) is the CalFire program tasked with, among other things, developing and reviewing regulations and building standards and providing training and education in fire protection methods and responsibilities. The OSFM is responsible for the development of Wildland-Urban Fire Area Building Standards, which were approved by the California Building Standards Commission in 2005, amending the CCR, Title 24, known as the CBC. The amendment added Chapter 7A to the CBC and the requirements became active in 2008. Part 9 of the CBC is known as the California Fire Code (CFC). There are three chapters within the CFC that are most relevant to wildfire safety:

- *Chapter 7, Fire and Smoke Protection Features*: Chapter 7 regulates materials, systems and assemblies used for structural fire resistance and fire-resistance-rated construction separation of adjacent spaces to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings.[89] Chapter 7 applies to all permitted structures.
- *Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure*: Chapter 7A establishes minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses.[90] Chapter 7A applies to all new buildings located within a FHSZ, which includes the Project site, and therefore the Project structures would be required to meet the ignition-resistant construction standards of Chapter 7A. This chapter of the CFC defines WUI as any area within a FHSZ for regulatory purposes.
- *Chapter 9, Fire Protection Systems*: Chapter 9 specifies when fire protection systems are required, and specifies the design, installation, and operation of those systems. It addresses requirements for buildings, facilities, storage, and processes, and addresses safe storage, and use of hazardous materials, as well. Fire sprinkler requirements, fire flow standards, and emergency access roads standards are components of the chapter. Chapter 9 requirements are applicable throughout the State.

The California PRC, Section 4290, requires minimum fire safety standards related to defensible space that are applicable to residential, commercial, and industrial building construction in SRA lands and lands

[89] State of California, California Building Code, Chapter 7.
[90] State of California, California Building Code, Chapter 7a.

classified and designated as VHFHSZs. The California PRC, Section 4291, requires a reduction of fire hazards in SRA lands around buildings located adjacent to a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered in flammable material. A 100-foot defensible space area is required to be maintained around all sides of a structure, but not beyond the property line unless otherwise required by State law, local ordinance, rule, or regulations. Section 51182 of the California Government Code applies defensible space requirements to VHFHSZs within LRA lands or otherwise designated by the local agency. It requires maintenance of 100 feet of defensible space around all sides of a structure and allows local agencies to determine if such space should extend beyond property lines.

On October 2, 2019, Governor Newsom signed AB 38 related to fire safety. California AB 38 established a 5-year pilot program requiring OES and CalFire to work together to fund a fire retrofit program to help communities and owners of homes built prior 2008 building codes to harden their homes and make them more likely to survive wildfires. It also requires that local agencies conduct inspections and provide education on fire hardening improvements when real estate transactions occur within a VHFHSZ.

Local Regulations

As described in the City General Plan, several countywide plans guide wildfire policies and programs in the City. The VCFPD Unit Strategic Fire Plan describes Ventura County's fire history, firefighting capabilities, and collaboration throughout different agencies, non-government organizations, and private entities. It also provides a reporting mechanism that tracks the implementation of projects that work to meet VCFPD's goals and objectives. The Ventura Regional Fire Safe Council is also in the process of completing a Ventura County Community Wildfire Protection Plan (CWPP) that will provide regional context and the countywide priority actions regarding community engagement and education, structural hardening, defensible space, fuels reduction, evacuation, and emergency response. The Ventura County Multi-Jurisdictional Local Hazard Mitigation Plan (MJHMP), which covers the City planning area, was developed in accordance with the Disaster Mitigation Act of 2000 and follows the Federal Emergency Management Agency's (FEMA's) Local Hazard Mitigation Plan guidance. The MJHMP incorporates a process in which hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which include both short and long-term strategies, involve planning, policy changes, programs, projects, and other activities.[91]

Section 8-1.02 of the TOMC adopts the CBC by reference with certain amendments. Adoption of the CBC includes Chapters 7, 7A, and 9, as described above. By necessity, the City's Building Code provisions regarding fire safety are either identical to or are more stringent than those found in the CBC.

The Board of Directors of the VCFD adopted by reference the 2019 CFC, including portions of the 2018 International Fire Code, and portions of Title 19 of the CCR, with amendments, to produce the Ventura County Fire Code (VCFC). The VCFC includes Appendix W, which establishes minimum requirements in WUI areas to increase the ability of a building to resist the intrusion of flame or burning embers being projected by a vegetation fire. VCFD Ordinance 29 establishes minimum and cumulative design and maintenance standards for emergency fire access roads within the jurisdictional boundaries of the VCFD. The standards apply to public and private property, and includes road design, signage, and marking requirements and provisions for enforcement.

As previously described, Project landscaping would also comply with Ventura County Fire Protection District Ordinance Number 32, Chapter 49, Requirements for Wildland-Urban Interface Fire Areas, and by

[91] City of Thousand Oaks, General Plan 2045, November 2023.

extension, with the CCR, Title 14, Fire Safe Regulations. Landscaping would also comply with VCFD Standard 515 based upon vegetation characteristics.

The Thousand Oaks Emergency Operations Plan (EOP) addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The plan helps maintain the City's ability to prepare, respond, and recover from a variety of emergency incidents, and satisfies the SEMS requirements per Title 19 of the CCR and the National Incident Management System (NIMS).

The Ventura County Sheriff Office of Emergency Services (County OES) is the County's preparedness document designed to be read, understood, and exercised prior to an extraordinary emergency. It designates the County of Ventura as part of the California SEMS and the NIMS. It clarifies each element of the emergency management organization and their responsibilities in the maintenance of appropriate and current Standard Operating Procedures resource lists and checklists that detail how assigned responsibilities are performed to support implementation of the EOP and to ensure an effective response during a major disaster. The EOP delineates the organization, framework, and command hierarchy for the County's response to major disasters.

The City's General Plan includes an emergency evacuation analysis, with scenario modeling that identifies evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. The emergency evacuation analysis also specifically identifies any residential developments in any hazard area that do not have at least two evacuation routes. The emergency evacuation analysis allows the City to identify areas at higher risk of impacts of human welfare and supports new evacuation strategies that improve the transportation system in future evacuation events. These strategies include implementing traffic management strategies, improving communication among entities involved in the management of response, improving communication between the City and the public, and prioritizing vulnerable populations.[92] Figure 10.9 of the City General Plan shows the neighborhoods and subdivisions throughout the City that have a single entry or exit point (as identified by CalFire and/or the City), which represent higher risk areas. The Project site is not located within an area mapped as having a single exit/entry point.[93]

a. A project may have a significant impact if it would substantially impair an adopted emergency response plan or emergency evacuation plan.

Less than Significant Impact. The Project site is located within an LRA and VHFHSZ. Lynn Road provides access to Highway 101, which provides primary emergency access in the region. The City's Safety Element designates Lynn Road and Highway 101 as evacuation routes. There are three primary documents that govern the framework for emergency response in the City; the 2020 EOP, the City's General Plan Safety Element, and the 2021 Ventura County Operational Area Emergency Operations Plan. Impairment of emergency response or emergency evacuation plans might occur if a project introduced conditions that placed a burden on emergency responders during an emergency response situation or impaired the implementation of emergency response planning.

As mentioned previously Ventura County Sherriff's OEC would have primary responsibility for coordinating evacuations, though the VCFD may direct evacuations during a wildfire. Evacuation warnings or evacuation orders are issued according to conditions as wildfires are inherently dynamic and unpredictable. Multiple factors such as weather conditions, fuel loads, recent fire history, road conditions, available resources, etc., may influence the ordering and timing of evacuation orders, but it is the experience and training of the emergency response agencies, operating within the framework of the SEMS, that

[92] City of Thousand Oaks, General Plan 2045, November 2023.
[93] City of Thousand Oaks, General Plan 2045, Figure 10.9 Neighborhoods/Subdivisions with One Entry/Exit, November 2023.

effectuates evacuation decisions. Evacuation warnings and orders may be made in a phased manner according to vulnerability, location, or other factors, which would enable traffic surges on roadways to be minimized over time allowing for more an orderly flow of vehicles exiting an evacuation area. Once a warning or order is issued, it is important to note that the timely evacuation of residential properties depends upon timely cooperation from the individual residents under evacuation orders.

Construction

Project Construction may temporarily impact Blair Court and/or Lynn Road due to staging or to accommodate construction of sidewalks along the Lynn Road and Blair Court Project site frontages. If so, the Project would implement Project design feature PDF-TR-1, which includes a Construction Traffic Management Plan, to assure adequate traffic flow and traffic safety during the construction period. Construction impacts are short term and would not substantially impair an adopted emergency response plan or emergency evacuation plan; therefore, construction impacts would be less than significant.

Operation

The Project represents infill development, and the Project site is surrounded by existing residential neighborhoods and streets. The Project would be consistent with the General Plan land use designation and City Municipal Code zoning designation of the Project site. The Project is therefore consistent with the City's growth projections. The Project would subdivide the existing parcel into 19 individual lots and develop 18 single-family houses and a bio-retention basin. The proposed 18 residences would generate 170 ADT (refer to Section XVII, Transportation), which would not significantly affect traffic and access. In the case of an emergency or evacuation order, residents of the Project would travel from the private road to Blair Court and then travel on Lynn Road northeast for approximately 1.4 miles until reaching Ventura Freeway. Furthermore, during operations, access to the new residences would be located from Blair Court and the Project's new private road, via an electronically operated gate. Construction of the private road and sidewalk improvements would comply with the City's Road Design and Construction Standards and Standard Land Development Specifications.[94] These improvements are also subject to the review and approval of the City Public Works Department, as well as the VCFD, to assure adequate emergency access to all the structures. The Project would not modify the existing circulation routes within the vicinity of the Project site. Therefore, development of the Project would not impede or impair adopted emergency response plans or emergency evacuation routes, and Project impacts during operations would be less than significant.

Mitigation Measures

No mitigation measures are required.

b. A project may have a significant impact if, due to slope, prevailing winds, and other factors, the project would exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire.

Less than Significant Impact. The Project represents infill development, and the Project site is surrounded by existing residential neighborhoods and streets. Nevertheless, the Project site is mapped within a VHFHSZ due to the location of open space areas located south of the Project site and south of Lynn Road. The Project would be developed on a parcel that currently includes one single-family residence. However, the majority of the site is occupied by undeveloped land that is not irrigated. The Project buildings would be required to be designed and constructed to comply with the CBC, CFC, and City Municipal Code standards, which regulate building materials and structural design as it relates to fire containment and safety

[94] City of Thousand Oaks Public Works, Road Design and Construction Standards and Standard Land Development Specifications, May 15, 2018.

features, as well as require adequate defensible space (i.e., vegetation management) around residences. Therefore, the Project would not be constructed in a manner that would exacerbate wildfire risk. In addition, existing VCFD fire stations in the Project vicinity would serve the Project site, as they do in the existing condition. VCFD Fire Station No. 35, currently located at 751 Mitchell Road, is nearest to the Project site, located approximately 2.2 miles away. As such, the Project would result in a less than significant impact related to exacerbating wildfire risks.

Mitigation Measures

No mitigation measures are required.

c. A project may have a significant impact if it would require the installation of associated infrastructure that may exacerbate fire risk or may result in temporary or ongoing impacts to the environment.

Less than Significant Impact. The Project development would require utility extensions/connections, such as electrical conduit, water and wastewater lines, natural gas lines, which would be located underground. The Project infrastructure otherwise includes streetlights, hydrants, and a new private road, as well as sidewalks, both within the new subdivision and along the Lynn Road and Blair Court Project site frontages. Such infrastructure improvements would comply with applicable State and City regulations and would not exacerbate fire risks. Project impacts related to the fire risk of infrastructure improvements would be less than significant.

Mitigation Measures

No mitigation measures are required.

d. A project may have a significant impact if it would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Less than Significant Impact. As shown in the City's General Plan Safety Element, the Project site is not located within a landslide hazard area.[95] The National Flood Hazard Layer locates the Project in Zone X, which is an area of minimal flood hazard.[96] The Project would develop a stormwater treatment and detention system in compliance with County, City, and VCFD standards, to assure adequate drainage of runoff. According to the Geotechnical Report (Appendix G), slopes within the Project site and adjacent to the Project site do not exceed a 2:1 slope ration, which would remain following site development. As the Project would be designed and constructed to comply with the CBC, CFC, and City Municipal Code standards, and as the Project site is not subject to landslide and flooding risks, the Project would result in a less than significant impact regarding the risk of exposing people or structures to landslides or downslope or downstream flooding as a result of post-fire slope instability or drainage changes.

Mitigation Measures

No mitigation measures are required.

[95] City of Thousand Oaks, General Plan 2045, Figure 10.2: Landslide Risk Zones, November 2023.

[96] FEMA's National Flood Hazard Layer Viewer, FIRMette, accessed on November 30, 2023 at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of 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. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual 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. Does the project have environmental effects that cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Impact Analysis

a. A significant impact may occur if a project would significantly degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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.

Potentially Significant Unless Mitigation Incorporated. As discussed in Sections IV, Biological Resources; V, Cultural Resources; and VII, Geology and Soils, Project impacts to these resources would be less than significant following the implementation of mitigation measures that address impacts to oak trees, archaeological resources, and paleontological resources. Therefore, the Project would not significantly degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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. The Project impacts to biological, cultural, paleontological, and tribal cultural resources would be less than significant following implementation of Mitigation Measures MM-BIO-1, MM-BIO-2, MM-BIO-3, MM-BIO4, MM-CUL-1, MM-GEO-1, and MM-TCR-1.

Mitigation Measures

The Project would be required to implement Mitigation Measures MM-BIO-1, MM-BIO-2, MM-BIO-3, MM-BIO4, MM-CUL-1, and MM-GEO-1 to reduce impacts to biological, cultural, and paleontological resources to a less than significant level.

b. A significant impact may occur if the impacts of a project, in conjunction with the impacts of related projects, would result in impacts that are less than significant when viewed separately but significant when viewed together.

Less than Significant Impact. Within 500 feet of the Project site boundary, there is only one planned residential project, located on the northern adjacent property at 1617 Susan Drive. This property is anticipated to be subdivided into four lots, with each lot designated for the construction of a single-family home. As detailed in the analyses provided throughout Section 4.0, Initial Study/Mitigated Negative Declaration, the Project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated for all environmental issues. Where appropriate, detailed cumulative impacts are addressed, as for air quality (Section III), greenhouse gas emissions (Section VIII), and noise (Section XIII). As discussed throughout this document, with Project design features or through required regulatory compliance, none of the Project's impacts would be significant and unavoidable, including cumulative impacts. The Project's contribution to cumulative impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

c. A significant impact may occur if a project has the potential to result in significant impacts to humans either directly or indirectly.

Less than Significant Impact. Impacts to human beings are generally related to air quality, hazards and hazardous materials, excessive noise or vibration, transportation/circulation safety, and wildfire. As detailed in the analyses provided throughout Section 4.0, Initial Study/Mitigated Negative Declaration, the Project would not result, either directly or indirectly, in substantial adverse effects related to these hazards. As all Projects impacts to human beings would be less than significant with Project design features or through required regulatory compliance; impacts to human beings would be less than significant.

Mitigation Measures

No mitigation measures are required.

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APPENDIX A

California Emissions Estimator Model Output

1651 Lynn Road Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	1651 Lynn Road
Construction Start Date	1/1/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	1.60
Location	Lynn Rd, California, USA
County	Ventura
City	Thousand Oaks
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3540
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.26

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	18.0	Dwelling Unit	3.69	46,531	80,000	—	50.0	—

Other Asphalt Surfaces	0.93	Acre	0.93	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26	0.26	2.13	14.7	0.02	0.15	0.07	2,544	0.52	2,556
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	16.8	16.8	5.26	19.2	0.04	3.01	1.45	4,111	0.07	4,149
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.86	0.86	1.70	10.8	0.02	0.37	0.17	1,935	0.22	1,946
Annual (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	0.16	0.31	1.97	< 0.005	0.07	0.03	320	0.04	322
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—
Threshold	—	25.0	25.0	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—
Threshold	—	25.0	25.0	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	—	—	—

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—
2025	0.26	0.26	2.13	14.7	0.02	0.15	0.07	2,544	0.52	2,556
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—
2025	0.46	0.44	5.26	19.2	0.04	3.01	1.45	4,111	0.07	4,149
2026	16.8	16.8	2.14	14.7	0.02	0.28	0.08	2,537	0.03	2,549
Average Daily	—	—	—	—	—	—	—	—	—	—
2025	0.20	0.20	1.70	10.8	0.02	0.37	0.17	1,935	0.22	1,946
2026	0.86	0.86	0.23	1.34	< 0.005	0.02	0.01	225	0.03	227
Annual	—	—	—	—	—	—	—	—	—	—
2025	0.04	0.04	0.31	1.97	< 0.005	0.07	0.03	320	0.04	322
2026	0.16	0.16	0.04	0.25	< 0.005	< 0.005	< 0.005	37.3	0.01	37.5

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	2.02	1.93	1.05	6.14	0.01	1.13	0.32	1,942	4.72	1,987
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	1.91	1.83	1.10	5.10	0.01	1.13	0.32	1,899	0.45	1,941
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	1.90	1.84	0.80	5.28	0.01	1.08	0.29	1,528	2.19	1,571

Annual (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35	0.34	0.15	0.96	< 0.005	0.20	0.05	253	0.36	260
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—
Threshold	—	25.0	25.0	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—
Threshold	—	25.0	25.0	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	—	—	—

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.73	0.54	4.91	0.01	1.09	0.28	1,182	4.39	1,203
Area	1.21	1.19	0.31	1.15	< 0.005	0.02	0.02	382	—	382
Energy	0.02	0.01	0.20	0.08	< 0.005	0.02	0.02	359	—	360
Water	—	—	—	—	—	—	—	12.1	—	16.4
Waste	—	—	—	—	—	—	—	7.19	—	25.2
Refrig.	—	—	—	—	—	—	—	—	0.33	0.33
Total	2.02	1.93	1.05	6.14	0.01	1.13	0.32	1,942	4.72	1,987
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	0.77	0.72	0.61	4.89	0.01	1.09	0.28	1,142	0.11	1,160
Area	1.12	1.10	0.30	0.13	< 0.005	0.02	0.02	379	—	379
Energy	0.02	0.01	0.20	0.08	< 0.005	0.02	0.02	359	—	360
Water	—	—	—	—	—	—	—	12.1	—	16.4

Waste	—	—	—	—	—	—	—	7.19	—	25.2
Refrig.	—	—	—	—	—	—	—	—	0.33	0.33
Total	1.91	1.83	1.10	5.10	0.01	1.13	0.32	1,899	0.45	1,941
Average Daily	—	—	—	—	—	—	—	—	—	—
Mobile	0.75	0.70	0.58	4.68	0.01	1.06	0.28	1,122	1.85	1,141
Area	1.13	1.13	0.03	0.51	< 0.005	< 0.005	< 0.005	27.3	—	27.3
Energy	0.02	0.01	0.20	0.08	< 0.005	0.02	0.02	359	—	360
Water	—	—	—	—	—	—	—	12.1	—	16.4
Waste	—	—	—	—	—	—	—	7.19	—	25.2
Refrig.	—	—	—	—	—	—	—	—	0.33	0.33
Total	1.90	1.84	0.80	5.28	0.01	1.08	0.29	1,528	2.19	1,571
Annual	—	—	—	—	—	—	—	—	—	—
Mobile	0.14	0.13	0.11	0.85	< 0.005	0.19	0.05	186	0.31	189
Area	0.21	0.21	< 0.005	0.09	< 0.005	< 0.005	< 0.005	4.52	—	4.53
Energy	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	< 0.005	59.4	—	59.6
Water	—	—	—	—	—	—	—	2.00	—	2.72
Waste	—	—	—	—	—	—	—	1.19	—	4.17
Refrig.	—	—	—	—	—	—	—	—	0.06	0.06
Total	0.35	0.34	0.15	0.96	< 0.005	0.20	0.05	253	0.36	260

3. Construction Emissions Details

3.1. Demolition (2025) - 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	PM10T	PM2.5T	CO2T	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	4.51	18.2	0.03	0.06	0.06	3,425	—	3,437
Demolition	—	—	—	—	—	0.38	0.06	—	—	—
Onsite truck	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	0.25	1.00	< 0.005	< 0.005	< 0.005	188	—	188
Demolition	—	—	—	—	—	0.02	< 0.005	—	—	—
Onsite truck	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	0.05	0.18	< 0.005	< 0.005	< 0.005	31.1	—	31.2
Demolition	—	—	—	—	—	< 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
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.86	0.00	0.20	0.05	192	0.02	194
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.67	0.16	< 0.005	0.14	0.04	494	0.03	518
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.01	< 0.005	10.6	0.02	10.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	0.01	< 0.005	27.1	0.03	28.4
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.75	< 0.005	1.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	4.48	< 0.005	4.70

3.3. Site Preparation (2025) - 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	PM10T	PM2.5T	CO2T	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	0.82	8.76	0.02	0.03	0.03	1,668	—	1,674
Dust From Material Movement	—	—	—	—	—	2.56	1.31	—	—	—
Onsite truck	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	0.02	0.24	< 0.005	< 0.005	< 0.005	45.7	—	45.9
Dust From Material Movement	—	—	—	—	—	0.07	0.04	—	—	—
Onsite truck	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	< 0.005	0.04	< 0.005	< 0.005	< 0.005	7.57	—	7.59
Dust From Material Movement	—	—	—	—	—	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
Offsite	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.29	0.00	0.07	0.02	63.9	0.01	64.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.05	0.02	1.39	0.33	0.01	0.28	0.09	1,018	0.06	1,066
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.76	< 0.005	1.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	0.01	< 0.005	27.9	0.03	29.2
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.29	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	4.62	< 0.005	4.84

3.5. Grading (2025) - 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	PM10T	PM2.5T	CO2T	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.29	2.04	17.8	0.03	0.06	0.06	2,959	—	2,970
Dust From Material Movement	—	—	—	—	—	2.76	1.34	—	—	—
Onsite truck	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	0.11	0.97	< 0.005	< 0.005	< 0.005	162	—	163
Dust From Material Movement	—	—	—	—	—	0.15	0.07	—	—	—
Onsite truck	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	0.18	< 0.005	< 0.005	< 0.005	26.8	—	26.9
Dust From Material Movement	—	—	—	—	—	0.03	0.01	—	—	—
Onsite truck	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	0.07	0.06	0.08	0.86	0.00	0.20	0.05	192	0.02	194
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.01	< 0.005	10.6	0.02	10.7
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.75	< 0.005	1.78
Vendor	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

3.7. Building Construction (2025) - 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	PM10T	PM2.5T	CO2T	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	0.04	2,398	—	2,406
Onsite truck	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	0.23	2.03	14.3	0.02	0.04	0.04	2,398	—	2,406
Onsite truck	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	0.13	1.17	8.23	0.01	0.02	0.02	1,379	—	1,384
Onsite truck	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	0.21	1.50	< 0.005	< 0.005	< 0.005	228	—	229
Onsite truck	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	0.03	0.03	0.03	0.41	0.00	0.08	0.02	86.6	0.35	88.0
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	0.02	0.01	59.3	0.17	62.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.08	0.02	82.8	0.01	83.9
Vendor	< 0.005	< 0.005	0.08	0.02	< 0.005	0.02	0.01	59.3	< 0.005	62.0

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.21	0.00	0.05	0.01	48.0	0.09	48.7
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	0.01	< 0.005	34.1	0.04	35.7
Hauling	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	0.04	0.00	0.01	< 0.005	7.94	0.01	8.06
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	5.65	0.01	5.91
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. 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	PM10T	PM2.5T	CO2T	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	0.04	2,397	—	2,405
Onsite truck	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	0.11	0.78	< 0.005	< 0.005	< 0.005	131	—	132
Onsite truck	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	0.14	< 0.005	< 0.005	< 0.005	21.7	—	21.8
Onsite truck	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	0.03	0.03	0.03	0.34	0.00	0.08	0.02	81.2	0.01	82.2
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	0.02	< 0.005	58.3	< 0.005	60.9
Hauling	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	< 0.005	< 0.005	4.48	0.01	4.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.20	< 0.005	3.34
Hauling	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	< 0.005	< 0.005	0.74	< 0.005	0.75
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.53	< 0.005	0.55
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (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	PM10T	PM2.5T	CO2T	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	1.51	8.87	0.01	0.02	0.02	1,350	—	1,355
Paving	0.14	0.14	—	—	—	—	—	—	—	—
Onsite truck	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	0.07	0.44	< 0.005	< 0.005	< 0.005	66.6	—	66.8
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
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.08	< 0.005	< 0.005	< 0.005	11.0	—	11.1
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
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.06	0.00	0.26	0.06	251	0.03	254
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.01	< 0.005	12.4	0.02	12.6
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	2.06	< 0.005	2.09
Vendor	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

3.13. 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	PM10T	PM2.5T	CO2T	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	< 0.005	134	—	134
Architectural Coatings	16.8	16.8	—	—	—	—	—	—	—	—
Onsite truck	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	0.03	0.05	< 0.005	< 0.005	< 0.005	6.58	—	6.61
Architectural Coatings	0.83	0.83	—	—	—	—	—	—	—	—
Onsite truck	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	0.01	< 0.005	< 0.005	< 0.005	1.09	—	1.09
Architectural Coatings	0.15	0.15	—	—	—	—	—	—	—	—
Onsite truck	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	0.07	0.00	0.02	< 0.005	16.2	< 0.005	16.4
Vendor	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
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.81	< 0.005	0.82

Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.13	< 0.005	0.14
Vendor	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

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.78	0.73	0.54	4.91	0.01	1.09	0.28	1,182	4.39	1,203
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.78	0.73	0.54	4.91	0.01	1.09	0.28	1,182	4.39	1,203
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.77	0.72	0.61	4.89	0.01	1.09	0.28	1,142	0.11	1,160
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.77	0.72	0.61	4.89	0.01	1.09	0.28	1,142	0.11	1,160
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.14	0.13	0.11	0.85	< 0.005	0.19	0.05	186	0.31	189

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.14	0.13	0.11	0.85	< 0.005	0.19	0.05	186	0.31	189

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	108	—	109
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	—	0.00
Total	—	—	—	—	—	—	—	108	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	108	—	109
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	—	0.00
Total	—	—	—	—	—	—	—	108	—	109
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	17.9	—	18.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	—	0.00
Total	—	—	—	—	—	—	—	17.9	—	18.0

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.02	0.01	0.20	0.08	< 0.005	0.02	0.02	251	—	251
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.20	0.08	< 0.005	0.02	0.02	251	—	251
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.02	0.01	0.20	0.08	< 0.005	0.02	0.02	251	—	251
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.20	0.08	< 0.005	0.02	0.02	251	—	251
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	< 0.005	41.5	—	41.6
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	< 0.005	41.5	—	41.6

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.03	0.02	0.30	0.13	< 0.005	0.02	0.02	379	—	379
Consumer Products	1.00	1.00	—	—	—	—	—	—	—	—

Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.09	0.01	1.02	< 0.005	< 0.005	< 0.005	2.73	—	2.74
Total	1.21	1.19	0.31	1.15	< 0.005	0.02	0.02	382	—	382
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.03	0.02	0.30	0.13	< 0.005	0.02	0.02	379	—	379
Consumer Products	1.00	1.00	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—
Total	1.12	1.10	0.30	0.13	< 0.005	0.02	0.02	379	—	379
Annual	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.30	—	4.30
Consumer Products	0.18	0.18	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.09	< 0.005	< 0.005	< 0.005	0.22	—	0.22
Total	0.21	0.21	< 0.005	0.09	< 0.005	< 0.005	< 0.005	4.52	—	4.53

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	12.1	—	16.4

Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	—	0.00
Total	—	—	—	—	—	—	—	12.1	—	16.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	12.1	—	16.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	—	0.00
Total	—	—	—	—	—	—	—	12.1	—	16.4
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	2.00	—	2.72
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	—	0.00
Total	—	—	—	—	—	—	—	2.00	—	2.72

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	7.19	—	25.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	—	0.00
Total	—	—	—	—	—	—	—	7.19	—	25.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	7.19	—	25.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	—	0.00
Total	—	—	—	—	—	—	—	7.19	—	25.2
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	1.19	—	4.17
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00	—	0.00
Total	—	—	—	—	—	—	—	1.19	—	4.17

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	PM10T	PM2.5T	CO2T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	0.33	0.33
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	0.33	0.33
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	0.06	0.06

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	PM10T	PM2.5T	CO2T	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	PM10T	PM2.5T	CO2T	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	PM10T	PM2.5T	CO2T	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	PM10T	PM2.5T	CO2T	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	PM10T	PM2.5T	CO2T	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	PM10T	PM2.5T	CO2T	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	1/1/2025	1/29/2025	5.00	20.0	—
Site Preparation	Site Preparation	1/30/2025	2/12/2025	5.00	10.0	—
Grading	Grading	2/13/2025	3/12/2025	5.00	20.0	—
Building Construction	Building Construction	3/13/2025	1/28/2026	5.00	230	—
Paving	Paving	1/29/2026	2/23/2026	5.00	18.0	—
Architectural Coating	Architectural Coating	2/24/2026	3/19/2026	5.00	18.0	—

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	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40

Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Tier 4 Final	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	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	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT

Demolition	Hauling	6.80	21.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	14.0	21.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	21.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	6.48	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	1.92	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	21.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	21.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.30	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	21.0	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	94,225	31,408	0.00	0.00	2,431

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	543	—
Site Preparation	0.00	1,000	5.00	0.00	—
Grading	0.00	0.00	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.13

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.20	0%

Other Asphalt Surfaces	0.93	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2026	0.00	346	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	170	172	154	61,279	1,513	1,529	1,371	545,734
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	18
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

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)
94225.275	31,408	0.00	0.00	2,431

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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	114,125	346	0.0330	0.0040	781,664
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	682,262	1,264,027

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	13.3	—
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	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	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

5.16. 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. Biomass Cover Type

5.18.1.1. Unmitigated

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)

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	14.2	annual days of extreme heat
Extreme Precipitation	7.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	34.8	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	50.5
AQ-PM	42.5
AQ-DPM	85.5
Drinking Water	60.0
Lead Risk Housing	32.0

Pesticides	0.00
Toxic Releases	30.1
Traffic	78.5
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	50.1
Haz Waste Facilities/Generators	77.6
Impaired Water Bodies	87.0
Solid Waste	0.00
Sensitive Population	—
Asthma	11.9
Cardio-vascular	42.4
Low Birth Weights	58.2
Socioeconomic Factor Indicators	—
Education	6.95
Housing	50.7
Linguistic	10.4
Poverty	19.9
Unemployment	33.6

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	77.92891056
Employed	57.44899269
Median HI	87.06531503
Education	—

Bachelor's or higher	75.4010009
High school enrollment	100
Preschool enrollment	85.06351854
Transportation	—
Auto Access	75.69613756
Active commuting	23.70075709
Social	—
2-parent households	74.97754395
Voting	83.95996407
Neighborhood	—
Alcohol availability	59.00166816
Park access	81.35506224
Retail density	51.26395483
Supermarket access	73.95098165
Tree canopy	67.2783267
Housing	—
Homeownership	68.76684204
Housing habitability	61.31143334
Low-inc homeowner severe housing cost burden	47.22186578
Low-inc renter severe housing cost burden	19.49185166
Uncrowded housing	76.50455537
Health Outcomes	—
Insured adults	83.11305017
Arthritis	24.0
Asthma ER Admissions	84.2
High Blood Pressure	23.1
Cancer (excluding skin)	14.0
Asthma	51.9

Coronary Heart Disease	34.0
Chronic Obstructive Pulmonary Disease	40.0
Diagnosed Diabetes	72.3
Life Expectancy at Birth	75.7
Cognitively Disabled	11.3
Physically Disabled	46.5
Heart Attack ER Admissions	54.2
Mental Health Not Good	68.6
Chronic Kidney Disease	64.9
Obesity	66.6
Pedestrian Injuries	95.4
Physical Health Not Good	65.0
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	33.9
Current Smoker	69.0
No Leisure Time for Physical Activity	72.6
Climate Change Exposures	—
Wildfire Risk	30.1
SLR Inundation Area	0.0
Children	81.0
Elderly	16.0
English Speaking	81.4
Foreign-born	36.1
Outdoor Workers	77.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	79.6
Traffic Density	69.1

Traffic Access	23.0
Other Indices	—
Hardship	29.5
Other Decision Support	—
2016 Voting	93.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	33.0
Healthy Places Index Score for Project Location (b)	85.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
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	The project is anticipated to develop four versions of SFR residences. SFR building sq ft for 18 lots is based on separate building plans (Plan 1: 2,011 sf; Plan 2: 2,488 SF; Plan 3: 2,651; and Plan 4: 3,056) per site plan= 46,531 sq ft SFR + HOA acreage per site plan= 3.69 acres CalEEMod assumes 54 residents but per Thousand Oaks Housing Element sourced from 2010 census, the generation rate is 2.75 people per household which equals 50 residents. HOA lot Acreage =0.11 acres Other Asphalt Surfaces represents the private road construction with an area of 0.93 acres (per site plan). Landscape Area assumes 80,000 sq ft: Lot 1-18: 75,000 sq ft HOA Lot: 5,000 sq ft
Construction: Demolition	Existing residence approximately 3,000 Hardscape removal: 7,616.53 sq ft of hardscape removal at assumed depth of 3 inches equals 1904.1325 cubic feet. One cubic foot of concrete is assumed to be 150 pounds (Table A-7, Characterization of Building-Related Construction and Demolition Debris in the United States) 1904.1325 x 150 pounds = 285,619.875 lbs / 2,000 tons/lb = 142.81 tons of hardscape
Construction: Trips and VMT	Simi Valley Landfill is approximately 21 driving miles away according to Google Maps. CalEEMod calculates that the demolition removal of the 3,000-sf structure would require 2 one-way trips per day (1 laden trip per day) for 20 days. Default haul truck capacity is 20 tons. 1 trip per day x 20 days at 20 tons each = 400 tons of material. 7,616.53 sq ft of hardscape removal at assumed depth of 3 inches equals 1904.1325 cubic feet. One cubic foot of concrete is assumed to be 150 pounds (Table A-7, Characterization of Building-Related Construction and Demolition Debris in the United States). 1904.1325 x 150 pounds = 285,619.875 lbs / 2,000 tons/lb = 142.81 tons of hardscape Demolition total at 542.81 tons of material. Export/Import expected to be balanced on site, but there is potential to need to remove and export unsuitable rock material, estimated to be 1,000 cy. Requires 70 truck trips using 14 cy trucks (14 truck trips per day over the five day site preparation period).

Operations: Hearths	Assumes natural gas fireplaces.
Construction: Construction Phases	Using 2026 as operational year.
Construction: Off-Road Equipment	Two pieces of equipment (Rubber Tired Dover and Tractor/Loader/Backhoe) per day for Site Preparation is adequate to serve the 4.61-acre Project site.
Operations: Vehicle Data	Swimming pool is a private community pool for the 18 single-family residences. No trips would be generated from the land use.
Characteristics: Utility Information	City of Thousand

APPENDIX B

Construction Health Risk Assessment

July 15, 2024

Envicom Corporation
4165 East Thousand Oaks Boulevard, Suite 290
Westlake Village, California 91362
Attn: Travis Cullen

Re: 1651 Lynn Road Residential Subdivision Project: Construction Health Risk Assessment

Mr. Cullen:

Per your request, Air Quality Dynamics has prepared a health risk assessment (HRA) to quantify the impact of diesel particulate matter (DPM), which is identified as a toxic air contaminant pursuant to California Code of Regulations Section 93001, associated with the generation of off-road equipment emissions during construction of the proposed Project. This was done to supplement the Air Quality Assessment prepared by Envicom Corporation which evaluated criteria pollutant exposures associated with Project construction.

The HRA quantifies both carcinogenic risks and noncarcinogenic hazards for the maximum exposed sensitive receptor located in proximity of the Project site. A sensitive receptor is any residence including schools, daycare centers and health facilities or similar live-in housing. To ensure a viable quantification of exposure, the technical approach used in the preparation of the HRA was composed of all relevant and appropriate assessment and dispersion modeling methodologies presented by the U.S. Environmental Protection Agency (USEPA), California Environmental Protection Agency and Ventura County Air Pollution Control District (VCAPCD).

Results of the HRA showed that carcinogenic risk and noncarcinogenic hazard estimates for the maximum exposed sensitive receptor did not exceed identified significance thresholds. The following discussion outlines the methodology utilized to conduct the HRA and summarizes the protocol used to evaluate DPM exposures.

Source Identification

The Project proposes to subdivide 1651 Lynn Road (Assessor's Parcel Numbers 660-0-030-165 and 660-0-030-175) to accommodate the construction of 18 single-family residences, a bioretention basin/rain garden and a private road in the City of Thousand Oaks. The Project is located at the northwest corner of the intersection of Lynn Road and Blair Court, on an approximately 4.61-acre residential lot and is comprised of a vacant single-family residence with associated driveway and hardscape features. The remainder of the Project site is undeveloped. The Project site is zoned Rural-Exclusive (R-E) with a current General Plan land use designation of Low Density Residential (the proposed General Plan 2045 land use designation is Neighborhood Low 2 Residential).

The Project site is bordered by Lynn Road to the south, Blair Court to the east and single-family residences to the north and west. Considered sensitive land uses, the following list identifies the location of residential occupancies situated within 500 feet of the Project site.

- Giant Oak Avenue, Blair Court, Susan Drive (north)
- Lynn Road, Live Oak Road (south)
- Blair Court, Meadowglen Court, Susan Drive (east)
- North Ellis Place, South Ellis Place, South Jerome Avenue, Rivendell Circle (west)

Site development will involve the demolition of the existing single-family residence, as well as the removal of 21 oak trees. Once demolition activities are complete, construction would grade the Project site and construct the proposed 19 subdivided lots and private road with associated utilities and service systems. Rough grade quantities are estimated to be approximately 15,000 cubic yards (cy) of cut and 15,000 cy of fill, which would be balanced on the Project site. While soil materials would be balanced across the site, there is a potential for the over excavation and removal of approximately 1,000 cy of underlying artificial fill and rock material considered unsuitable for on-site use.

Demolition and construction of the Project is anticipated to occur over approximately 15 months with construction beginning in 2025 and its completion in 2026. Figure 1 presents an aerial photograph of the Project location and adjoining community.

Figure 1
Site Location /Vicinity Aerial Photograph



Source Characterization

For on-site construction, emission estimates were based upon the Ventura County profile generated by the California Emissions Estimator Model (CalEEMod) prepared by Envicom Corporation. CalEEMod is an emissions model which provides a uniform platform quantifying pollutant emissions associated with project construction and operation. The model is considered a comprehensive tool for quantifying air quality impacts from projects located throughout the State prepared under the auspices of the California Environmental Quality Act (CEQA).

In 1998, diesel exhaust emissions in the PM_{10} particle size range were identified by the State as a toxic air contaminant. As such, the off-road PM_{10} exhaust estimates reported by CalEEMod, which assumed diesel-powered construction equipment will meet USEPA-certified Tier 4 Final emission standards, were used to assess DPM exposures. The emission rates for both winter and summer scenarios were found to be commensurate.

To assess localized impacts, construction phase, calendar year and number of days associated with each activity were identified to produce an average daily emission rate. Construction operations are reported to occur for 316 days over a 443 day period (1.21 years) based upon a 5 day per week operational schedule.

Table 1 provides a summary of estimated average daily particulate emissions associated with each identified construction phase and year. Attachment B presents the emission calculation worksheet used to quantify pollutant source strength. Excerpts from the CalEEMod output file which identify construction phase timelines and associated emission rates are provided in Attachment C.

Table 1
Average Daily Emissions/PM_{10}

Construction Phase/Year	Emissions (Lbs/Day)
Demolition/2025	0.0633
Site Preparation/2025	0.0314
Grading/2025	0.0555
Building Construction/2025	0.0431
Building Construction/2026	0.0431
Paving/2026	0.0236
Architectural Coating/2026	0.0023
Average Daily Emissions	**0.0414**

Exposure Quantification

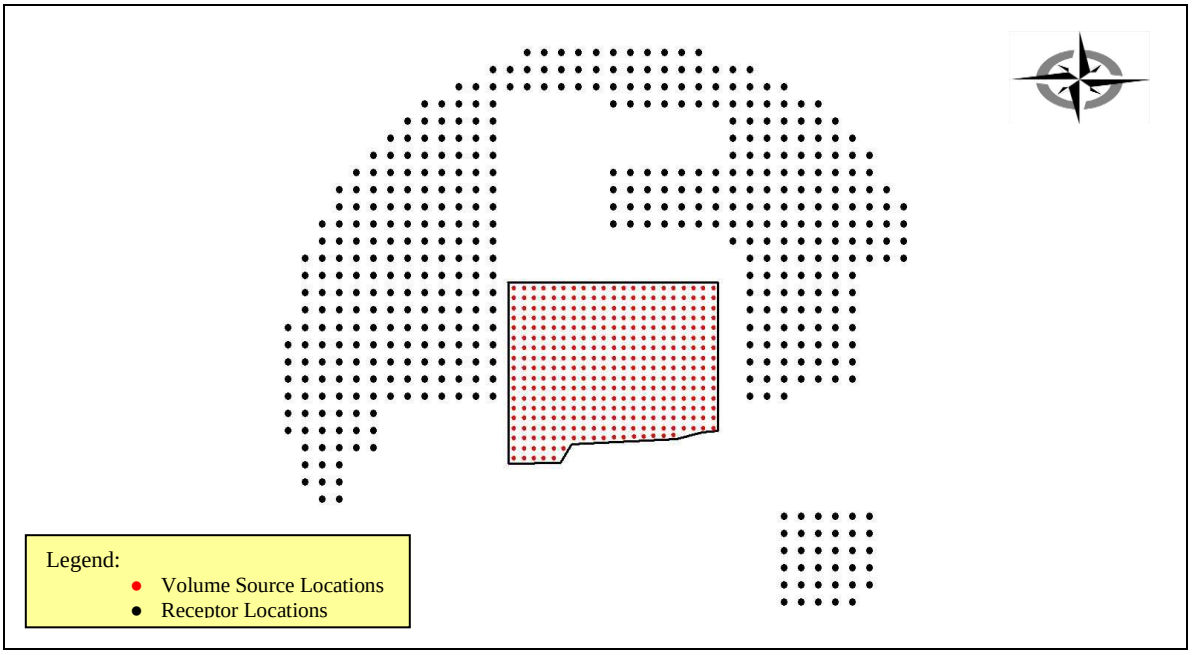
In order to assess the impact of DPM emissions, air quality modeling utilizing the American Meteorological Society (AMS)/EPA Regulatory Model (AERMOD) was performed. AERMOD

is a steady-state Gaussian plume model applicable to directly emitted air pollutants that employs best state-of-practice parameterizations for characterizing meteorological influences and atmospheric dispersion. AERMOD is the USEPA guideline model for the assessment of near-field pollutant dispersion.

Source treatment outlined in the South Coast Air Quality Management District's Localized Significance Threshold (LST) methodology was utilized whereby exhaust emissions from construction equipment were treated as a set of side-by-side elevated volume sources with a release height of five meters and an initial vertical (sigma z) dimension of 1.4 meters. The elevated source characterization accounts for a mid-range plume rise height associated with exhaust stack emissions for typical off-road equipment inventories. Horizontal (sigma y) parameters were produced by dividing source separation distances by a standard deviation of 2.15.

To accommodate a Cartesian grid format, direction dependent calculations were obtained by identifying the universal transverse mercator (UTM) coordinates for each volume source location. UTM coordinates were also identified for residential receptors located within 500 feet of the Project site. Flagpole heights were not assigned. Terrain height adjustments were incorporated into the modeling exercise to account for the discrepancy in source-receptor elevations. A graphical representation of the source-receptor grid network is presented in Figure 2.

Figure 2
Source-Receptor Grid Network



Refined air dispersion models require meteorological information to account for local atmospheric conditions. Due to their sensitivity to individual meteorological parameters such as wind speed and direction, the USEPA recommends that meteorological data used as input into

dispersion models be selected on the basis of relative spatial and temporal conditions that exist in the area of concern. In response to this recommendation, meteorological data from the VCAPCD Thousand Oaks monitoring station which is located 3.4 miles northeast of the Project site was used to represent local weather conditions and prevailing winds. For the assessment of DPM exposures, maximum concentrations were produced by incorporating all three years (i.e., 2015 through 2017) of available data.

A model scalar value of 1 was assigned to account for emissions generated during construction related activity corresponding to 8 hours per day as reported in the CalEEMod construction profile from 8 a.m. to 4 p.m. (ending hours 9 to 16). A scalar value of 0 was used for non-operational hours. A copy of the AERMOD dispersion model output file is provided in Attachment D.

Risk Characterization

Carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Any exposure, therefore, will have some associated risk. As a result, the State has established a threshold of one in one hundred thousand (1.0E-05) as a level posing no significant risk for exposures to carcinogens regulated under the Safe Drinking Water and Toxic Enforcement Act (Proposition 65). This threshold is also consistent with the maximum incremental cancer risk established by the VCAPCD for projects prepared under the auspices of CEQA.

Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. Under a deterministic approach (i.e., point estimate methodology), the cancer risk probability is determined by multiplying the chemical's annual concentration by its unit risk factor (URF). The URF is a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It represents an upper-bound estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu g/m^3$) over a 70 year lifetime. The URF and corresponding cancer potency factor for DPM utilized in the assessment was obtained from the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values*.

To effectively quantify dose, the Office of Environmental Health Hazard Assessment (OEHHA) recommends the incorporation of several discrete exposure variates. To account for upper-bound exposures, lifetime risk values were adjusted to account for an exposure frequency of 261 days per year for a period of 1.21 years (i.e., 0.25 years for the third trimester and 0.96 years for the 0 to 2 year age group). Point estimates for daily breathing rates representing the 95th percentile of 361 and 1090 L/kg-day for the identified age groups were utilized and incorporated into the following dose algorithm.

$$Dose_{air} = C_{air} \times \{BR/BW\} \times A \times EF \times 10^{-6}$$

Where:

$Dose_{air}$ = *dose through inhalation (mg/kg/day)*
C_{air} = *concentration of contaminant in air (µg/m^3)*
{BR/BW} = *daily breathing rate normalized to body weight (L/kg body weight/day)*
A = *inhalation absorption factor (unitless)*
EF = *exposure frequency (days/365 days)*
10^{-6} = *micrograms to milligrams conversion*

The inhalation dose estimates, corresponding age sensitivity factors (i.e., 10 for the third trimester and ages 0 to 2 years) and residential fractional adjustments (i.e., 0.85 for the third trimester and ages 0 to 2 years) were incorporated into the following equation to produce carcinogenic risk estimates for ages commensurate with the reported exposure durations.

$$Risk_{inh} = Dose_{air} \times CPF \times ASF \times ED/AT \times FAH$$

Where:

$Risk_{inh}$ = *inhalation cancer risk*
$Dose_{air}$ = *daily inhalation dose (mg/kg/day)*
CPF = *inhalation cancer potency factor (mg/kg/day^{-1})*
ASF = *age sensitivity factor for the specified age group (unitless)*
ED = *exposure duration for specified age group (years)*
AT = *averaging time (years)*
FAH = *fraction of time at home (unitless)*

Table 2 presents the carcinogenic risk estimates for the maximum exposed residential receptor which is located immediately east of the Project site along Susan Drive. Attachment A, Tables A1 and A2, column b identify the predicted DPM concentration, columns f-h, present the URF, corresponding cancer potency factor and dose estimates for the exposure scenarios considered in the assessment. The cancer risk estimate is presented in column i.

Table 2
Carcinogenic Risk / Maximum Exposed Residential Receptor

Age Group	Risk
Third Trimester	1.4E-07
0 to 2 years	1.6E-06
Total	**1.7E-06**

Note: 1.7E-06 denotes cases of cancer of 0.17 in one hundred thousand (100,000) individuals exposed. The individual risk values by age group are rounded values. The total risk value represents the actual summation of risk for the identified occupancy.

As noted above, the cancer risk for the maximum exposed residential receptor is predicted to be below the significance threshold of one in one hundred thousand (1.0E-05).

An evaluation of the potential noncancer effects of DPM exposure was also conducted. Under the point estimate approach, adverse health effects are evaluated by comparing the pollutant

concentration with the appropriate Reference Exposure Level (REL). The chronic REL presented in the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* was considered in the assessment. There are no available acute/8-hour reference exposure levels for DPM.

To quantify noncarcinogenic impacts, the hazard index approach was used. The hazard index assumes that subthreshold exposures adversely affect a specific organ or organ system (i.e., toxicological endpoint). To calculate the hazard index, the pollutant concentration or dose is divided by its toxicity value. Should the total equal or exceed one (i.e., unity), a health hazard is presumed to exist. No exposure frequency or duration adjustments are considered for noncarcinogenic exposures.

Table 3 presents the hazard index value for the identified maximum exposed residential receptor. Attachment A, Tables A1 and A2, column j present the REL used in the evaluation of chronic noncarcinogenic exposures. The noncancer hazard index generated from off-road equipment activity is presented in column l.

Table 3
Noncarcinogenic Hazard / Maximum Exposed Residential Receptor

Receptor	Hazard
Residential	3.3E-03

Note:3.3E-03 is commensurate with a numeric value of 0.0033.

As noted above, the hazard index for the respiratory endpoint totaled less than one for the maximum exposed residential receptor.

Conclusion

The carcinogenic risk for the maximum exposed residential receptor was predicted to be below the significance threshold of one in one hundred thousand (1.0E-05). The noncarcinogenic hazard index for the respiratory endpoint was predicted to be less than one. Based upon the carcinogenic risk and noncarcinogenic hazard estimates, the HRA demonstrates that DPM emissions associated with construction of the Project will result in less than significant impacts.

I can be reached at (818) 703-3294 should you have any questions or require additional information.

Sincerely,

Bill Piazza

Attachment A: Carcinogenic Risk/Noncarcinogenic Hazard Calculation Worksheet
Attachment B: Emission Calculation Worksheet
Attachment C: CalEEMod Output File
Attachment D: AERMOD Dispersion Model Output File
Attachment E: List of References

ATTACHMENT A

Carcinogenic Risk/Noncarcinogenic Hazard Calculation Worksheet

Table A1
Quantification of Carcinogenic Risks and Noncarcinogenic Hazard
Susan Drive / Maximum Exposed Residential Receptor (Third Trimester)

Source	Mass GLC		Weight Fraction	Contaminant	Carcinogenic Risk				Noncarcinogenic Hazard		
					URF	CPF	DOSE	RISK	REL	RfD	RESP
	(ug/m^3)	(mg/m^3)			$(ug/m^3)^{-1}$	$(mg/kg/day)^{-1}$	(mg/kg-day)		(ug/m^3)	(mg/kg/day)	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
On-Site Exhaust	0.01669	1.67E-05	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	4.3E-06	1.4E-07	5.0E+00	1.4E-03	3.3E-03
TOTAL								1.4E-07			3.3E-03

Note:

Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	261
exposure duration (years)	0.25
inhalation rate (L/kg-day))	361
inhalation absorption factor	1
averaging time (years)	70
fraction of time at home	0.85
age sensitivity factor	10

Table A2
Quantification of Carcinogenic Risks and Noncarcinogenic Hazard
Susan Drive / Maximum Exposed Residential Receptor (0 to 2 Year Age Group)

Source	Mass GLC		Weight Fraction	Contaminant	Carcinogenic Risk				Noncarcinogenic Hazard		
					URF	CPF	DOSE	RISK	REL	RfD	RESP
	(ug/m^3)	(mg/m^3)			$(ug/m^3)^{-1}$	$(mg/kg/day)^{-1}$	(mg/kg-day)		(ug/m^3)	(mg/kg/day)	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
On-Site Exhaust	0.01669	1.67E-05	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	1.3E-05	1.6E-06	5.0E+00	1.4E-03	3.3E-03
TOTAL								1.6E-06			3.3E-03

Note:

Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	261
exposure duration (years)	0.96
inhalation rate (L/kg-day))	1090
inhalation absorption factor	1
averaging time (years)	70
fraction of time at home	0.85
age sensitivity factor	10

ATTACHMENT B

Emission Calculation Worksheet

Emission Calculation Worksheet

CalEEMod Version 2022.1.1.26

Emissions	Phase	Start/End Dates	Lb/Day	# Days	Emissions
On-Site Exhaust PM10	Demolition	01/01/25 to 01/29/25	0.0633	20	1.27
	Site Preparation	01/30/25 to 02/12/25	0.0314	10	0.31
	Grading	02/13/25 to 03/12/25	0.0555	20	1.11
	Building Construction	03/13/25 to 12/31/25	0.0431	210	9.06
	Building Construction	01/01/26 to 01/28/26	0.0431	20	0.86
	Paving	01/29/26 to 02/23/26	0.0236	18	0.42
	Architectural Coating	02/24/26 to 03/19/26	0.0023	18	0.04
				316	13.08
	Average Daily Construction (Lb/Day)				0.0414

Exhaust PM10			Combustion mass	Combustion g/s/source
	Combustion Sources	343	0.0414	1.9003E-06

ATTACHMENT C

CalEEMod Output File

1. Basic Project Information

1.1 Basic Project Information

Data Field	Value
Project Name	1651 Lynn Road
Construction Start Date	1/1/2025
Operational Year	2026
Lead Agency	
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.7
Precipitation (days)	1.6
Location	Lynn Rd, California, USA
County	Ventura
City	Thousand Oaks
Air District	Ventura County APCD
Air Basin	South Central Coast
TAZ	3540
EDFZ	8
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.26

5. Activity Data

5.1 Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase
Demolition	Demolition	1/1/2025	1/29/2025	5	20
Site Preparation	Site Preparation	1/30/2025	2/12/2025	5	10
Grading	Grading	2/13/2025	3/12/2025	5	20
Building Construction	Building Construction	3/13/2025	1/28/2026	5	230
Paving	Paving	1/29/2026	2/23/2026	5	18
Architectural Coating	Architectural Coating	2/24/2026	3/19/2026	5	18

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	Tier 4 Final	1	8	33	0.73
Demolition	Excavators	Diesel	Tier 4 Final	3	8	36	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2	8	367	0.4
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1	8	367	0.4
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1	8	84	0.37
Grading	Excavators	Diesel	Tier 4 Final	1	8	36	0.38
Grading	Graders	Diesel	Tier 4 Final	1	8	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1	8	367	0.4
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3	8	84	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1	7	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3	8	82	0.2
Building Construction	Generator Sets	Diesel	Tier 4 Final	1	8	14	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3	7	84	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1	8	46	0.45
Paving	Cement and Mortar Mixers	Diesel	Tier 4 Final	2	6	10	0.56
Paving	Pavers	Diesel	Tier 4 Final	1	8	81	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2	6	89	0.36
Paving	Rollers	Diesel	Tier 4 Final	2	6	36	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1	8	84	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1	6	37	0.48

3. Construction Emissions Details

3.1 Demolition (2025) - Unmitigated	
Location	PM10T
Onsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Off-Road Equipment	0.06326914038363249
Demolition	0.37747952371597876
Onsite truck	0
Average Daily	
Off-Road Equipment	0.00346680221280178
Demolition	0.020683809518683767
Onsite truck	0
Annual	
Off-Road Equipment	0.0006326914038363248
Demolition	0.003774795237159787 5
Onsite truck	0
Offsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Worker	0.19606410035078564
Vendor	0
Hauling	0.1355237383495264
Average Daily	
Worker	0.01073219969977299
Vendor	0
Hauling	0.007420277822925787
Annual	
Worker	0.0019586264452085707
Vendor	0
Hauling	0.001354200702683956

3. Construction Emissions Details

3.3 Site Preparation (2025) - Unmitigated	
Location	PM10T
Onsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Off-Road Equipment	0.03137266103041437
Dust From Material Movement	2.5576836398142277
Onsite truck	0
Average Daily	
Off-Road Equipment	0.0008595249597373799
Dust From Material Movement	0.070073524378472
Onsite truck	0
Annual	
Off-Road Equipment	0.00015686330515207183
Dust From Material Movement	0.012788418199071139
Onsite truck	0
Offsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Worker	0.06535470011692854
Vendor	0
Hauling	0.27901946130784855
Average Daily	
Worker	0.0017886999499621655
Vendor	0
Hauling	0.0076385212883059595
Annual	
Worker	0.0003264377408680952
Vendor	0
Hauling	0.0013940301351158375

3. Construction Emissions Details

3.5 Grading (2025) - Unmitigated	
Location	PM10T
Onsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Off-Road Equipment	0.055450666898820986
Dust From Material Movement	2.7622087154746486
Onsite truck	0
Average Daily	
Off-Road Equipment	0.0030383927067847115
Dust From Material Movement	0.15135390221778894
Onsite truck	0
Annual	
Off-Road Equipment	0.0005545066689882098
Dust From Material Movement	0.027622087154746486
Onsite truck	0
Offsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Worker	0.19606410035078564
Vendor	0
Hauling	0
Average Daily	
Worker	0.01073219969977299
Vendor	0
Hauling	0
Annual	
Worker	0.0019586264452085707
Vendor	0
Hauling	0

3. Construction Emissions Details

3.7 Building Construction (2025) - Unmitigated	
Location	PM10T
Onsite	
Daily, Summer (Max)	
Off-Road Equipment	0.04314203862421827
Onsite truck	0
Daily, Winter (Max)	
Off-Road Equipment	0.04314203862421827
Onsite truck	0
Average Daily	
Off-Road Equipment	0.024821446879687223
Onsite truck	0
Annual	
Off-Road Equipment	0.004529914055542919
Onsite truck	0
Offsite	
Daily, Summer (Max)	
Worker	0.08544081365086537
Vendor	0.01752794011685936
Hauling	0
Daily, Winter (Max)	
Worker	0.08544081365086537
Vendor	0.01752794011685936
Hauling	0
Average Daily	
Worker	0.04910721884425429
Vendor	0.010076276289144745
Hauling	0
Annual	
Worker	0.008962067439076408
Vendor	0.0018389204227689158
Hauling	0

3. Construction Emissions Details

3.9 Building Construction (2026) - Unmitigated	
Location	PM10T
Onsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Off-Road Equipment	0.04314203862421827
Onsite truck	0
Average Daily	
Off-Road Equipment	0.0023639473218749736
Onsite truck	0
Annual	
Off-Road Equipment	0.0004314203862421827
Onsite truck	0
Offsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Worker	0.08544081365086537
Vendor	0.01752794011685936
Hauling	0
Average Daily	
Worker	0.004676877985167075
Vendor	0.0009596453608709278
Hauling	0
Annual	
Worker	0.0008535302322929912
Vendor	0.00017513527835894433
Hauling	0

3. Construction Emissions Details

3.11 Paving (2026) - Unmitigated	
Location	PM10T
Onsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Off-Road Equipment	0.023577115620338387
Paving	
Onsite truck	0
Average Daily	
Off-Road Equipment	0.0011627070716879204
Paving	
Onsite truck	0
Annual	
Off-Road Equipment	0.0002121940405830455
Paving	
Onsite truck	0
Offsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Worker	0.26141880046771415
Vendor	0
Hauling	0
Average Daily	
Worker	0.012878639639727591
Vendor	0
Hauling	0
Annual	
Worker	0.0023503517342502852
Vendor	0
Hauling	0

3. Construction Emissions Details

3.13 Architectural Coating (2026) - Unmitigated	
Location	PM10T
Onsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Off-Road Equipment	0.0023492458113622628
Architectural Coatings	
Onsite truck	0
Average Daily	
Off-Road Equipment	0.00011585321809457734
Architectural Coatings	
Onsite truck	0
Annual	
Off-Road Equipment	0.00002114321230226036 4
Architectural Coatings	
Onsite truck	0
Offsite	
Daily, Summer (Max)	
Daily, Winter (Max)	
Worker	0.017088162730173072
Vendor	0
Hauling	0
Average Daily	
Worker	0.0008418380373300733
Vendor	0
Hauling	0
Annual	
Worker	0.0001536354418127384
Vendor	0
Hauling	0

ATTACHMENT D

AERMOD Dispersion Model Output File

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

                                        ***   MODEL SETUP OPTIONS SUMMARY   ***
- -

** Model Options Selected:
     * 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   343 Source(s),
       for Total of   1 Urban Area(s):
  Urban Population =   839784.0 ; Urban Roughness Length = 1.000 m
     * Urban Roughness Length of 1.0 Meter Used.
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Assumes No FLAGPOLE Receptor Heights.
     * The User Specified a Pollutant Type of: OTHER

**Model Calculates ANNUAL Averages Only

**This Run Includes: 343 Source(s);   1 Source Group(s); and   476 Receptor(s)

               with: 0 POINT(s), including
                          0 POINTCAP(s) and   0 POINTHOR(s)
                and: 343 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: 18081

**Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         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) =   11.80 ; 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 =   3.8 MB of RAM.

**Input Runstream File: E:\WD Passport\1651 lynn road\model\SETUP_2015-2017_DPM_T4.DTA
**Output Print File: E:\WD Passport\1651 lynn road\model\SETUP_2015-2017_DPM_T4.LST

**File for Summary of Results: E:\WD Passport\1651 lynn road\model\SETUP_2015-2017_DPM_T4.SUM

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
C_1	0	0.19003E-05	323386.5	3783427.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_2	0	0.19003E-05	323393.5	3783427.5	226.1	5.00	3.26	1.40	YES	HROFDY	NO
C_3	0	0.19003E-05	323400.5	3783427.5	226.1	5.00	3.26	1.40	YES	HROFDY	NO
C_4	0	0.19003E-05	323407.5	3783427.5	226.2	5.00	3.26	1.40	YES	HROFDY	NO
C_5	0	0.19003E-05	323414.5	3783427.5	226.2	5.00	3.26	1.40	YES	HROFDY	NO
C_6	0	0.19003E-05	323386.5	3783434.5	224.5	5.00	3.26	1.40	YES	HROFDY	NO
C_7	0	0.19003E-05	323393.5	3783434.5	224.9	5.00	3.26	1.40	YES	HROFDY	NO
C_8	0	0.19003E-05	323400.5	3783434.5	225.0	5.00	3.26	1.40	YES	HROFDY	NO
C_9	0	0.19003E-05	323407.5	3783434.5	225.0	5.00	3.26	1.40	YES	HROFDY	NO
C_10	0	0.19003E-05	323414.5	3783434.5	225.1	5.00	3.26	1.40	YES	HROFDY	NO
C_11	0	0.19003E-05	323421.5	3783434.5	225.2	5.00	3.26	1.40	YES	HROFDY	NO
C_12	0	0.19003E-05	323386.5	3783441.5	223.4	5.00	3.26	1.40	YES	HROFDY	NO
C_13	0	0.19003E-05	323393.5	3783441.5	223.7	5.00	3.26	1.40	YES	HROFDY	NO
C_14	0	0.19003E-05	323400.5	3783441.5	223.8	5.00	3.26	1.40	YES	HROFDY	NO
C_15	0	0.19003E-05	323407.5	3783441.5	223.9	5.00	3.26	1.40	YES	HROFDY	NO
C_16	0	0.19003E-05	323414.5	3783441.5	224.0	5.00	3.26	1.40	YES	HROFDY	NO
C_17	0	0.19003E-05	323421.5	3783441.5	224.0	5.00	3.26	1.40	YES	HROFDY	NO
C_18	0	0.19003E-05	323428.5	3783441.5	224.1	5.00	3.26	1.40	YES	HROFDY	NO
C_19	0	0.19003E-05	323435.5	3783441.5	224.2	5.00	3.26	1.40	YES	HROFDY	NO
C_20	0	0.19003E-05	323442.5	3783441.5	224.3	5.00	3.26	1.40	YES	HROFDY	NO
C_21	0	0.19003E-05	323449.5	3783441.6	224.4	5.00	3.26	1.40	YES	HROFDY	NO
C_22	0	0.19003E-05	323456.5	3783442.2	224.4	5.00	3.26	1.40	YES	HROFDY	NO
C_23	0	0.19003E-05	323463.5	3783442.4	224.5	5.00	3.26	1.40	YES	HROFDY	NO
C_24	0	0.19003E-05	323470.7	3783442.6	224.6	5.00	3.26	1.40	YES	HROFDY	NO
C_25	0	0.19003E-05	323477.5	3783442.8	224.8	5.00	3.26	1.40	YES	HROFDY	NO
C_26	0	0.19003E-05	323484.5	3783443.1	225.1	5.00	3.26	1.40	YES	HROFDY	NO
C_27	0	0.19003E-05	323491.5	3783443.4	225.3	5.00	3.26	1.40	YES	HROFDY	NO
C_28	0	0.19003E-05	323498.5	3783443.8	225.5	5.00	3.26	1.40	YES	HROFDY	NO
C_29	0	0.19003E-05	323386.5	3783448.5	222.2	5.00	3.26	1.40	YES	HROFDY	NO
C_30	0	0.19003E-05	323393.5	3783448.5	222.5	5.00	3.26	1.40	YES	HROFDY	NO
C_31	0	0.19003E-05	323400.5	3783448.5	222.6	5.00	3.26	1.40	YES	HROFDY	NO
C_32	0	0.19003E-05	323407.5	3783448.5	222.7	5.00	3.26	1.40	YES	HROFDY	NO
C_33	0	0.19003E-05	323414.5	3783448.5	222.8	5.00	3.26	1.40	YES	HROFDY	NO
C_34	0	0.19003E-05	323421.5	3783448.5	222.9	5.00	3.26	1.40	YES	HROFDY	NO
C_35	0	0.19003E-05	323428.5	3783448.5	223.1	5.00	3.26	1.40	YES	HROFDY	NO
C_36	0	0.19003E-05	323435.5	3783448.5	223.2	5.00	3.26	1.40	YES	HROFDY	NO
C_37	0	0.19003E-05	323442.5	3783448.5	223.3	5.00	3.26	1.40	YES	HROFDY	NO
C_38	0	0.19003E-05	323449.5	3783448.5	223.4	5.00	3.26	1.40	YES	HROFDY	NO
C_39	0	0.19003E-05	323456.5	3783448.5	223.5	5.00	3.26	1.40	YES	HROFDY	NO
C_40	0	0.19003E-05	323463.5	3783448.5	223.7	5.00	3.26	1.40	YES	HROFDY	NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
C_41	0	0.19003E-05	323470.5	3783448.5	223.8	5.00	3.26	1.40	YES	HROFDY	NO
C_42	0	0.19003E-05	323477.5	3783448.5	224.2	5.00	3.26	1.40	YES	HROFDY	NO
C_43	0	0.19003E-05	323484.5	3783448.5	224.5	5.00	3.26	1.40	YES	HROFDY	NO
C_44	0	0.19003E-05	323491.5	3783448.5	224.9	5.00	3.26	1.40	YES	HROFDY	NO
C_45	0	0.19003E-05	323498.5	3783448.5	225.2	5.00	3.26	1.40	YES	HROFDY	NO
C_46	0	0.19003E-05	323505.5	3783448.5	225.4	5.00	3.26	1.40	YES	HROFDY	NO

C_47	0	0.19003E-05	323512.5	3783448.5	225.5	5.00	3.26	1.40	YES	HROFDY	NO
C_48	0	0.19003E-05	323519.5	3783448.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_49	0	0.19003E-05	323526.5	3783448.5	225.4	5.00	3.26	1.40	YES	HROFDY	NO
C_50	0	0.19003E-05	323386.5	3783455.5	221.5	5.00	3.26	1.40	YES	HROFDY	NO
C_51	0	0.19003E-05	323393.5	3783455.5	221.8	5.00	3.26	1.40	YES	HROFDY	NO
C_52	0	0.19003E-05	323400.5	3783455.5	222.0	5.00	3.26	1.40	YES	HROFDY	NO
C_53	0	0.19003E-05	323407.5	3783455.5	222.2	5.00	3.26	1.40	YES	HROFDY	NO
C_54	0	0.19003E-05	323414.5	3783455.5	222.3	5.00	3.26	1.40	YES	HROFDY	NO
C_55	0	0.19003E-05	323421.5	3783455.5	222.5	5.00	3.26	1.40	YES	HROFDY	NO
C_56	0	0.19003E-05	323428.5	3783455.5	222.7	5.00	3.26	1.40	YES	HROFDY	NO
C_57	0	0.19003E-05	323435.5	3783455.5	222.9	5.00	3.26	1.40	YES	HROFDY	NO
C_58	0	0.19003E-05	323442.5	3783455.5	223.1	5.00	3.26	1.40	YES	HROFDY	NO
C_59	0	0.19003E-05	323449.5	3783455.5	223.3	5.00	3.26	1.40	YES	HROFDY	NO
C_60	0	0.19003E-05	323456.5	3783455.5	223.5	5.00	3.26	1.40	YES	HROFDY	NO
C_61	0	0.19003E-05	323463.5	3783455.5	223.7	5.00	3.26	1.40	YES	HROFDY	NO
C_62	0	0.19003E-05	323470.5	3783455.5	223.9	5.00	3.26	1.40	YES	HROFDY	NO
C_63	0	0.19003E-05	323477.5	3783455.5	224.3	5.00	3.26	1.40	YES	HROFDY	NO
C_64	0	0.19003E-05	323484.5	3783455.5	224.7	5.00	3.26	1.40	YES	HROFDY	NO
C_65	0	0.19003E-05	323491.5	3783455.5	225.1	5.00	3.26	1.40	YES	HROFDY	NO
C_66	0	0.19003E-05	323498.5	3783455.5	225.4	5.00	3.26	1.40	YES	HROFDY	NO
C_67	0	0.19003E-05	323505.5	3783455.5	225.5	5.00	3.26	1.40	YES	HROFDY	NO
C_68	0	0.19003E-05	323512.5	3783455.5	225.6	5.00	3.26	1.40	YES	HROFDY	NO
C_69	0	0.19003E-05	323519.5	3783455.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_70	0	0.19003E-05	323526.5	3783455.5	225.4	5.00	3.26	1.40	YES	HROFDY	NO
C_71	0	0.19003E-05	323386.5	3783462.5	221.0	5.00	3.26	1.40	YES	HROFDY	NO
C_72	0	0.19003E-05	323393.5	3783462.5	221.3	5.00	3.26	1.40	YES	HROFDY	NO
C_73	0	0.19003E-05	323400.5	3783462.5	221.5	5.00	3.26	1.40	YES	HROFDY	NO
C_74	0	0.19003E-05	323407.5	3783462.5	221.8	5.00	3.26	1.40	YES	HROFDY	NO
C_75	0	0.19003E-05	323414.5	3783462.5	222.0	5.00	3.26	1.40	YES	HROFDY	NO
C_76	0	0.19003E-05	323421.5	3783462.5	222.3	5.00	3.26	1.40	YES	HROFDY	NO
C_77	0	0.19003E-05	323428.5	3783462.5	222.5	5.00	3.26	1.40	YES	HROFDY	NO
C_78	0	0.19003E-05	323435.5	3783462.5	222.7	5.00	3.26	1.40	YES	HROFDY	NO
C_79	0	0.19003E-05	323442.5	3783462.5	223.0	5.00	3.26	1.40	YES	HROFDY	NO
C_80	0	0.19003E-05	323449.5	3783462.5	223.2	5.00	3.26	1.40	YES	HROFDY	NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
C_81	0	0.19003E-05	323456.5	3783462.5	223.5	5.00	3.26	1.40	YES	HROFDY	NO
C_82	0	0.19003E-05	323463.5	3783462.5	223.7	5.00	3.26	1.40	YES	HROFDY	NO
C_83	0	0.19003E-05	323470.5	3783462.5	224.0	5.00	3.26	1.40	YES	HROFDY	NO
C_84	0	0.19003E-05	323477.5	3783462.5	224.4	5.00	3.26	1.40	YES	HROFDY	NO
C_85	0	0.19003E-05	323484.5	3783462.5	224.8	5.00	3.26	1.40	YES	HROFDY	NO
C_86	0	0.19003E-05	323491.5	3783462.5	225.2	5.00	3.26	1.40	YES	HROFDY	NO
C_87	0	0.19003E-05	323498.5	3783462.5	225.6	5.00	3.26	1.40	YES	HROFDY	NO
C_88	0	0.19003E-05	323505.5	3783462.5	225.6	5.00	3.26	1.40	YES	HROFDY	NO
C_89	0	0.19003E-05	323512.5	3783462.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_90	0	0.19003E-05	323519.5	3783462.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_91	0	0.19003E-05	323526.5	3783462.5	225.4	5.00	3.26	1.40	YES	HROFDY	NO
C_92	0	0.19003E-05	323386.5	3783469.5	220.4	5.00	3.26	1.40	YES	HROFDY	NO
C_93	0	0.19003E-05	323393.5	3783469.5	220.8	5.00	3.26	1.40	YES	HROFDY	NO
C_94	0	0.19003E-05	323400.5	3783469.5	221.1	5.00	3.26	1.40	YES	HROFDY	NO
C_95	0	0.19003E-05	323407.5	3783469.5	221.4	5.00	3.26	1.40	YES	HROFDY	NO
C_96	0	0.19003E-05	323414.5	3783469.5	221.7	5.00	3.26	1.40	YES	HROFDY	NO
C_97	0	0.19003E-05	323421.5	3783469.5	222.0	5.00	3.26	1.40	YES	HROFDY	NO
C_98	0	0.19003E-05	323428.5	3783469.5	222.3	5.00	3.26	1.40	YES	HROFDY	NO
C_99	0	0.19003E-05	323435.5	3783469.5	222.6	5.00	3.26	1.40	YES	HROFDY	NO
C_100	0	0.19003E-05	323442.5	3783469.5	222.9	5.00	3.26	1.40	YES	HROFDY	NO
C_101	0	0.19003E-05	323449.5	3783469.5	223.2	5.00	3.26	1.40	YES	HROFDY	NO
C_102	0	0.19003E-05	323456.5	3783469.5	223.5	5.00	3.26	1.40	YES	HROFDY	NO
C_103	0	0.19003E-05	323463.5	3783469.5	223.8	5.00	3.26	1.40	YES	HROFDY	NO
C_104	0	0.19003E-05	323470.5	3783469.5	224.1	5.00	3.26	1.40	YES	HROFDY	NO
C_105	0	0.19003E-05	323477.5	3783469.5	224.6	5.00	3.26	1.40	YES	HROFDY	NO

C_106	0	0.19003E-05	323484.5	3783469.5	225.0	5.00	3.26	1.40	YES	HROFDY	NO
C_107	0	0.19003E-05	323491.5	3783469.5	225.4	5.00	3.26	1.40	YES	HROFDY	NO
C_108	0	0.19003E-05	323498.5	3783469.5	225.8	5.00	3.26	1.40	YES	HROFDY	NO
C_109	0	0.19003E-05	323505.5	3783469.5	225.8	5.00	3.26	1.40	YES	HROFDY	NO
C_110	0	0.19003E-05	323512.5	3783469.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_111	0	0.19003E-05	323519.5	3783469.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_112	0	0.19003E-05	323526.5	3783469.5	225.3	5.00	3.26	1.40	YES	HROFDY	NO
C_113	0	0.19003E-05	323386.5	3783476.5	219.9	5.00	3.26	1.40	YES	HROFDY	NO
C_114	0	0.19003E-05	323393.5	3783476.5	220.2	5.00	3.26	1.40	YES	HROFDY	NO
C_115	0	0.19003E-05	323400.5	3783476.5	220.6	5.00	3.26	1.40	YES	HROFDY	NO
C_116	0	0.19003E-05	323407.5	3783476.5	221.0	5.00	3.26	1.40	YES	HROFDY	NO
C_117	0	0.19003E-05	323414.5	3783476.5	221.4	5.00	3.26	1.40	YES	HROFDY	NO
C_118	0	0.19003E-05	323421.5	3783476.5	221.8	5.00	3.26	1.40	YES	HROFDY	NO
C_119	0	0.19003E-05	323428.5	3783476.5	222.1	5.00	3.26	1.40	YES	HROFDY	NO
C_120	0	0.19003E-05	323435.5	3783476.5	222.4	5.00	3.26	1.40	YES	HROFDY	NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
C_121	0	0.19003E-05	323442.5	3783476.5	222.8	5.00	3.26	1.40	YES	HROFDY	NO
C_122	0	0.19003E-05	323449.5	3783476.5	223.1	5.00	3.26	1.40	YES	HROFDY	NO
C_123	0	0.19003E-05	323456.5	3783476.5	223.5	5.00	3.26	1.40	YES	HROFDY	NO
C_124	0	0.19003E-05	323463.5	3783476.5	223.9	5.00	3.26	1.40	YES	HROFDY	NO
C_125	0	0.19003E-05	323470.5	3783476.5	224.2	5.00	3.26	1.40	YES	HROFDY	NO
C_126	0	0.19003E-05	323477.5	3783476.5	224.7	5.00	3.26	1.40	YES	HROFDY	NO
C_127	0	0.19003E-05	323484.5	3783476.5	225.2	5.00	3.26	1.40	YES	HROFDY	NO
C_128	0	0.19003E-05	323491.5	3783476.5	225.6	5.00	3.26	1.40	YES	HROFDY	NO
C_129	0	0.19003E-05	323498.5	3783476.5	226.0	5.00	3.26	1.40	YES	HROFDY	NO
C_130	0	0.19003E-05	323505.5	3783476.5	225.9	5.00	3.26	1.40	YES	HROFDY	NO
C_131	0	0.19003E-05	323512.5	3783476.5	225.8	5.00	3.26	1.40	YES	HROFDY	NO
C_132	0	0.19003E-05	323519.5	3783476.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_133	0	0.19003E-05	323526.5	3783476.5	225.3	5.00	3.26	1.40	YES	HROFDY	NO
C_134	0	0.19003E-05	323386.5	3783483.5	219.5	5.00	3.26	1.40	YES	HROFDY	NO
C_135	0	0.19003E-05	323393.5	3783483.5	219.9	5.00	3.26	1.40	YES	HROFDY	NO
C_136	0	0.19003E-05	323400.5	3783483.5	220.3	5.00	3.26	1.40	YES	HROFDY	NO
C_137	0	0.19003E-05	323407.5	3783483.5	220.8	5.00	3.26	1.40	YES	HROFDY	NO
C_138	0	0.19003E-05	323414.5	3783483.5	221.2	5.00	3.26	1.40	YES	HROFDY	NO
C_139	0	0.19003E-05	323421.5	3783483.5	221.7	5.00	3.26	1.40	YES	HROFDY	NO
C_140	0	0.19003E-05	323428.5	3783483.5	222.1	5.00	3.26	1.40	YES	HROFDY	NO
C_141	0	0.19003E-05	323435.5	3783483.5	222.5	5.00	3.26	1.40	YES	HROFDY	NO
C_142	0	0.19003E-05	323442.5	3783483.5	222.9	5.00	3.26	1.40	YES	HROFDY	NO
C_143	0	0.19003E-05	323449.5	3783483.5	223.3	5.00	3.26	1.40	YES	HROFDY	NO
C_144	0	0.19003E-05	323456.5	3783483.5	223.8	5.00	3.26	1.40	YES	HROFDY	NO
C_145	0	0.19003E-05	323463.5	3783483.5	224.2	5.00	3.26	1.40	YES	HROFDY	NO
C_146	0	0.19003E-05	323470.5	3783483.5	224.6	5.00	3.26	1.40	YES	HROFDY	NO
C_147	0	0.19003E-05	323477.5	3783483.5	225.1	5.00	3.26	1.40	YES	HROFDY	NO
C_148	0	0.19003E-05	323484.5	3783483.5	225.5	5.00	3.26	1.40	YES	HROFDY	NO
C_149	0	0.19003E-05	323491.5	3783483.5	225.9	5.00	3.26	1.40	YES	HROFDY	NO
C_150	0	0.19003E-05	323498.5	3783483.5	226.2	5.00	3.26	1.40	YES	HROFDY	NO
C_151	0	0.19003E-05	323505.5	3783483.5	226.0	5.00	3.26	1.40	YES	HROFDY	NO
C_152	0	0.19003E-05	323512.5	3783483.5	225.9	5.00	3.26	1.40	YES	HROFDY	NO
C_153	0	0.19003E-05	323519.5	3783483.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_154	0	0.19003E-05	323526.5	3783483.5	225.3	5.00	3.26	1.40	YES	HROFDY	NO
C_155	0	0.19003E-05	323386.5	3783490.5	219.4	5.00	3.26	1.40	YES	HROFDY	NO
C_156	0	0.19003E-05	323393.5	3783490.5	219.9	5.00	3.26	1.40	YES	HROFDY	NO
C_157	0	0.19003E-05	323400.5	3783490.5	220.4	5.00	3.26	1.40	YES	HROFDY	NO
C_158	0	0.19003E-05	323407.5	3783490.5	220.9	5.00	3.26	1.40	YES	HROFDY	NO
C_159	0	0.19003E-05	323414.5	3783490.5	221.3	5.00	3.26	1.40	YES	HROFDY	NO
C_160	0	0.19003E-05	323421.5	3783490.5	221.8	5.00	3.26	1.40	YES	HROFDY	NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
C_161	0	0.19003E-05	323428.5	3783490.5	222.3	5.00	3.26	1.40	YES	HROFDY	NO
C_162	0	0.19003E-05	323435.5	3783490.5	222.8	5.00	3.26	1.40	YES	HROFDY	NO
C_163	0	0.19003E-05	323442.5	3783490.5	223.2	5.00	3.26	1.40	YES	HROFDY	NO
C_164	0	0.19003E-05	323449.5	3783490.5	223.7	5.00	3.26	1.40	YES	HROFDY	NO
C_165	0	0.19003E-05	323456.5	3783490.5	224.2	5.00	3.26	1.40	YES	HROFDY	NO
C_166	0	0.19003E-05	323463.5	3783490.5	224.7	5.00	3.26	1.40	YES	HROFDY	NO
C_167	0	0.19003E-05	323470.5	3783490.5	225.2	5.00	3.26	1.40	YES	HROFDY	NO
C_168	0	0.19003E-05	323477.5	3783490.5	225.6	5.00	3.26	1.40	YES	HROFDY	NO
C_169	0	0.19003E-05	323484.5	3783490.5	225.9	5.00	3.26	1.40	YES	HROFDY	NO
C_170	0	0.19003E-05	323491.5	3783490.5	226.2	5.00	3.26	1.40	YES	HROFDY	NO
C_171	0	0.19003E-05	323498.5	3783490.5	226.5	5.00	3.26	1.40	YES	HROFDY	NO
C_172	0	0.19003E-05	323505.5	3783490.5	226.2	5.00	3.26	1.40	YES	HROFDY	NO
C_173	0	0.19003E-05	323512.5	3783490.5	225.9	5.00	3.26	1.40	YES	HROFDY	NO
C_174	0	0.19003E-05	323519.5	3783490.5	225.6	5.00	3.26	1.40	YES	HROFDY	NO
C_175	0	0.19003E-05	323526.5	3783490.5	225.2	5.00	3.26	1.40	YES	HROFDY	NO
C_176	0	0.19003E-05	323386.5	3783497.5	219.4	5.00	3.26	1.40	YES	HROFDY	NO
C_177	0	0.19003E-05	323393.5	3783497.5	219.9	5.00	3.26	1.40	YES	HROFDY	NO
C_178	0	0.19003E-05	323400.5	3783497.5	220.4	5.00	3.26	1.40	YES	HROFDY	NO
C_179	0	0.19003E-05	323407.5	3783497.5	220.9	5.00	3.26	1.40	YES	HROFDY	NO
C_180	0	0.19003E-05	323414.5	3783497.5	221.4	5.00	3.26	1.40	YES	HROFDY	NO
C_181	0	0.19003E-05	323421.5	3783497.5	222.0	5.00	3.26	1.40	YES	HROFDY	NO
C_182	0	0.19003E-05	323428.5	3783497.5	222.5	5.00	3.26	1.40	YES	HROFDY	NO
C_183	0	0.19003E-05	323435.5	3783497.5	223.1	5.00	3.26	1.40	YES	HROFDY	NO
C_184	0	0.19003E-05	323442.5	3783497.5	223.6	5.00	3.26	1.40	YES	HROFDY	NO
C_185	0	0.19003E-05	323449.5	3783497.5	224.2	5.00	3.26	1.40	YES	HROFDY	NO
C_186	0	0.19003E-05	323456.5	3783497.5	224.7	5.00	3.26	1.40	YES	HROFDY	NO
C_187	0	0.19003E-05	323463.5	3783497.5	225.3	5.00	3.26	1.40	YES	HROFDY	NO
C_188	0	0.19003E-05	323470.5	3783497.5	225.9	5.00	3.26	1.40	YES	HROFDY	NO
C_189	0	0.19003E-05	323477.5	3783497.5	226.2	5.00	3.26	1.40	YES	HROFDY	NO
C_190	0	0.19003E-05	323484.5	3783497.5	226.4	5.00	3.26	1.40	YES	HROFDY	NO
C_191	0	0.19003E-05	323491.5	3783497.5	226.6	5.00	3.26	1.40	YES	HROFDY	NO
C_192	0	0.19003E-05	323498.5	3783497.5	226.7	5.00	3.26	1.40	YES	HROFDY	NO
C_193	0	0.19003E-05	323505.5	3783497.5	226.3	5.00	3.26	1.40	YES	HROFDY	NO
C_194	0	0.19003E-05	323512.5	3783497.5	225.9	5.00	3.26	1.40	YES	HROFDY	NO
C_195	0	0.19003E-05	323519.5	3783497.5	225.5	5.00	3.26	1.40	YES	HROFDY	NO
C_196	0	0.19003E-05	323526.5	3783497.5	225.1	5.00	3.26	1.40	YES	HROFDY	NO
C_197	0	0.19003E-05	323386.5	3783504.5	219.4	5.00	3.26	1.40	YES	HROFDY	NO
C_198	0	0.19003E-05	323393.5	3783504.5	219.9	5.00	3.26	1.40	YES	HROFDY	NO
C_199	0	0.19003E-05	323400.5	3783504.5	220.4	5.00	3.26	1.40	YES	HROFDY	NO
C_200	0	0.19003E-05	323407.5	3783504.5	221.0	5.00	3.26	1.40	YES	HROFDY	NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
C_201	0	0.19003E-05	323414.5	3783504.5	221.5	5.00	3.26	1.40	YES	HROFDY	NO
C_202	0	0.19003E-05	323421.5	3783504.5	222.1	5.00	3.26	1.40	YES	HROFDY	NO
C_203	0	0.19003E-05	323428.5	3783504.5	222.7	5.00	3.26	1.40	YES	HROFDY	NO
C_204	0	0.19003E-05	323435.5	3783504.5	223.4	5.00	3.26	1.40	YES	HROFDY	NO
C_205	0	0.19003E-05	323442.5	3783504.5	224.0	5.00	3.26	1.40	YES	HROFDY	NO
C_206	0	0.19003E-05	323449.5	3783504.5	224.6	5.00	3.26	1.40	YES	HROFDY	NO

C_207	0	0.19003E-05	323456.5	3783504.5	225.2	5.00	3.26	1.40	YES	HROFDY	NO
C_208	0	0.19003E-05	323463.5	3783504.5	225.9	5.00	3.26	1.40	YES	HROFDY	NO
C_209	0	0.19003E-05	323470.5	3783504.5	226.5	5.00	3.26	1.40	YES	HROFDY	NO
C_210	0	0.19003E-05	323477.5	3783504.5	226.7	5.00	3.26	1.40	YES	HROFDY	NO
C_211	0	0.19003E-05	323484.5	3783504.5	226.8	5.00	3.26	1.40	YES	HROFDY	NO
C_212	0	0.19003E-05	323491.5	3783504.5	227.0	5.00	3.26	1.40	YES	HROFDY	NO
C_213	0	0.19003E-05	323498.5	3783504.5	227.0	5.00	3.26	1.40	YES	HROFDY	NO
C_214	0	0.19003E-05	323505.5	3783504.5	226.5	5.00	3.26	1.40	YES	HROFDY	NO
C_215	0	0.19003E-05	323512.5	3783504.5	226.0	5.00	3.26	1.40	YES	HROFDY	NO
C_216	0	0.19003E-05	323519.5	3783504.5	225.5	5.00	3.26	1.40	YES	HROFDY	NO
C_217	0	0.19003E-05	323526.5	3783504.5	225.0	5.00	3.26	1.40	YES	HROFDY	NO
C_218	0	0.19003E-05	323386.5	3783511.5	219.3	5.00	3.26	1.40	YES	HROFDY	NO
C_219	0	0.19003E-05	323393.5	3783511.5	219.9	5.00	3.26	1.40	YES	HROFDY	NO
C_220	0	0.19003E-05	323400.5	3783511.5	220.5	5.00	3.26	1.40	YES	HROFDY	NO
C_221	0	0.19003E-05	323407.5	3783511.5	221.1	5.00	3.26	1.40	YES	HROFDY	NO
C_222	0	0.19003E-05	323414.5	3783511.5	221.7	5.00	3.26	1.40	YES	HROFDY	NO
C_223	0	0.19003E-05	323421.5	3783511.5	222.2	5.00	3.26	1.40	YES	HROFDY	NO
C_224	0	0.19003E-05	323428.5	3783511.5	223.0	5.00	3.26	1.40	YES	HROFDY	NO
C_225	0	0.19003E-05	323435.5	3783511.5	223.6	5.00	3.26	1.40	YES	HROFDY	NO
C_226	0	0.19003E-05	323442.5	3783511.5	224.3	5.00	3.26	1.40	YES	HROFDY	NO
C_227	0	0.19003E-05	323449.5	3783511.5	225.0	5.00	3.26	1.40	YES	HROFDY	NO
C_228	0	0.19003E-05	323456.5	3783511.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_229	0	0.19003E-05	323463.5	3783511.5	226.4	5.00	3.26	1.40	YES	HROFDY	NO
C_230	0	0.19003E-05	323470.5	3783511.5	227.0	5.00	3.26	1.40	YES	HROFDY	NO
C_231	0	0.19003E-05	323477.5	3783511.5	227.2	5.00	3.26	1.40	YES	HROFDY	NO
C_232	0	0.19003E-05	323484.5	3783511.5	227.2	5.00	3.26	1.40	YES	HROFDY	NO
C_233	0	0.19003E-05	323491.5	3783511.5	227.2	5.00	3.26	1.40	YES	HROFDY	NO
C_234	0	0.19003E-05	323498.5	3783511.5	227.2	5.00	3.26	1.40	YES	HROFDY	NO
C_235	0	0.19003E-05	323505.5	3783511.5	226.6	5.00	3.26	1.40	YES	HROFDY	NO
C_236	0	0.19003E-05	323512.5	3783511.5	226.0	5.00	3.26	1.40	YES	HROFDY	NO
C_237	0	0.19003E-05	323519.5	3783511.5	225.4	5.00	3.26	1.40	YES	HROFDY	NO
C_238	0	0.19003E-05	323526.5	3783511.5	224.8	5.00	3.26	1.40	YES	HROFDY	NO
C_239	0	0.19003E-05	323386.5	3783518.5	219.6	5.00	3.26	1.40	YES	HROFDY	NO
C_240	0	0.19003E-05	323393.5	3783518.5	220.2	5.00	3.26	1.40	YES	HROFDY	NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
C_241	0	0.19003E-05	323400.5	3783518.5	220.8	5.00	3.26	1.40	YES	HROFDY	NO
C_242	0	0.19003E-05	323407.5	3783518.5	221.4	5.00	3.26	1.40	YES	HROFDY	NO
C_243	0	0.19003E-05	323414.5	3783518.5	222.0	5.00	3.26	1.40	YES	HROFDY	NO
C_244	0	0.19003E-05	323421.5	3783518.5	222.6	5.00	3.26	1.40	YES	HROFDY	NO
C_245	0	0.19003E-05	323428.5	3783518.5	223.3	5.00	3.26	1.40	YES	HROFDY	NO
C_246	0	0.19003E-05	323435.5	3783518.5	224.1	5.00	3.26	1.40	YES	HROFDY	NO
C_247	0	0.19003E-05	323442.5	3783518.5	224.8	5.00	3.26	1.40	YES	HROFDY	NO
C_248	0	0.19003E-05	323449.5	3783518.5	225.5	5.00	3.26	1.40	YES	HROFDY	NO
C_249	0	0.19003E-05	323456.5	3783518.5	226.1	5.00	3.26	1.40	YES	HROFDY	NO
C_250	0	0.19003E-05	323463.5	3783518.5	226.7	5.00	3.26	1.40	YES	HROFDY	NO
C_251	0	0.19003E-05	323470.5	3783518.5	227.3	5.00	3.26	1.40	YES	HROFDY	NO
C_252	0	0.19003E-05	323477.5	3783518.5	227.4	5.00	3.26	1.40	YES	HROFDY	NO
C_253	0	0.19003E-05	323484.5	3783518.5	227.3	5.00	3.26	1.40	YES	HROFDY	NO
C_254	0	0.19003E-05	323491.5	3783518.5	227.2	5.00	3.26	1.40	YES	HROFDY	NO
C_255	0	0.19003E-05	323498.5	3783518.5	227.1	5.00	3.26	1.40	YES	HROFDY	NO
C_256	0	0.19003E-05	323505.5	3783518.5	226.4	5.00	3.26	1.40	YES	HROFDY	NO
C_257	0	0.19003E-05	323512.5	3783518.5	225.8	5.00	3.26	1.40	YES	HROFDY	NO
C_258	0	0.19003E-05	323519.5	3783518.5	225.1	5.00	3.26	1.40	YES	HROFDY	NO
C_259	0	0.19003E-05	323526.5	3783518.5	224.6	5.00	3.26	1.40	YES	HROFDY	NO
C_260	0	0.19003E-05	323386.5	3783525.5	219.8	5.00	3.26	1.40	YES	HROFDY	NO
C_261	0	0.19003E-05	323393.5	3783525.5	220.5	5.00	3.26	1.40	YES	HROFDY	NO
C_262	0	0.19003E-05	323400.5	3783525.5	221.2	5.00	3.26	1.40	YES	HROFDY	NO
C_263	0	0.19003E-05	323407.5	3783525.5	221.8	5.00	3.26	1.40	YES	HROFDY	NO
C_264	0	0.19003E-05	323414.5	3783525.5	222.4	5.00	3.26	1.40	YES	HROFDY	NO
C_265	0	0.19003E-05	323421.5	3783525.5	223.0	5.00	3.26	1.40	YES	HROFDY	NO

C_266	0	0.19003E-05	323428.5	3783525.5	223.7	5.00	3.26	1.40	YES	HROFDY	NO
C_267	0	0.19003E-05	323435.5	3783525.5	224.5	5.00	3.26	1.40	YES	HROFDY	NO
C_268	0	0.19003E-05	323442.5	3783525.5	225.2	5.00	3.26	1.40	YES	HROFDY	NO
C_269	0	0.19003E-05	323449.5	3783525.5	225.9	5.00	3.26	1.40	YES	HROFDY	NO
C_270	0	0.19003E-05	323456.5	3783525.5	226.5	5.00	3.26	1.40	YES	HROFDY	NO
C_271	0	0.19003E-05	323463.5	3783525.5	227.1	5.00	3.26	1.40	YES	HROFDY	NO
C_272	0	0.19003E-05	323470.5	3783525.5	227.6	5.00	3.26	1.40	YES	HROFDY	NO
C_273	0	0.19003E-05	323477.5	3783525.5	227.6	5.00	3.26	1.40	YES	HROFDY	NO
C_274	0	0.19003E-05	323484.5	3783525.5	227.4	5.00	3.26	1.40	YES	HROFDY	NO
C_275	0	0.19003E-05	323491.5	3783525.5	227.2	5.00	3.26	1.40	YES	HROFDY	NO
C_276	0	0.19003E-05	323498.5	3783525.5	227.0	5.00	3.26	1.40	YES	HROFDY	NO
C_277	0	0.19003E-05	323505.5	3783525.5	226.3	5.00	3.26	1.40	YES	HROFDY	NO
C_278	0	0.19003E-05	323512.5	3783525.5	225.6	5.00	3.26	1.40	YES	HROFDY	NO
C_279	0	0.19003E-05	323519.5	3783525.5	224.9	5.00	3.26	1.40	YES	HROFDY	NO
C_280	0	0.19003E-05	323526.5	3783525.5	224.3	5.00	3.26	1.40	YES	HROFDY	NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
C_281	0	0.19003E-05	323386.5	3783532.5	220.1	5.00	3.26	1.40	YES	HROFDY	NO
C_282	0	0.19003E-05	323393.5	3783532.5	220.9	5.00	3.26	1.40	YES	HROFDY	NO
C_283	0	0.19003E-05	323400.5	3783532.5	221.5	5.00	3.26	1.40	YES	HROFDY	NO
C_284	0	0.19003E-05	323407.5	3783532.5	222.2	5.00	3.26	1.40	YES	HROFDY	NO
C_285	0	0.19003E-05	323414.5	3783532.5	222.8	5.00	3.26	1.40	YES	HROFDY	NO
C_286	0	0.19003E-05	323421.5	3783532.5	223.4	5.00	3.26	1.40	YES	HROFDY	NO
C_287	0	0.19003E-05	323428.5	3783532.5	224.1	5.00	3.26	1.40	YES	HROFDY	NO
C_288	0	0.19003E-05	323435.5	3783532.5	224.9	5.00	3.26	1.40	YES	HROFDY	NO
C_289	0	0.19003E-05	323442.5	3783532.5	225.7	5.00	3.26	1.40	YES	HROFDY	NO
C_290	0	0.19003E-05	323449.5	3783532.5	226.4	5.00	3.26	1.40	YES	HROFDY	NO
C_291	0	0.19003E-05	323456.5	3783532.5	226.9	5.00	3.26	1.40	YES	HROFDY	NO
C_292	0	0.19003E-05	323463.5	3783532.5	227.4	5.00	3.26	1.40	YES	HROFDY	NO
C_293	0	0.19003E-05	323470.5	3783532.5	227.9	5.00	3.26	1.40	YES	HROFDY	NO
C_294	0	0.19003E-05	323477.5	3783532.5	227.9	5.00	3.26	1.40	YES	HROFDY	NO
C_295	0	0.19003E-05	323484.5	3783532.5	227.6	5.00	3.26	1.40	YES	HROFDY	NO
C_296	0	0.19003E-05	323491.5	3783532.5	227.2	5.00	3.26	1.40	YES	HROFDY	NO
C_297	0	0.19003E-05	323498.5	3783532.5	226.9	5.00	3.26	1.40	YES	HROFDY	NO
C_298	0	0.19003E-05	323505.5	3783532.5	226.2	5.00	3.26	1.40	YES	HROFDY	NO
C_299	0	0.19003E-05	323512.5	3783532.5	225.4	5.00	3.26	1.40	YES	HROFDY	NO
C_300	0	0.19003E-05	323519.5	3783532.5	224.7	5.00	3.26	1.40	YES	HROFDY	NO
C_301	0	0.19003E-05	323526.5	3783532.5	224.0	5.00	3.26	1.40	YES	HROFDY	NO
C_302	0	0.19003E-05	323386.5	3783539.5	220.3	5.00	3.26	1.40	YES	HROFDY	NO
C_303	0	0.19003E-05	323393.5	3783539.5	221.2	5.00	3.26	1.40	YES	HROFDY	NO
C_304	0	0.19003E-05	323400.5	3783539.5	221.9	5.00	3.26	1.40	YES	HROFDY	NO
C_305	0	0.19003E-05	323407.5	3783539.5	222.5	5.00	3.26	1.40	YES	HROFDY	NO
C_306	0	0.19003E-05	323414.5	3783539.5	223.1	5.00	3.26	1.40	YES	HROFDY	NO
C_307	0	0.19003E-05	323421.5	3783539.5	223.7	5.00	3.26	1.40	YES	HROFDY	NO
C_308	0	0.19003E-05	323428.5	3783539.5	224.5	5.00	3.26	1.40	YES	HROFDY	NO
C_309	0	0.19003E-05	323435.5	3783539.5	225.3	5.00	3.26	1.40	YES	HROFDY	NO
C_310	0	0.19003E-05	323442.5	3783539.5	226.1	5.00	3.26	1.40	YES	HROFDY	NO
C_311	0	0.19003E-05	323449.5	3783539.5	226.8	5.00	3.26	1.40	YES	HROFDY	NO
C_312	0	0.19003E-05	323456.5	3783539.5	227.3	5.00	3.26	1.40	YES	HROFDY	NO
C_313	0	0.19003E-05	323463.5	3783539.5	227.7	5.00	3.26	1.40	YES	HROFDY	NO
C_314	0	0.19003E-05	323470.5	3783539.5	228.2	5.00	3.26	1.40	YES	HROFDY	NO
C_315	0	0.19003E-05	323477.5	3783539.5	228.1	5.00	3.26	1.40	YES	HROFDY	NO
C_316	0	0.19003E-05	323484.5	3783539.5	227.7	5.00	3.26	1.40	YES	HROFDY	NO
C_317	0	0.19003E-05	323491.5	3783539.5	227.2	5.00	3.26	1.40	YES	HROFDY	NO
C_318	0	0.19003E-05	323498.5	3783539.5	226.8	5.00	3.26	1.40	YES	HROFDY	NO
C_319	0	0.19003E-05	323505.5	3783539.5	226.0	5.00	3.26	1.40	YES	HROFDY	NO
C_320	0	0.19003E-05	323512.5	3783539.5	225.2	5.00	3.26	1.40	YES	HROFDY	NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
C_321	0	0.19003E-05	323519.5	3783539.5	224.4	5.00	3.26	1.40	YES	HROFDY	NO
C_322	0	0.19003E-05	323526.5	3783539.5	223.8	5.00	3.26	1.40	YES	HROFDY	NO
C_323	0	0.19003E-05	323386.5	3783546.5	220.6	5.00	3.26	1.40	YES	HROFDY	NO
C_324	0	0.19003E-05	323393.5	3783546.5	221.5	5.00	3.26	1.40	YES	HROFDY	NO
C_325	0	0.19003E-05	323400.5	3783546.5	222.3	5.00	3.26	1.40	YES	HROFDY	NO
C_326	0	0.19003E-05	323407.5	3783546.5	222.9	5.00	3.26	1.40	YES	HROFDY	NO
C_327	0	0.19003E-05	323414.5	3783546.5	223.5	5.00	3.26	1.40	YES	HROFDY	NO
C_328	0	0.19003E-05	323421.5	3783546.5	224.1	5.00	3.26	1.40	YES	HROFDY	NO
C_329	0	0.19003E-05	323428.5	3783546.5	224.9	5.00	3.26	1.40	YES	HROFDY	NO
C_330	0	0.19003E-05	323435.5	3783546.5	225.6	5.00	3.26	1.40	YES	HROFDY	NO
C_331	0	0.19003E-05	323442.5	3783546.5	226.3	5.00	3.26	1.40	YES	HROFDY	NO
C_332	0	0.19003E-05	323449.5	3783546.5	227.0	5.00	3.26	1.40	YES	HROFDY	NO
C_333	0	0.19003E-05	323456.5	3783546.5	227.3	5.00	3.26	1.40	YES	HROFDY	NO
C_334	0	0.19003E-05	323463.5	3783546.5	227.7	5.00	3.26	1.40	YES	HROFDY	NO
C_335	0	0.19003E-05	323470.5	3783546.5	228.0	5.00	3.26	1.40	YES	HROFDY	NO
C_336	0	0.19003E-05	323477.5	3783546.5	227.8	5.00	3.26	1.40	YES	HROFDY	NO
C_337	0	0.19003E-05	323484.5	3783546.5	227.3	5.00	3.26	1.40	YES	HROFDY	NO
C_338	0	0.19003E-05	323491.5	3783546.5	226.8	5.00	3.26	1.40	YES	HROFDY	NO
C_339	0	0.19003E-05	323498.5	3783546.5	226.3	5.00	3.26	1.40	YES	HROFDY	NO
C_340	0	0.19003E-05	323505.5	3783546.5	225.6	5.00	3.26	1.40	YES	HROFDY	NO
C_341	0	0.19003E-05	323512.5	3783546.5	224.8	5.00	3.26	1.40	YES	HROFDY	NO
C_342	0	0.19003E-05	323519.5	3783546.5	224.0	5.00	3.26	1.40	YES	HROFDY	NO
C_343	0	0.19003E-05	323526.5	3783546.5	223.4	5.00	3.26	1.40	YES	HROFDY	NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	C_1 , C_2 , C_3 , C_4 , C_5 , C_6 , C_7 , C_8 ,
	C_9 , C_10 , C_11 , C_12 , C_13 , C_14 , C_15 , C_16 ,
	C_17 , C_18 , C_19 , C_20 , C_21 , C_22 , C_23 , C_24 ,
	C_25 , C_26 , C_27 , C_28 , C_29 , C_30 , C_31 , C_32 ,
	C_33 , C_34 , C_35 , C_36 , C_37 , C_38 , C_39 , C_40 ,
	C_41 , C_42 , C_43 , C_44 , C_45 , C_46 , C_47 , C_48 ,
	C_49 , C_50 , C_51 , C_52 , C_53 , C_54 , C_55 , C_56 ,
	C_57 , C_58 , C_59 , C_60 , C_61 , C_62 , C_63 , C_64 ,
	C_65 , C_66 , C_67 , C_68 , C_69 , C_70 , C_71 , C_72 ,
	C_73 , C_74 , C_75 , C_76 , C_77 , C_78 , C_79 , C_80 ,
	C_81 , C_82 , C_83 , C_84 , C_85 , C_86 , C_87 , C_88 ,
	C_89 , C_90 , C_91 , C_92 , C_93 , C_94 , C_95 , C_96 ,

C_97 , C_98 , C_99 , C_100 , C_101 , C_102 , C_103 , C_104 ,

C_105 , C_106 , C_107 , C_108 , C_109 , C_110 , C_111 , C_112 ,

C_113 , C_114 , C_115 , C_116 , C_117 , C_118 , C_119 , C_120 ,

C_121 , C_122 , C_123 , C_124 , C_125 , C_126 , C_127 , C_128 ,

C_129 , C_130 , C_131 , C_132 , C_133 , C_134 , C_135 , C_136 ,

C_137 , C_138 , C_139 , C_140 , C_141 , C_142 , C_143 , C_144 ,

C_145 , C_146 , C_147 , C_148 , C_149 , C_150 , C_151 , C_152 ,

C_153 , C_154 , C_155 , C_156 , C_157 , C_158 , C_159 , C_160 ,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs

C_161 , C_162 , C_163 , C_164 , C_165 , C_166 , C_167 , C_168 ,

C_169 , C_170 , C_171 , C_172 , C_173 , C_174 , C_175 , C_176 ,

C_177 , C_178 , C_179 , C_180 , C_181 , C_182 , C_183 , C_184 ,

C_185 , C_186 , C_187 , C_188 , C_189 , C_190 , C_191 , C_192 ,

C_193 , C_194 , C_195 , C_196 , C_197 , C_198 , C_199 , C_200 ,

C_201 , C_202 , C_203 , C_204 , C_205 , C_206 , C_207 , C_208 ,

C_209 , C_210 , C_211 , C_212 , C_213 , C_214 , C_215 , C_216 ,

C_217 , C_218 , C_219 , C_220 , C_221 , C_222 , C_223 , C_224 ,

C_225 , C_226 , C_227 , C_228 , C_229 , C_230 , C_231 , C_232 ,

C_233 , C_234 , C_235 , C_236 , C_237 , C_238 , C_239 , C_240 ,

C_241 , C_242 , C_243 , C_244 , C_245 , C_246 , C_247 , C_248 ,

C_249 , C_250 , C_251 , C_252 , C_253 , C_254 , C_255 , C_256 ,

C_257 , C_258 , C_259 , C_260 , C_261 , C_262 , C_263 , C_264 ,

C_265 , C_266 , C_267 , C_268 , C_269 , C_270 , C_271 , C_272 ,

C_273 , C_274 , C_275 , C_276 , C_277 , C_278 , C_279 , C_280 ,

C_281 , C_282 , C_283 , C_284 , C_285 , C_286 , C_287 , C_288 ,

C_289 , C_290 , C_291 , C_292 , C_293 , C_294 , C_295 , C_296 ,

C_297 , C_298 , C_299 , C_300 , C_301 , C_302 , C_303 , C_304 ,

C_305 , C_306 , C_307 , C_308 , C_309 , C_310 , C_311 , C_312 ,

C_313 , C_314 , C_315 , C_316 , C_317 , C_318 , C_319 , C_320 ,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
	C_321 , C_322 , C_323 , C_324 , C_325 , C_326 , C_327 , C_328 ,
	C_329 , C_330 , C_331 , C_332 , C_333 , C_334 , C_335 , C_336 ,
	C_337 , C_338 , C_339 , C_340 , C_341 , C_342 , C_343 ,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
	839784.	C_1 , C_2 , C_3 , C_4 , C_5 , C_6 , C_7 , C_8 ,
		C_9 , C_10 , C_11 , C_12 , C_13 , C_14 , C_15 , C_16 ,
		C_17 , C_18 , C_19 , C_20 , C_21 , C_22 , C_23 , C_24 ,
		C_25 , C_26 , C_27 , C_28 , C_29 , C_30 , C_31 , C_32 ,
		C_33 , C_34 , C_35 , C_36 , C_37 , C_38 , C_39 , C_40 ,
		C_41 , C_42 , C_43 , C_44 , C_45 , C_46 , C_47 , C_48 ,
		C_49 , C_50 , C_51 , C_52 , C_53 , C_54 , C_55 , C_56 ,
		C_57 , C_58 , C_59 , C_60 , C_61 , C_62 , C_63 , C_64 ,
		C_65 , C_66 , C_67 , C_68 , C_69 , C_70 , C_71 , C_72 ,
		C_73 , C_74 , C_75 , C_76 , C_77 , C_78 , C_79 , C_80 ,
		C_81 , C_82 , C_83 , C_84 , C_85 , C_86 , C_87 , C_88 ,
		C_89 , C_90 , C_91 , C_92 , C_93 , C_94 , C_95 , C_96 ,
		C_97 , C_98 , C_99 , C_100 , C_101 , C_102 , C_103 , C_104 ,
		C_105 , C_106 , C_107 , C_108 , C_109 , C_110 , C_111 , C_112 ,
		C_113 , C_114 , C_115 , C_116 , C_117 , C_118 , C_119 , C_120 ,
		C_121 , C_122 , C_123 , C_124 , C_125 , C_126 , C_127 , C_128 ,
		C_129 , C_130 , C_131 , C_132 , C_133 , C_134 , C_135 , C_136 ,
		C_137 , C_138 , C_139 , C_140 , C_141 , C_142 , C_143 , C_144 ,
		C_145 , C_146 , C_147 , C_148 , C_149 , C_150 , C_151 , C_152 ,
		C_153 , C_154 , C_155 , C_156 , C_157 , C_158 , C_159 , C_160 ,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
		C_161 , C_162 , C_163 , C_164 , C_165 , C_166 , C_167 , C_168 ,
		C_169 , C_170 , C_171 , C_172 , C_173 , C_174 , C_175 , C_176 ,
		C_177 , C_178 , C_179 , C_180 , C_181 , C_182 , C_183 , C_184 ,
		C_185 , C_186 , C_187 , C_188 , C_189 , C_190 , C_191 , C_192 ,
		C_193 , C_194 , C_195 , C_196 , C_197 , C_198 , C_199 , C_200 ,
		C_201 , C_202 , C_203 , C_204 , C_205 , C_206 , C_207 , C_208 ,
		C_209 , C_210 , C_211 , C_212 , C_213 , C_214 , C_215 , C_216 ,
		C_217 , C_218 , C_219 , C_220 , C_221 , C_222 , C_223 , C_224 ,
		C_225 , C_226 , C_227 , C_228 , C_229 , C_230 , C_231 , C_232 ,
		C_233 , C_234 , C_235 , C_236 , C_237 , C_238 , C_239 , C_240 ,
		C_241 , C_242 , C_243 , C_244 , C_245 , C_246 , C_247 , C_248 ,
		C_249 , C_250 , C_251 , C_252 , C_253 , C_254 , C_255 , C_256 ,
		C_257 , C_258 , C_259 , C_260 , C_261 , C_262 , C_263 , C_264 ,
		C_265 , C_266 , C_267 , C_268 , C_269 , C_270 , C_271 , C_272 ,
		C_273 , C_274 , C_275 , C_276 , C_277 , C_278 , C_279 , C_280 ,
		C_281 , C_282 , C_283 , C_284 , C_285 , C_286 , C_287 , C_288 ,
		C_289 , C_290 , C_291 , C_292 , C_293 , C_294 , C_295 , C_296 ,
		C_297 , C_298 , C_299 , C_300 , C_301 , C_302 , C_303 , C_304 ,
		C_305 , C_306 , C_307 , C_308 , C_309 , C_310 , C_311 , C_312 ,
		C_313 , C_314 , C_315 , C_316 , C_317 , C_318 , C_319 , C_320 ,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
		C_321 , C_322 , C_323 , C_324 , C_325 , C_326 , C_327 , C_328 ,
		C_329 , C_330 , C_331 , C_332 , C_333 , C_334 , C_335 , C_336 ,
		C_337 , C_338 , C_339 , C_340 , C_341 , C_342 , C_343 ,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_1 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_2 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_3 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_4 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_5 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_6 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_7 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_8 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_9 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_10 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_11 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_12 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_13 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_14 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_15 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_16 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_17 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_18 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_19 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_20 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_21 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_22 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_23 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_24 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_25 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_26 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_27 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_28 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_29 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_30 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_31 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_32 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00

19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_33 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_34 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_35 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_36 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_37 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_38 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_39 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_40 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_41 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_42 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_43 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_44 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_45 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_46 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_47 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_48 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_49 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_50 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_51 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_52 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_53 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_54 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_55 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_56 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_57 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_58 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_59 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_60 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_61 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_62 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_63 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_64 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_65 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_66 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_67 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_68 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_69 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_70 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_71 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_72 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00

19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_73 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_74 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_75 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_76 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_77 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_78 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_79 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_80 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_81 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_82 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_83 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_84 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_85 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_86 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_87 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_88 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_89 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_90 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_91 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_92 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_93 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_94 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_95 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_96 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_97 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_98 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_99 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_100 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_101 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_102 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_103 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_104 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_105 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_106 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_107 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_108 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_109 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_110 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_111 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_112 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_113 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_114 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_115 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_116 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_117 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_118 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_119 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_120 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_121 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_122 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_123 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_124 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_125 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_126 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_127 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_128 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_129 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_130 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_131 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_132 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_133 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_134 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_135 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_136 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_137 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_138 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_139 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_140 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_141 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_142 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_143 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_144 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_145 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_146 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_147 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_148 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_149 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_150 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_151 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_152 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00

19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_153 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_154 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_155 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_156 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_157 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_158 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_159 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_160 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_161 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_162 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_163 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_164 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_165 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_166 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_167 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_168 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_169 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_170 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_171 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_172 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_173 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_174 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_175 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_176 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_177 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_178 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_179 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_180 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_181 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_182 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_183 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_184 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_185 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_186 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_187 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_188 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_189 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_190 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_191 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_192 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00

19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00												

SOURCE ID = C_193 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00												
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01												
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00												
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00												

SOURCE ID = C_194 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00												
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01												
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00												
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00												

SOURCE ID = C_195 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00												
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01												
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00												
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00												

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_196 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00												
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01												
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00												
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00												

SOURCE ID = C_197 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00												
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01												
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00												
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00												

SOURCE ID = C_198 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00												
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01												
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00												
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00												

SOURCE ID = C_199 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00												
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01												
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00												
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00												

SOURCE ID = C_200 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00												
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01												
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00												
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00												

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_201 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_202 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_203 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_204 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_205 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_206 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_207 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_208 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_209 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_210 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_211 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_212 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_213 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_214 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_215 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_216 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_217 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_218 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_219 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_220 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_221 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_222 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_223 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_224 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_225 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_226 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_227 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_228 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_229 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_230 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_231 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_232 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00

19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_233 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_234 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_235 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_236 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_237 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_238 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_239 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_240 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_241 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_242 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_243 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_244 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_245 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_246 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_247 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_248 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00

7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_249 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_250 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_251 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_252 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_253 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_254 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_255 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_256 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_257 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_258 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_259 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_260 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_261 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_262 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_263 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_264 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_265 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_266 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_267 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_268 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_269 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_270 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_271 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_272 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_273 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_274 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_275 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_276 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_277 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_278 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_279 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_280 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_281 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_282 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_283 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_284 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_285 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_286 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_287 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_288 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00

7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_289 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_290 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_291 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_292 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_293 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_294 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_295 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_296 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_297 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_298 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_299 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_300 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_301 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_302 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_303 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_304 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_305 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_306 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_307 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_308 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_309 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_310 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_311 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_312 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_313 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_314 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_315 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_316 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_317 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_318 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_319 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_320 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_321 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_322 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_323 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_324 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_325 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_326 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_327 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_328 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01

13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_329 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_330 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_331 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_332 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_333 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_334 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_335 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_336 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_337 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_338 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_339 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_340 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = C_341 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_342 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = C_343 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(323576.0,	3783327.0,	226.2,	939.9,	0.0);	(323588.0,	3783327.0,	227.0,	939.9,	0.0);
(323600.0,	3783327.0,	227.8,	939.9,	0.0);	(323612.0,	3783327.0,	228.8,	939.9,	0.0);
(323624.0,	3783327.0,	229.7,	939.9,	0.0);	(323576.0,	3783339.0,	225.1,	939.9,	0.0);
(323588.0,	3783339.0,	226.2,	939.9,	0.0);	(323600.0,	3783339.0,	227.4,	939.9,	0.0);
(323612.0,	3783339.0,	228.4,	939.9,	0.0);	(323624.0,	3783339.0,	229.3,	939.9,	0.0);
(323636.0,	3783339.0,	229.4,	939.9,	0.0);	(323576.0,	3783351.0,	224.0,	939.9,	0.0);
(323588.0,	3783351.0,	225.5,	939.9,	0.0);	(323600.0,	3783351.0,	226.9,	939.9,	0.0);
(323612.0,	3783351.0,	228.0,	939.9,	0.0);	(323624.0,	3783351.0,	228.9,	939.9,	0.0);
(323636.0,	3783351.0,	228.5,	939.9,	0.0);	(323576.0,	3783363.0,	223.5,	939.9,	0.0);
(323588.0,	3783363.0,	225.0,	939.9,	0.0);	(323600.0,	3783363.0,	226.3,	939.9,	0.0);
(323612.0,	3783363.0,	227.0,	939.9,	0.0);	(323624.0,	3783363.0,	227.6,	939.9,	0.0);
(323636.0,	3783363.0,	227.0,	939.9,	0.0);	(323576.0,	3783375.0,	223.3,	939.9,	0.0);
(323588.0,	3783375.0,	224.6,	939.9,	0.0);	(323600.0,	3783375.0,	225.7,	939.9,	0.0);
(323612.0,	3783375.0,	225.9,	939.9,	0.0);	(323624.0,	3783375.0,	226.1,	939.9,	0.0);
(323636.0,	3783375.0,	225.3,	939.9,	0.0);	(323576.0,	3783387.0,	223.2,	939.9,	0.0);
(323588.0,	3783387.0,	224.2,	939.9,	0.0);	(323600.0,	3783387.0,	225.1,	939.9,	0.0);
(323612.0,	3783387.0,	224.9,	939.9,	0.0);	(323624.0,	3783387.0,	224.8,	939.9,	0.0);
(323636.0,	3783387.0,	223.9,	939.9,	0.0);	(323252.0,	3783399.0,	227.8,	939.9,	0.0);
(323264.0,	3783399.0,	227.6,	939.9,	0.0);	(323240.0,	3783411.0,	227.0,	939.9,	0.0);
(323252.0,	3783411.0,	226.5,	939.9,	0.0);	(323264.0,	3783411.0,	226.1,	939.9,	0.0);
(323240.0,	3783423.0,	226.1,	939.9,	0.0);	(323252.0,	3783423.0,	225.4,	939.9,	0.0);
(323264.0,	3783423.0,	224.7,	939.9,	0.0);	(323240.0,	3783435.0,	225.4,	939.9,	0.0);
(323252.0,	3783435.0,	224.8,	939.9,	0.0);	(323264.0,	3783435.0,	224.3,	939.9,	0.0);
(323276.0,	3783435.0,	223.6,	939.9,	0.0);	(323288.0,	3783435.0,	222.9,	939.9,	0.0);
(323228.0,	3783447.0,	224.8,	939.9,	0.0);	(323240.0,	3783447.0,	224.8,	939.9,	0.0);
(323252.0,	3783447.0,	224.3,	939.9,	0.0);	(323264.0,	3783447.0,	223.9,	939.9,	0.0);
(323276.0,	3783447.0,	223.2,	939.9,	0.0);	(323288.0,	3783447.0,	222.4,	939.9,	0.0);
(323228.0,	3783459.0,	223.5,	939.9,	0.0);	(323240.0,	3783459.0,	223.4,	939.9,	0.0);
(323252.0,	3783459.0,	223.0,	939.9,	0.0);	(323264.0,	3783459.0,	222.6,	939.9,	0.0);
(323276.0,	3783459.0,	222.0,	939.9,	0.0);	(323288.0,	3783459.0,	221.4,	939.9,	0.0);
(323228.0,	3783471.0,	221.4,	939.9,	0.0);	(323240.0,	3783471.0,	221.3,	939.9,	0.0);
(323252.0,	3783471.0,	221.0,	939.9,	0.0);	(323264.0,	3783471.0,	220.6,	939.9,	0.0);
(323276.0,	3783471.0,	220.3,	939.9,	0.0);	(323288.0,	3783471.0,	220.1,	939.9,	0.0);
(323300.0,	3783471.0,	219.7,	939.9,	0.0);	(323312.0,	3783471.0,	219.3,	939.9,	0.0);
(323324.0,	3783471.0,	219.0,	939.9,	0.0);	(323336.0,	3783471.0,	218.9,	939.9,	0.0);
(323348.0,	3783471.0,	218.9,	939.9,	0.0);	(323360.0,	3783471.0,	219.2,	939.9,	0.0);
(323372.0,	3783471.0,	219.6,	939.9,	0.0);	(323552.0,	3783471.0,	222.9,	939.9,	0.0);
(323564.0,	3783471.0,	221.7,	939.9,	0.0);	(323576.0,	3783471.0,	220.7,	939.9,	0.0);
(323228.0,	3783483.0,	219.3,	939.9,	0.0);	(323240.0,	3783483.0,	219.2,	939.9,	0.0);
(323252.0,	3783483.0,	218.9,	939.9,	0.0);	(323264.0,	3783483.0,	218.6,	939.9,	0.0);
(323276.0,	3783483.0,	218.6,	939.9,	0.0);	(323288.0,	3783483.0,	218.8,	939.9,	0.0);
(323300.0,	3783483.0,	218.7,	939.9,	0.0);	(323312.0,	3783483.0,	218.5,	939.9,	0.0);
(323324.0,	3783483.0,	218.3,	939.9,	0.0);	(323336.0,	3783483.0,	218.1,	939.9,	0.0);
(323348.0,	3783483.0,	218.1,	939.9,	0.0);	(323360.0,	3783483.0,	218.3,	939.9,	0.0);
(323372.0,	3783483.0,	218.6,	939.9,	0.0);	(323552.0,	3783483.0,	223.0,	939.9,	0.0);

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(323564.0,	3783483.0,	222.1,	939.9,	0.0);	(323576.0,	3783483.0,	221.2,	939.9,	0.0);
(323588.0,	3783483.0,	220.6,	939.9,	0.0);	(323600.0,	3783483.0,	219.9,	939.9,	0.0);
(323612.0,	3783483.0,	218.7,	939.9,	0.0);	(323624.0,	3783483.0,	217.5,	939.9,	0.0);
(323228.0,	3783495.0,	218.2,	939.9,	0.0);	(323240.0,	3783495.0,	218.1,	939.9,	0.0);
(323252.0,	3783495.0,	217.8,	939.9,	0.0);	(323264.0,	3783495.0,	217.5,	939.9,	0.0);
(323276.0,	3783495.0,	217.6,	939.9,	0.0);	(323288.0,	3783495.0,	217.9,	939.9,	0.0);
(323300.0,	3783495.0,	218.0,	939.9,	0.0);	(323312.0,	3783495.0,	218.1,	939.9,	0.0);
(323324.0,	3783495.0,	218.0,	939.9,	0.0);	(323336.0,	3783495.0,	217.9,	939.9,	0.0);
(323348.0,	3783495.0,	217.8,	939.9,	0.0);	(323360.0,	3783495.0,	218.1,	939.9,	0.0);

(323372.0, 3783495.0, 218.5, 939.9, 0.0); (323552.0, 3783495.0, 223.2, 939.9, 0.0);
(323564.0, 3783495.0, 222.6, 939.9, 0.0); (323576.0, 3783495.0, 222.0, 939.9, 0.0);
(323588.0, 3783495.0, 221.4, 939.9, 0.0); (323600.0, 3783495.0, 220.8, 939.9, 0.0);
(323612.0, 3783495.0, 219.5, 939.9, 0.0); (323624.0, 3783495.0, 218.1, 939.9, 0.0);
(323228.0, 3783507.0, 217.3, 939.9, 0.0); (323240.0, 3783507.0, 217.0, 939.9, 0.0);
(323252.0, 3783507.0, 216.7, 939.9, 0.0); (323264.0, 3783507.0, 216.4, 939.9, 0.0);
(323276.0, 3783507.0, 216.6, 939.9, 0.0); (323288.0, 3783507.0, 217.0, 939.9, 0.0);
(323300.0, 3783507.0, 217.3, 939.9, 0.0); (323312.0, 3783507.0, 217.6, 939.9, 0.0);
(323324.0, 3783507.0, 217.7, 939.9, 0.0); (323336.0, 3783507.0, 217.6, 939.9, 0.0);
(323348.0, 3783507.0, 217.6, 939.9, 0.0); (323360.0, 3783507.0, 217.9, 939.9, 0.0);
(323372.0, 3783507.0, 218.3, 939.9, 0.0); (323552.0, 3783507.0, 223.5, 939.9, 0.0);
(323564.0, 3783507.0, 223.2, 939.9, 0.0); (323576.0, 3783507.0, 222.9, 939.9, 0.0);
(323588.0, 3783507.0, 222.2, 939.9, 0.0); (323600.0, 3783507.0, 221.6, 939.9, 0.0);
(323612.0, 3783507.0, 220.2, 939.9, 0.0); (323624.0, 3783507.0, 218.8, 939.9, 0.0);
(323228.0, 3783519.0, 216.4, 939.9, 0.0); (323240.0, 3783519.0, 216.2, 939.9, 0.0);
(323252.0, 3783519.0, 215.9, 939.9, 0.0); (323264.0, 3783519.0, 215.6, 939.9, 0.0);
(323276.0, 3783519.0, 215.8, 939.9, 0.0); (323288.0, 3783519.0, 216.3, 939.9, 0.0);
(323300.0, 3783519.0, 216.8, 939.9, 0.0); (323312.0, 3783519.0, 217.3, 939.9, 0.0);
(323324.0, 3783519.0, 217.5, 939.9, 0.0); (323336.0, 3783519.0, 217.4, 939.9, 0.0);
(323348.0, 3783519.0, 217.4, 939.9, 0.0); (323360.0, 3783519.0, 217.8, 939.9, 0.0);
(323372.0, 3783519.0, 218.3, 939.9, 0.0); (323552.0, 3783519.0, 223.2, 939.9, 0.0);
(323564.0, 3783519.0, 223.1, 939.9, 0.0); (323576.0, 3783519.0, 223.0, 939.9, 0.0);
(323588.0, 3783519.0, 222.4, 939.9, 0.0); (323600.0, 3783519.0, 221.7, 939.9, 0.0);
(323612.0, 3783519.0, 220.3, 939.9, 0.0); (323624.0, 3783519.0, 218.9, 939.9, 0.0);
(323240.0, 3783531.0, 215.6, 939.9, 0.0); (323252.0, 3783531.0, 215.4, 939.9, 0.0);
(323264.0, 3783531.0, 215.1, 939.9, 0.0); (323276.0, 3783531.0, 215.4, 939.9, 0.0);
(323288.0, 3783531.0, 215.9, 939.9, 0.0); (323300.0, 3783531.0, 216.5, 939.9, 0.0);
(323312.0, 3783531.0, 217.1, 939.9, 0.0); (323324.0, 3783531.0, 217.5, 939.9, 0.0);
(323336.0, 3783531.0, 217.4, 939.9, 0.0); (323348.0, 3783531.0, 217.4, 939.9, 0.0);
(323360.0, 3783531.0, 217.9, 939.9, 0.0); (323372.0, 3783531.0, 218.4, 939.9, 0.0);
(323552.0, 3783531.0, 222.8, 939.9, 0.0); (323564.0, 3783531.0, 223.0, 939.9, 0.0);
(323576.0, 3783531.0, 223.0, 939.9, 0.0); (323588.0, 3783531.0, 222.4, 939.9, 0.0);
(323600.0, 3783531.0, 221.8, 939.9, 0.0); (323612.0, 3783531.0, 220.4, 939.9, 0.0);
(323624.0, 3783531.0, 218.9, 939.9, 0.0); (323240.0, 3783543.0, 215.1, 939.9, 0.0);
(323252.0, 3783543.0, 214.9, 939.9, 0.0); (323264.0, 3783543.0, 214.7, 939.9, 0.0);
(323276.0, 3783543.0, 215.0, 939.9, 0.0); (323288.0, 3783543.0, 215.5, 939.9, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(323300.0, 3783543.0, 216.2, 939.9, 0.0); (323312.0, 3783543.0, 217.0, 939.9, 0.0);
(323324.0, 3783543.0, 217.4, 939.9, 0.0); (323336.0, 3783543.0, 217.3, 939.9, 0.0);
(323348.0, 3783543.0, 217.4, 939.9, 0.0); (323360.0, 3783543.0, 217.9, 939.9, 0.0);
(323372.0, 3783543.0, 218.6, 939.9, 0.0); (323552.0, 3783543.0, 222.3, 939.9, 0.0);
(323564.0, 3783543.0, 222.6, 939.9, 0.0); (323576.0, 3783543.0, 222.7, 939.9, 0.0);
(323588.0, 3783543.0, 222.1, 939.9, 0.0); (323600.0, 3783543.0, 221.6, 939.9, 0.0);
(323612.0, 3783543.0, 220.3, 939.9, 0.0); (323624.0, 3783543.0, 218.9, 939.9, 0.0);
(323240.0, 3783555.0, 214.8, 939.9, 0.0); (323252.0, 3783555.0, 214.7, 939.9, 0.0);
(323264.0, 3783555.0, 214.5, 939.9, 0.0); (323276.0, 3783555.0, 214.8, 939.9, 0.0);
(323288.0, 3783555.0, 215.3, 939.9, 0.0); (323300.0, 3783555.0, 215.9, 939.9, 0.0);
(323312.0, 3783555.0, 216.7, 939.9, 0.0); (323324.0, 3783555.0, 217.1, 939.9, 0.0);
(323336.0, 3783555.0, 217.0, 939.9, 0.0); (323348.0, 3783555.0, 217.1, 939.9, 0.0);
(323360.0, 3783555.0, 217.8, 939.9, 0.0); (323372.0, 3783555.0, 218.6, 939.9, 0.0);
(323552.0, 3783555.0, 221.5, 939.9, 0.0); (323564.0, 3783555.0, 221.6, 939.9, 0.0);
(323576.0, 3783555.0, 221.6, 939.9, 0.0); (323588.0, 3783555.0, 221.2, 939.9, 0.0);
(323600.0, 3783555.0, 220.8, 939.9, 0.0); (323612.0, 3783555.0, 219.9, 939.9, 0.0);
(323624.0, 3783555.0, 219.0, 939.9, 0.0); (323240.0, 3783567.0, 214.7, 939.9, 0.0);
(323252.0, 3783567.0, 214.6, 939.9, 0.0); (323264.0, 3783567.0, 214.4, 939.9, 0.0);
(323276.0, 3783567.0, 214.6, 939.9, 0.0); (323288.0, 3783567.0, 215.1, 939.9, 0.0);
(323300.0, 3783567.0, 215.7, 939.9, 0.0); (323312.0, 3783567.0, 216.4, 939.9, 0.0);
(323324.0, 3783567.0, 216.8, 939.9, 0.0); (323336.0, 3783567.0, 216.7, 939.9, 0.0);
(323348.0, 3783567.0, 216.9, 939.9, 0.0); (323360.0, 3783567.0, 217.7, 939.9, 0.0);
(323372.0, 3783567.0, 218.6, 939.9, 0.0); (323552.0, 3783567.0, 220.6, 939.9, 0.0);
(323564.0, 3783567.0, 220.6, 939.9, 0.0); (323576.0, 3783567.0, 220.5, 939.9, 0.0);
(323588.0, 3783567.0, 220.3, 939.9, 0.0); (323600.0, 3783567.0, 220.0, 939.9, 0.0);
(323612.0, 3783567.0, 219.6, 939.9, 0.0); (323624.0, 3783567.0, 219.1, 939.9, 0.0);
(323636.0, 3783567.0, 218.5, 939.9, 0.0); (323648.0, 3783567.0, 217.9, 939.9, 0.0);

(323660.0, 3783567.0, 217.0, 939.9, 0.0); (323252.0, 3783579.0, 214.5, 939.9, 0.0);
(323264.0, 3783579.0, 214.3, 939.9, 0.0); (323276.0, 3783579.0, 214.5, 939.9, 0.0);
(323288.0, 3783579.0, 215.0, 939.9, 0.0); (323300.0, 3783579.0, 215.5, 939.9, 0.0);
(323312.0, 3783579.0, 216.1, 939.9, 0.0); (323324.0, 3783579.0, 216.4, 939.9, 0.0);
(323336.0, 3783579.0, 216.4, 939.9, 0.0); (323348.0, 3783579.0, 216.5, 939.9, 0.0);
(323360.0, 3783579.0, 217.3, 939.9, 0.0); (323372.0, 3783579.0, 218.2, 939.9, 0.0);
(323540.0, 3783579.0, 220.4, 939.9, 0.0); (323552.0, 3783579.0, 219.8, 939.9, 0.0);
(323564.0, 3783579.0, 219.8, 939.9, 0.0); (323576.0, 3783579.0, 219.8, 939.9, 0.0);
(323588.0, 3783579.0, 219.6, 939.9, 0.0); (323600.0, 3783579.0, 219.5, 939.9, 0.0);
(323612.0, 3783579.0, 219.2, 939.9, 0.0); (323624.0, 3783579.0, 219.0, 939.9, 0.0);
(323636.0, 3783579.0, 218.7, 939.9, 0.0); (323648.0, 3783579.0, 218.3, 939.9, 0.0);
(323660.0, 3783579.0, 217.7, 939.9, 0.0); (323252.0, 3783591.0, 214.4, 939.9, 0.0);
(323264.0, 3783591.0, 214.2, 939.9, 0.0); (323276.0, 3783591.0, 214.4, 939.9, 0.0);
(323288.0, 3783591.0, 214.9, 939.9, 0.0); (323300.0, 3783591.0, 215.3, 939.9, 0.0);
(323312.0, 3783591.0, 215.8, 939.9, 0.0); (323324.0, 3783591.0, 216.0, 939.9, 0.0);
(323336.0, 3783591.0, 215.9, 939.9, 0.0); (323348.0, 3783591.0, 216.0, 939.9, 0.0);
(323360.0, 3783591.0, 216.7, 939.9, 0.0); (323372.0, 3783591.0, 217.5, 939.9, 0.0);
(323456.0, 3783591.0, 225.5, 939.9, 0.0); (323468.0, 3783591.0, 225.0, 939.9, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(323480.0, 3783591.0, 224.2, 939.9, 0.0); (323492.0, 3783591.0, 223.1, 939.9, 0.0);
(323504.0, 3783591.0, 222.1, 939.9, 0.0); (323516.0, 3783591.0, 221.0, 939.9, 0.0);
(323528.0, 3783591.0, 220.1, 939.9, 0.0); (323540.0, 3783591.0, 219.6, 939.9, 0.0);
(323552.0, 3783591.0, 219.1, 939.9, 0.0); (323564.0, 3783591.0, 219.1, 939.9, 0.0);
(323576.0, 3783591.0, 219.1, 939.9, 0.0); (323588.0, 3783591.0, 219.1, 939.9, 0.0);
(323600.0, 3783591.0, 219.0, 939.9, 0.0); (323612.0, 3783591.0, 218.9, 939.9, 0.0);
(323624.0, 3783591.0, 218.8, 939.9, 0.0); (323636.0, 3783591.0, 218.7, 939.9, 0.0);
(323648.0, 3783591.0, 218.6, 939.9, 0.0); (323660.0, 3783591.0, 218.4, 939.9, 0.0);
(323264.0, 3783603.0, 214.2, 939.9, 0.0); (323276.0, 3783603.0, 214.3, 939.9, 0.0);
(323288.0, 3783603.0, 214.7, 939.9, 0.0); (323300.0, 3783603.0, 215.1, 939.9, 0.0);
(323312.0, 3783603.0, 215.4, 939.9, 0.0); (323324.0, 3783603.0, 215.6, 939.9, 0.0);
(323336.0, 3783603.0, 215.5, 939.9, 0.0); (323348.0, 3783603.0, 215.4, 939.9, 0.0);
(323360.0, 3783603.0, 216.0, 939.9, 0.0); (323372.0, 3783603.0, 216.7, 939.9, 0.0);
(323456.0, 3783603.0, 224.6, 939.9, 0.0); (323468.0, 3783603.0, 223.9, 939.9, 0.0);
(323480.0, 3783603.0, 223.1, 939.9, 0.0); (323492.0, 3783603.0, 222.1, 939.9, 0.0);
(323504.0, 3783603.0, 221.1, 939.9, 0.0); (323516.0, 3783603.0, 220.1, 939.9, 0.0);
(323528.0, 3783603.0, 219.2, 939.9, 0.0); (323540.0, 3783603.0, 218.8, 939.9, 0.0);
(323552.0, 3783603.0, 218.5, 939.9, 0.0); (323564.0, 3783603.0, 218.5, 939.9, 0.0);
(323576.0, 3783603.0, 218.5, 939.9, 0.0); (323588.0, 3783603.0, 218.6, 939.9, 0.0);
(323600.0, 3783603.0, 218.7, 939.9, 0.0); (323612.0, 3783603.0, 218.7, 939.9, 0.0);
(323624.0, 3783603.0, 218.7, 939.9, 0.0); (323636.0, 3783603.0, 218.7, 939.9, 0.0);
(323648.0, 3783603.0, 218.8, 939.9, 0.0); (323660.0, 3783603.0, 218.9, 939.9, 0.0);
(323264.0, 3783615.0, 214.1, 939.9, 0.0); (323276.0, 3783615.0, 214.2, 939.9, 0.0);
(323288.0, 3783615.0, 214.5, 939.9, 0.0); (323300.0, 3783615.0, 214.8, 939.9, 0.0);
(323312.0, 3783615.0, 215.1, 939.9, 0.0); (323324.0, 3783615.0, 215.2, 939.9, 0.0);
(323336.0, 3783615.0, 215.0, 939.9, 0.0); (323348.0, 3783615.0, 215.0, 939.9, 0.0);
(323360.0, 3783615.0, 215.4, 939.9, 0.0); (323372.0, 3783615.0, 215.9, 939.9, 0.0);
(323456.0, 3783615.0, 222.7, 939.9, 0.0); (323468.0, 3783615.0, 222.3, 939.9, 0.0);
(323480.0, 3783615.0, 221.8, 939.9, 0.0); (323492.0, 3783615.0, 221.2, 939.9, 0.0);
(323504.0, 3783615.0, 220.4, 939.9, 0.0); (323516.0, 3783615.0, 219.5, 939.9, 0.0);
(323528.0, 3783615.0, 218.7, 939.9, 0.0); (323540.0, 3783615.0, 218.4, 939.9, 0.0);
(323552.0, 3783615.0, 218.0, 939.9, 0.0); (323564.0, 3783615.0, 218.2, 939.9, 0.0);
(323576.0, 3783615.0, 218.3, 939.9, 0.0); (323588.0, 3783615.0, 218.5, 939.9, 0.0);
(323600.0, 3783615.0, 218.7, 939.9, 0.0); (323612.0, 3783615.0, 218.8, 939.9, 0.0);
(323624.0, 3783615.0, 218.8, 939.9, 0.0); (323636.0, 3783615.0, 218.8, 939.9, 0.0);
(323648.0, 3783615.0, 218.8, 939.9, 0.0); (323276.0, 3783627.0, 214.0, 939.9, 0.0);
(323288.0, 3783627.0, 214.2, 939.9, 0.0); (323300.0, 3783627.0, 214.5, 939.9, 0.0);
(323312.0, 3783627.0, 214.7, 939.9, 0.0); (323324.0, 3783627.0, 214.8, 939.9, 0.0);
(323336.0, 3783627.0, 214.6, 939.9, 0.0); (323348.0, 3783627.0, 214.5, 939.9, 0.0);
(323360.0, 3783627.0, 214.8, 939.9, 0.0); (323372.0, 3783627.0, 215.0, 939.9, 0.0);
(323456.0, 3783627.0, 220.8, 939.9, 0.0); (323468.0, 3783627.0, 220.7, 939.9, 0.0);
(323480.0, 3783627.0, 220.6, 939.9, 0.0); (323492.0, 3783627.0, 220.3, 939.9, 0.0);
(323504.0, 3783627.0, 219.8, 939.9, 0.0); (323516.0, 3783627.0, 219.0, 939.9, 0.0);
(323528.0, 3783627.0, 218.2, 939.9, 0.0); (323540.0, 3783627.0, 217.9, 939.9, 0.0);
(323552.0, 3783627.0, 217.6, 939.9, 0.0); (323564.0, 3783627.0, 217.9, 939.9, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(323576.0,	3783627.0,	218.2,	939.9,	0.0);	(323588.0,	3783627.0,	218.5,	939.9,	0.0);
(323600.0,	3783627.0,	218.8,	939.9,	0.0);	(323612.0,	3783627.0,	218.9,	939.9,	0.0);
(323624.0,	3783627.0,	218.9,	939.9,	0.0);	(323636.0,	3783627.0,	218.9,	939.9,	0.0);
(323288.0,	3783639.0,	214.0,	939.9,	0.0);	(323300.0,	3783639.0,	214.2,	939.9,	0.0);
(323312.0,	3783639.0,	214.3,	939.9,	0.0);	(323324.0,	3783639.0,	214.4,	939.9,	0.0);
(323336.0,	3783639.0,	214.2,	939.9,	0.0);	(323348.0,	3783639.0,	214.2,	939.9,	0.0);
(323360.0,	3783639.0,	214.2,	939.9,	0.0);	(323372.0,	3783639.0,	214.4,	939.9,	0.0);
(323540.0,	3783639.0,	217.4,	939.9,	0.0);	(323552.0,	3783639.0,	217.2,	939.9,	0.0);
(323564.0,	3783639.0,	217.6,	939.9,	0.0);	(323576.0,	3783639.0,	218.1,	939.9,	0.0);
(323588.0,	3783639.0,	218.5,	939.9,	0.0);	(323600.0,	3783639.0,	219.0,	939.9,	0.0);
(323612.0,	3783639.0,	219.1,	939.9,	0.0);	(323624.0,	3783639.0,	219.0,	939.9,	0.0);
(323636.0,	3783639.0,	219.0,	939.9,	0.0);	(323300.0,	3783651.0,	214.0,	939.9,	0.0);
(323312.0,	3783651.0,	214.2,	939.9,	0.0);	(323324.0,	3783651.0,	214.3,	939.9,	0.0);
(323336.0,	3783651.0,	214.1,	939.9,	0.0);	(323348.0,	3783651.0,	214.0,	939.9,	0.0);
(323360.0,	3783651.0,	214.1,	939.9,	0.0);	(323372.0,	3783651.0,	214.2,	939.9,	0.0);
(323540.0,	3783651.0,	216.8,	939.9,	0.0);	(323552.0,	3783651.0,	216.9,	939.9,	0.0);
(323564.0,	3783651.0,	217.5,	939.9,	0.0);	(323576.0,	3783651.0,	218.1,	939.9,	0.0);
(323588.0,	3783651.0,	218.6,	939.9,	0.0);	(323600.0,	3783651.0,	219.2,	939.9,	0.0);
(323612.0,	3783651.0,	219.3,	939.9,	0.0);	(323624.0,	3783651.0,	219.2,	939.9,	0.0);
(323312.0,	3783663.0,	214.0,	939.9,	0.0);	(323324.0,	3783663.0,	214.2,	939.9,	0.0);
(323336.0,	3783663.0,	214.0,	939.9,	0.0);	(323348.0,	3783663.0,	213.8,	939.9,	0.0);
(323360.0,	3783663.0,	213.9,	939.9,	0.0);	(323372.0,	3783663.0,	214.0,	939.9,	0.0);
(323540.0,	3783663.0,	216.2,	939.9,	0.0);	(323552.0,	3783663.0,	216.5,	939.9,	0.0);
(323564.0,	3783663.0,	217.2,	939.9,	0.0);	(323576.0,	3783663.0,	218.0,	939.9,	0.0);
(323588.0,	3783663.0,	218.7,	939.9,	0.0);	(323600.0,	3783663.0,	219.3,	939.9,	0.0);
(323612.0,	3783663.0,	219.4,	939.9,	0.0);	(323324.0,	3783675.0,	214.0,	939.9,	0.0);
(323336.0,	3783675.0,	213.8,	939.9,	0.0);	(323348.0,	3783675.0,	213.7,	939.9,	0.0);
(323360.0,	3783675.0,	213.8,	939.9,	0.0);	(323372.0,	3783675.0,	213.9,	939.9,	0.0);
(323456.0,	3783675.0,	215.1,	939.9,	0.0);	(323468.0,	3783675.0,	215.2,	939.9,	0.0);
(323480.0,	3783675.0,	215.2,	939.9,	0.0);	(323492.0,	3783675.0,	215.1,	939.9,	0.0);
(323504.0,	3783675.0,	215.2,	939.9,	0.0);	(323516.0,	3783675.0,	215.4,	939.9,	0.0);
(323528.0,	3783675.0,	215.6,	939.9,	0.0);	(323540.0,	3783675.0,	215.9,	939.9,	0.0);
(323552.0,	3783675.0,	216.2,	939.9,	0.0);	(323564.0,	3783675.0,	216.8,	939.9,	0.0);
(323576.0,	3783675.0,	217.4,	939.9,	0.0);	(323588.0,	3783675.0,	218.1,	939.9,	0.0);
(323600.0,	3783675.0,	218.7,	939.9,	0.0);	(323348.0,	3783687.0,	213.5,	939.9,	0.0);
(323360.0,	3783687.0,	213.7,	939.9,	0.0);	(323372.0,	3783687.0,	213.9,	939.9,	0.0);
(323384.0,	3783687.0,	214.3,	939.9,	0.0);	(323396.0,	3783687.0,	214.7,	939.9,	0.0);
(323408.0,	3783687.0,	214.8,	939.9,	0.0);	(323420.0,	3783687.0,	214.8,	939.9,	0.0);
(323432.0,	3783687.0,	214.9,	939.9,	0.0);	(323444.0,	3783687.0,	215.1,	939.9,	0.0);
(323456.0,	3783687.0,	215.2,	939.9,	0.0);	(323468.0,	3783687.0,	215.3,	939.9,	0.0);
(323480.0,	3783687.0,	215.4,	939.9,	0.0);	(323492.0,	3783687.0,	215.3,	939.9,	0.0);
(323504.0,	3783687.0,	215.2,	939.9,	0.0);	(323516.0,	3783687.0,	215.3,	939.9,	0.0);
(323528.0,	3783687.0,	215.3,	939.9,	0.0);	(323540.0,	3783687.0,	215.6,	939.9,	0.0);
(323552.0,	3783687.0,	215.8,	939.9,	0.0);	(323564.0,	3783687.0,	216.3,	939.9,	0.0);
(323576.0,	3783687.0,	216.8,	939.9,	0.0);	(323372.0,	3783699.0,	214.0,	939.9,	0.0);

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(323384.0,	3783699.0,	214.5,	939.9,	0.0);	(323396.0,	3783699.0,	215.1,	939.9,	0.0);
(323408.0,	3783699.0,	215.2,	939.9,	0.0);	(323420.0,	3783699.0,	215.1,	939.9,	0.0);
(323432.0,	3783699.0,	215.2,	939.9,	0.0);	(323444.0,	3783699.0,	215.2,	939.9,	0.0);
(323456.0,	3783699.0,	215.3,	939.9,	0.0);	(323468.0,	3783699.0,	215.5,	939.9,	0.0);
(323480.0,	3783699.0,	215.5,	939.9,	0.0);	(323492.0,	3783699.0,	215.4,	939.9,	0.0);
(323504.0,	3783699.0,	215.2,	939.9,	0.0);	(323516.0,	3783699.0,	215.1,	939.9,	0.0);
(323528.0,	3783699.0,	215.0,	939.9,	0.0);	(323540.0,	3783699.0,	215.3,	939.9,	0.0);
(323552.0,	3783699.0,	215.5,	939.9,	0.0);	(323396.0,	3783711.0,	215.2,	939.9,	0.0);
(323408.0,	3783711.0,	215.4,	939.9,	0.0);	(323420.0,	3783711.0,	215.3,	939.9,	0.0);

(323432.0, 3783711.0, 215.4, 939.9, 0.0); (323444.0, 3783711.0, 215.4, 939.9, 0.0);
(323456.0, 3783711.0, 215.5, 939.9, 0.0); (323468.0, 3783711.0, 215.5, 939.9, 0.0);
(323480.0, 3783711.0, 215.5, 939.9, 0.0); (323492.0, 3783711.0, 215.3, 939.9, 0.0);
(323504.0, 3783711.0, 215.1, 939.9, 0.0); (323516.0, 3783711.0, 215.0, 939.9, 0.0);

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: E:\WD Passport\1651 lynn road\metdata\Thousand Oaks_2015-2017.SFC Met Version: 18081
Profile file: E:\WD Passport\1651 lynn road\metdata\Thousand Oaks_2015-2017.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 93110 Upper air station no.: 93214
Name: OXNARD AIRPORT, CA Name: VANDENBERG AFB, CA
Year: 2015 Year: 2015

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
15	01	01	1	01	-2.8	0.059	-9.000	-9.000	-999.	34.	6.3	0.33	1.11	1.00	1.00	112.	10.0	275.4	10.0
15	01	01	1	02	-5.2	0.079	-9.000	-9.000	-999.	53.	8.3	0.29	1.11	1.00	1.40	129.	10.0	274.6	10.0
15	01	01	1	03	-3.9	0.068	-9.000	-9.000	-999.	42.	7.1	0.29	1.11	1.00	1.20	126.	10.0	274.2	10.0
15	01	01	1	04	-6.0	0.084	-9.000	-9.000	-999.	59.	8.8	0.29	1.11	1.00	1.50	126.	10.0	273.6	10.0
15	01	01	1	05	-6.0	0.084	-9.000	-9.000	-999.	59.	8.8	0.29	1.11	1.00	1.50	127.	10.0	273.8	10.0
15	01	01	1	06	-8.7	0.101	-9.000	-9.000	-999.	77.	10.6	0.29	1.11	1.00	1.80	127.	10.0	274.0	10.0
15	01	01	1	07	-14.2	0.130	-9.000	-9.000	-999.	112.	13.5	0.29	1.11	1.00	2.30	146.	10.0	273.5	10.0
15	01	01	1	08	-8.9	0.107	-9.000	-9.000	-999.	84.	12.2	0.29	1.11	0.56	1.90	127.	10.0	275.0	10.0
15	01	01	1	09	21.5	0.201	0.313	0.005	50.	216.	-33.3	0.29	1.11	0.31	1.50	141.	10.0	278.9	10.0
15	01	01	1	10	73.9	0.245	0.561	0.005	85.	291.	-17.6	0.34	1.11	0.23	1.60	163.	10.0	281.6	10.0
15	01	01	1	11	111.3	0.090	1.400	0.010	873.	89.	-1.0	0.35	1.11	0.20	0.28	66.	10.0	284.5	10.0
15	01	01	1	12	130.4	0.081	1.493	0.009	903.	56.	-1.0	0.21	1.11	0.19	0.28	273.	10.0	286.2	10.0
15	01	01	1	13	130.0	0.204	1.508	0.008	932.	220.	-5.7	0.21	1.11	0.19	1.30	297.	10.0	286.2	10.0
15	01	01	1	14	111.0	0.147	1.443	0.007	957.	136.	-2.5	0.21	1.11	0.20	0.80	281.	10.0	286.9	10.0
15	01	01	1	15	73.6	0.324	1.266	0.006	973.	443.	-40.8	0.21	1.11	0.23	2.70	281.	10.0	286.5	10.0
15	01	01	1	16	21.1	0.359	0.838	0.006	982.	516.	-193.4	0.21	1.11	0.32	3.30	280.	10.0	285.8	10.0
15	01	01	1	17	-23.3	0.245	-9.000	-9.000	-999.	298.	55.7	0.21	1.11	0.57	2.90	282.	10.0	284.4	10.0
15	01	01	1	18	-2.1	0.048	-9.000	-9.000	-999.	111.	4.6	0.15	1.11	1.00	1.00	309.	10.0	282.5	10.0
15	01	01	1	19	-2.8	0.059	-9.000	-9.000	-999.	36.	6.3	0.33	1.11	1.00	1.00	100.	10.0	280.9	10.0
15	01	01	1	20	-2.7	0.056	-9.000	-9.000	-999.	32.	5.9	0.29	1.11	1.00	1.00	123.	10.0	279.2	10.0
15	01	01	1	21	-6.0	0.084	-9.000	-9.000	-999.	59.	8.9	0.29	1.11	1.00	1.50	134.	10.0	278.4	10.0
15	01	01	1	22	-2.2	0.051	-9.000	-9.000	-999.	27.	5.3	0.29	1.11	1.00	0.90	127.	10.0	277.6	10.0
15	01	01	1	23	-3.2	0.062	-9.000	-9.000	-999.	37.	6.5	0.29	1.11	1.00	1.10	128.	10.0	276.5	10.0

15 01 01   1 24   -3.2 0.062 -9.000 -9.000 -999.   37.   6.5 0.29   1.11   1.00   1.10 127.   10.0 275.8   10.0

First hour of profile data
YR MO DY HR HEIGHT F WDIR   WSPD AMB_TMP sigmaA sigmaW sigmaV
15 01 01 01   10.0 1 112.   1.00   275.5   19.8 -99.00   0.33

F indicates top of profile (=1) or below (=0)

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

  *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   3 YEARS FOR SOURCE GROUP: ALL   ***
                  INCLUDING SOURCE(S):   C_1   , C_2   , C_3   , C_4   , C_5   ,
            C_6   , C_7   , C_8   , C_9   , C_10   , C_11   , C_12   , C_13   ,
            C_14   , C_15   , C_16   , C_17   , C_18   , C_19   , C_20   , C_21   ,
            C_22   , C_23   , C_24   , C_25   , C_26   , C_27   , C_28   , . . .   ,

                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                              ** CONC OF OTHER   IN MICROGRAMS/M**3   **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
323576.00	3783327.00	0.00215	323588.00	3783327.00	0.00213
323600.00	3783327.00	0.00210	323612.00	3783327.00	0.00204
323624.00	3783327.00	0.00198	323576.00	3783339.00	0.00257
323588.00	3783339.00	0.00252	323600.00	3783339.00	0.00245
323612.00	3783339.00	0.00237	323624.00	3783339.00	0.00228
323636.00	3783339.00	0.00220	323576.00	3783351.00	0.00306
323588.00	3783351.00	0.00298	323600.00	3783351.00	0.00286
323612.00	3783351.00	0.00274	323624.00	3783351.00	0.00261
323636.00	3783351.00	0.00250	323576.00	3783363.00	0.00364
323588.00	3783363.00	0.00351	323600.00	3783363.00	0.00335
323612.00	3783363.00	0.00318	323624.00	3783363.00	0.00300
323636.00	3783363.00	0.00285	323576.00	3783375.00	0.00433
323588.00	3783375.00	0.00413	323600.00	3783375.00	0.00390
323612.00	3783375.00	0.00366	323624.00	3783375.00	0.00342
323636.00	3783375.00	0.00320	323576.00	3783387.00	0.00516
323588.00	3783387.00	0.00484	323600.00	3783387.00	0.00451
323612.00	3783387.00	0.00417	323624.00	3783387.00	0.00384
323636.00	3783387.00	0.00354	323252.00	3783399.00	0.00084
323264.00	3783399.00	0.00095	323240.00	3783411.00	0.00074
323252.00	3783411.00	0.00085	323264.00	3783411.00	0.00098
323240.00	3783423.00	0.00074	323252.00	3783423.00	0.00086
323264.00	3783423.00	0.00100	323240.00	3783435.00	0.00074
323252.00	3783435.00	0.00086	323264.00	3783435.00	0.00100
323276.00	3783435.00	0.00118	323288.00	3783435.00	0.00140
323228.00	3783447.00	0.00064	323240.00	3783447.00	0.00073
323252.00	3783447.00	0.00085	323264.00	3783447.00	0.00100
323276.00	3783447.00	0.00118	323288.00	3783447.00	0.00142
323228.00	3783459.00	0.00063	323240.00	3783459.00	0.00073
323252.00	3783459.00	0.00085	323264.00	3783459.00	0.00100
323276.00	3783459.00	0.00118	323288.00	3783459.00	0.00142
323228.00	3783471.00	0.00063	323240.00	3783471.00	0.00072
323252.00	3783471.00	0.00084	323264.00	3783471.00	0.00099
323276.00	3783471.00	0.00117	323288.00	3783471.00	0.00141
323300.00	3783471.00	0.00172	323312.00	3783471.00	0.00213
323324.00	3783471.00	0.00270	323336.00	3783471.00	0.00351
323348.00	3783471.00	0.00473	323360.00	3783471.00	0.00670
323372.00	3783471.00	0.00991	323552.00	3783471.00	0.01669
323564.00	3783471.00	0.01298	323576.00	3783471.00	0.01033
323228.00	3783483.00	0.00062	323240.00	3783483.00	0.00071
323252.00	3783483.00	0.00082	323264.00	3783483.00	0.00097

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 3 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): C_1 , C_2 , C_3 , C_4 , C_5 ,
C_6 , C_7 , C_8 , C_9 , C_10 , C_11 , C_12 , C_13 ,
C_14 , C_15 , C_16 , C_17 , C_18 , C_19 , C_20 , C_21 ,
C_22 , C_23 , C_24 , C_25 , C_26 , C_27 , C_28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
323276.00	3783483.00	0.00115	323288.00	3783483.00	0.00138
323300.00	3783483.00	0.00169	323312.00	3783483.00	0.00210
323324.00	3783483.00	0.00268	323336.00	3783483.00	0.00349
323348.00	3783483.00	0.00471	323360.00	3783483.00	0.00668
323372.00	3783483.00	0.00984	323552.00	3783483.00	0.01651
323564.00	3783483.00	0.01278	323576.00	3783483.00	0.01011
323588.00	3783483.00	0.00820	323600.00	3783483.00	0.00677
323612.00	3783483.00	0.00562	323624.00	3783483.00	0.00474
323228.00	3783495.00	0.00060	323240.00	3783495.00	0.00069
323252.00	3783495.00	0.00080	323264.00	3783495.00	0.00094
323276.00	3783495.00	0.00111	323288.00	3783495.00	0.00134
323300.00	3783495.00	0.00165	323312.00	3783495.00	0.00205
323324.00	3783495.00	0.00262	323336.00	3783495.00	0.00343
323348.00	3783495.00	0.00464	323360.00	3783495.00	0.00660
323372.00	3783495.00	0.00976	323552.00	3783495.00	0.01595
323564.00	3783495.00	0.01230	323576.00	3783495.00	0.00967
323588.00	3783495.00	0.00777	323600.00	3783495.00	0.00637
323612.00	3783495.00	0.00526	323624.00	3783495.00	0.00441
323228.00	3783507.00	0.00058	323240.00	3783507.00	0.00067
323252.00	3783507.00	0.00077	323264.00	3783507.00	0.00090
323276.00	3783507.00	0.00107	323288.00	3783507.00	0.00129
323300.00	3783507.00	0.00158	323312.00	3783507.00	0.00198
323324.00	3783507.00	0.00252	323336.00	3783507.00	0.00330
323348.00	3783507.00	0.00446	323360.00	3783507.00	0.00635
323372.00	3783507.00	0.00942	323552.00	3783507.00	0.01493
323564.00	3783507.00	0.01143	323576.00	3783507.00	0.00893
323588.00	3783507.00	0.00711	323600.00	3783507.00	0.00580
323612.00	3783507.00	0.00478	323624.00	3783507.00	0.00401
323228.00	3783519.00	0.00056	323240.00	3783519.00	0.00065
323252.00	3783519.00	0.00075	323264.00	3783519.00	0.00087
323276.00	3783519.00	0.00103	323288.00	3783519.00	0.00124
323300.00	3783519.00	0.00151	323312.00	3783519.00	0.00188
323324.00	3783519.00	0.00239	323336.00	3783519.00	0.00311
323348.00	3783519.00	0.00419	323360.00	3783519.00	0.00596
323372.00	3783519.00	0.00885	323552.00	3783519.00	0.01316
323564.00	3783519.00	0.01002	323576.00	3783519.00	0.00780
323588.00	3783519.00	0.00620	323600.00	3783519.00	0.00506
323612.00	3783519.00	0.00419	323624.00	3783519.00	0.00352
323240.00	3783531.00	0.00063	323252.00	3783531.00	0.00072
323264.00	3783531.00	0.00084	323276.00	3783531.00	0.00099

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 3 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): C_1 , C_2 , C_3 , C_4 , C_5 ,
C_6 , C_7 , C_8 , C_9 , C_10 , C_11 , C_12 , C_13 ,
C_14 , C_15 , C_16 , C_17 , C_18 , C_19 , C_20 , C_21 ,
C_22 , C_23 , C_24 , C_25 , C_26 , C_27 , C_28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
323288.00	3783531.00	0.00118	323300.00	3783531.00	0.00143
323312.00	3783531.00	0.00178	323324.00	3783531.00	0.00224
323336.00	3783531.00	0.00288	323348.00	3783531.00	0.00384
323360.00	3783531.00	0.00541	323372.00	3783531.00	0.00800
323552.00	3783531.00	0.01080	323564.00	3783531.00	0.00825
323576.00	3783531.00	0.00648	323588.00	3783531.00	0.00519
323600.00	3783531.00	0.00427	323612.00	3783531.00	0.00356
323624.00	3783531.00	0.00302	323240.00	3783543.00	0.00060
323252.00	3783543.00	0.00070	323264.00	3783543.00	0.00081
323276.00	3783543.00	0.00094	323288.00	3783543.00	0.00112
323300.00	3783543.00	0.00135	323312.00	3783543.00	0.00166
323324.00	3783543.00	0.00207	323336.00	3783543.00	0.00263
323348.00	3783543.00	0.00343	323360.00	3783543.00	0.00472
323372.00	3783543.00	0.00679	323552.00	3783543.00	0.00802
323564.00	3783543.00	0.00631	323576.00	3783543.00	0.00509
323588.00	3783543.00	0.00417	323600.00	3783543.00	0.00349
323612.00	3783543.00	0.00296	323624.00	3783543.00	0.00254
323240.00	3783555.00	0.00059	323252.00	3783555.00	0.00067
323264.00	3783555.00	0.00077	323276.00	3783555.00	0.00090
323288.00	3783555.00	0.00106	323300.00	3783555.00	0.00127
323312.00	3783555.00	0.00154	323324.00	3783555.00	0.00189
323336.00	3783555.00	0.00236	323348.00	3783555.00	0.00300
323360.00	3783555.00	0.00397	323372.00	3783555.00	0.00542
323552.00	3783555.00	0.00554	323564.00	3783555.00	0.00457
323576.00	3783555.00	0.00383	323588.00	3783555.00	0.00324
323600.00	3783555.00	0.00278	323612.00	3783555.00	0.00241
323624.00	3783555.00	0.00211	323240.00	3783567.00	0.00057
323252.00	3783567.00	0.00065	323264.00	3783567.00	0.00074
323276.00	3783567.00	0.00086	323288.00	3783567.00	0.00101
323300.00	3783567.00	0.00119	323312.00	3783567.00	0.00143
323324.00	3783567.00	0.00172	323336.00	3783567.00	0.00210
323348.00	3783567.00	0.00260	323360.00	3783567.00	0.00329
323372.00	3783567.00	0.00421	323552.00	3783567.00	0.00392
323564.00	3783567.00	0.00335	323576.00	3783567.00	0.00289
323588.00	3783567.00	0.00252	323600.00	3783567.00	0.00221
323612.00	3783567.00	0.00196	323624.00	3783567.00	0.00175
323636.00	3783567.00	0.00157	323648.00	3783567.00	0.00141
323660.00	3783567.00	0.00128	323252.00	3783579.00	0.00062
323264.00	3783579.00	0.00071	323276.00	3783579.00	0.00082
323288.00	3783579.00	0.00095	323300.00	3783579.00	0.00111

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 3 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): C_1 , C_2 , C_3 , C_4 , C_5 ,
C_6 , C_7 , C_8 , C_9 , C_10 , C_11 , C_12 , C_13 ,
C_14 , C_15 , C_16 , C_17 , C_18 , C_19 , C_20 , C_21 ,
C_22 , C_23 , C_24 , C_25 , C_26 , C_27 , C_28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
323312.00	3783579.00	0.00131	323324.00	3783579.00	0.00156
323336.00	3783579.00	0.00186	323348.00	3783579.00	0.00223
323360.00	3783579.00	0.00271	323372.00	3783579.00	0.00329
323540.00	3783579.00	0.00339	323552.00	3783579.00	0.00292
323564.00	3783579.00	0.00255	323576.00	3783579.00	0.00225
323588.00	3783579.00	0.00200	323600.00	3783579.00	0.00178
323612.00	3783579.00	0.00160	323624.00	3783579.00	0.00145
323636.00	3783579.00	0.00132	323648.00	3783579.00	0.00120
323660.00	3783579.00	0.00110	323252.00	3783591.00	0.00060
323264.00	3783591.00	0.00068	323276.00	3783591.00	0.00078
323288.00	3783591.00	0.00089	323300.00	3783591.00	0.00103
323312.00	3783591.00	0.00120	323324.00	3783591.00	0.00140

323336.00	3783591.00	0.00164	323348.00	3783591.00	0.00191
323360.00	3783591.00	0.00225	323372.00	3783591.00	0.00262
323456.00	3783591.00	0.00408	323468.00	3783591.00	0.00408
323480.00	3783591.00	0.00400	323492.00	3783591.00	0.00383
323504.00	3783591.00	0.00356	323516.00	3783591.00	0.00323
323528.00	3783591.00	0.00288	323540.00	3783591.00	0.00255
323552.00	3783591.00	0.00225	323564.00	3783591.00	0.00201
323576.00	3783591.00	0.00180	323588.00	3783591.00	0.00162
323600.00	3783591.00	0.00146	323612.00	3783591.00	0.00133
323624.00	3783591.00	0.00121	323636.00	3783591.00	0.00111
323648.00	3783591.00	0.00102	323660.00	3783591.00	0.00094
323264.00	3783603.00	0.00065	323276.00	3783603.00	0.00073
323288.00	3783603.00	0.00084	323300.00	3783603.00	0.00096
323312.00	3783603.00	0.00110	323324.00	3783603.00	0.00126
323336.00	3783603.00	0.00144	323348.00	3783603.00	0.00165
323360.00	3783603.00	0.00189	323372.00	3783603.00	0.00213
323456.00	3783603.00	0.00310	323468.00	3783603.00	0.00307
323480.00	3783603.00	0.00300	323492.00	3783603.00	0.00285
323504.00	3783603.00	0.00266	323516.00	3783603.00	0.00244
323528.00	3783603.00	0.00221	323540.00	3783603.00	0.00199
323552.00	3783603.00	0.00179	323564.00	3783603.00	0.00162
323576.00	3783603.00	0.00147	323588.00	3783603.00	0.00134
323600.00	3783603.00	0.00122	323612.00	3783603.00	0.00112
323624.00	3783603.00	0.00103	323636.00	3783603.00	0.00095
323648.00	3783603.00	0.00088	323660.00	3783603.00	0.00082
323264.00	3783615.00	0.00061	323276.00	3783615.00	0.00069
323288.00	3783615.00	0.00078	323300.00	3783615.00	0.00088
323312.00	3783615.00	0.00100	323324.00	3783615.00	0.00113

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 3 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): C_1 , C_2 , C_3 , C_4 , C_5 ,
C_6 , C_7 , C_8 , C_9 , C_10 , C_11 , C_12 , C_13 ,
C_14 , C_15 , C_16 , C_17 , C_18 , C_19 , C_20 , C_21 ,
C_22 , C_23 , C_24 , C_25 , C_26 , C_27 , C_28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
323336.00	3783615.00	0.00128	323348.00	3783615.00	0.00143
323360.00	3783615.00	0.00160	323372.00	3783615.00	0.00177
323456.00	3783615.00	0.00243	323468.00	3783615.00	0.00239
323480.00	3783615.00	0.00232	323492.00	3783615.00	0.00221
323504.00	3783615.00	0.00207	323516.00	3783615.00	0.00192
323528.00	3783615.00	0.00175	323540.00	3783615.00	0.00160
323552.00	3783615.00	0.00146	323564.00	3783615.00	0.00134
323576.00	3783615.00	0.00122	323588.00	3783615.00	0.00112
323600.00	3783615.00	0.00104	323612.00	3783615.00	0.00096
323624.00	3783615.00	0.00088	323636.00	3783615.00	0.00082
323648.00	3783615.00	0.00076	323276.00	3783627.00	0.00065
323288.00	3783627.00	0.00073	323300.00	3783627.00	0.00082
323312.00	3783627.00	0.00091	323324.00	3783627.00	0.00102
323336.00	3783627.00	0.00113	323348.00	3783627.00	0.00125
323360.00	3783627.00	0.00137	323372.00	3783627.00	0.00149
323456.00	3783627.00	0.00194	323468.00	3783627.00	0.00190
323480.00	3783627.00	0.00184	323492.00	3783627.00	0.00176
323504.00	3783627.00	0.00166	323516.00	3783627.00	0.00154
323528.00	3783627.00	0.00143	323540.00	3783627.00	0.00132
323552.00	3783627.00	0.00121	323564.00	3783627.00	0.00112
323576.00	3783627.00	0.00103	323588.00	3783627.00	0.00096
323600.00	3783627.00	0.00089	323612.00	3783627.00	0.00082
323624.00	3783627.00	0.00077	323636.00	3783627.00	0.00072
323288.00	3783639.00	0.00068	323300.00	3783639.00	0.00075
323312.00	3783639.00	0.00083	323324.00	3783639.00	0.00092
323336.00	3783639.00	0.00101	323348.00	3783639.00	0.00110
323360.00	3783639.00	0.00119	323372.00	3783639.00	0.00128

323540.00	3783639.00	0.00110	323552.00	3783639.00	0.00102
323564.00	3783639.00	0.00095	323576.00	3783639.00	0.00089
323588.00	3783639.00	0.00082	323600.00	3783639.00	0.00077
323612.00	3783639.00	0.00072	323624.00	3783639.00	0.00067
323636.00	3783639.00	0.00063	323300.00	3783651.00	0.00069
323312.00	3783651.00	0.00076	323324.00	3783651.00	0.00083
323336.00	3783651.00	0.00090	323348.00	3783651.00	0.00097
323360.00	3783651.00	0.00104	323372.00	3783651.00	0.00111
323540.00	3783651.00	0.00093	323552.00	3783651.00	0.00087
323564.00	3783651.00	0.00082	323576.00	3783651.00	0.00076
323588.00	3783651.00	0.00072	323600.00	3783651.00	0.00067
323612.00	3783651.00	0.00063	323624.00	3783651.00	0.00059
323312.00	3783663.00	0.00069	323324.00	3783663.00	0.00075

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 3 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): C_1 , C_2 , C_3 , C_4 , C_5 ,
C_6 , C_7 , C_8 , C_9 , C_10 , C_11 , C_12 , C_13 ,
C_14 , C_15 , C_16 , C_17 , C_18 , C_19 , C_20 , C_21 ,
C_22 , C_23 , C_24 , C_25 , C_26 , C_27 , C_28 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
323336.00	3783663.00	0.00081	323348.00	3783663.00	0.00086
323360.00	3783663.00	0.00092	323372.00	3783663.00	0.00097
323540.00	3783663.00	0.00080	323552.00	3783663.00	0.00075
323564.00	3783663.00	0.00071	323576.00	3783663.00	0.00067
323588.00	3783663.00	0.00063	323600.00	3783663.00	0.00059
323612.00	3783663.00	0.00056	323324.00	3783675.00	0.00068
323336.00	3783675.00	0.00073	323348.00	3783675.00	0.00077
323360.00	3783675.00	0.00081	323372.00	3783675.00	0.00085
323456.00	3783675.00	0.00092	323468.00	3783675.00	0.00090
323480.00	3783675.00	0.00087	323492.00	3783675.00	0.00084
323504.00	3783675.00	0.00080	323516.00	3783675.00	0.00077
323528.00	3783675.00	0.00073	323540.00	3783675.00	0.00069
323552.00	3783675.00	0.00065	323564.00	3783675.00	0.00062
323576.00	3783675.00	0.00058	323588.00	3783675.00	0.00055
323600.00	3783675.00	0.00052	323348.00	3783687.00	0.00069
323360.00	3783687.00	0.00072	323372.00	3783687.00	0.00075
323384.00	3783687.00	0.00078	323396.00	3783687.00	0.00080
323408.00	3783687.00	0.00081	323420.00	3783687.00	0.00081
323432.00	3783687.00	0.00081	323444.00	3783687.00	0.00081
323456.00	3783687.00	0.00079	323468.00	3783687.00	0.00077
323480.00	3783687.00	0.00075	323492.00	3783687.00	0.00073
323504.00	3783687.00	0.00070	323516.00	3783687.00	0.00066
323528.00	3783687.00	0.00063	323540.00	3783687.00	0.00060
323552.00	3783687.00	0.00057	323564.00	3783687.00	0.00054
323576.00	3783687.00	0.00052	323372.00	3783699.00	0.00067
323384.00	3783699.00	0.00069	323396.00	3783699.00	0.00070
323408.00	3783699.00	0.00071	323420.00	3783699.00	0.00071
323432.00	3783699.00	0.00071	323444.00	3783699.00	0.00070
323456.00	3783699.00	0.00069	323468.00	3783699.00	0.00068
323480.00	3783699.00	0.00066	323492.00	3783699.00	0.00063
323504.00	3783699.00	0.00061	323516.00	3783699.00	0.00058
323528.00	3783699.00	0.00056	323540.00	3783699.00	0.00053
323552.00	3783699.00	0.00051	323396.00	3783711.00	0.00062
323408.00	3783711.00	0.00063	323420.00	3783711.00	0.00063
323432.00	3783711.00	0.00062	323444.00	3783711.00	0.00062
323456.00	3783711.00	0.00061	323468.00	3783711.00	0.00059
323480.00	3783711.00	0.00058	323492.00	3783711.00	0.00056
323504.00	3783711.00	0.00054	323516.00	3783711.00	0.00051

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 3 YEARS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.01669 AT (323552.00, 3783471.00, 222.89, 939.95, 0.00)	DC	
	2ND HIGHEST VALUE IS	0.01651 AT (323552.00, 3783483.00, 222.99, 939.95, 0.00)	DC	
	3RD HIGHEST VALUE IS	0.01595 AT (323552.00, 3783495.00, 223.23, 939.95, 0.00)	DC	
	4TH HIGHEST VALUE IS	0.01493 AT (323552.00, 3783507.00, 223.45, 939.95, 0.00)	DC	
	5TH HIGHEST VALUE IS	0.01316 AT (323552.00, 3783519.00, 223.19, 939.95, 0.00)	DC	
	6TH HIGHEST VALUE IS	0.01298 AT (323564.00, 3783471.00, 221.74, 939.95, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.01278 AT (323564.00, 3783483.00, 222.07, 939.95, 0.00)	DC	
	8TH HIGHEST VALUE IS	0.01230 AT (323564.00, 3783495.00, 222.63, 939.95, 0.00)	DC	
	9TH HIGHEST VALUE IS	0.01143 AT (323564.00, 3783507.00, 223.18, 939.95, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.01080 AT (323552.00, 3783531.00, 222.84, 939.95, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT URBAN SigA Data

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 214 Informational Message(s)

A Total of 26304 Hours Were Processed

A Total of 0 Calm Hours Identified

A Total of 214 Missing Hours Identified (0.81 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
ME W186 1538 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
MX W403 1538 PFLCNV: Turbulence data is being used w/o ADJ_U* option SigA Data

****
*** AERMOD Finishes Successfully ***
****

ATTACHMENT E

List of References

1. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 2017. *Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size.* ANSI/ASHRAE Standard 52.2-2017.

2. California Air Pollution Control Officers Association (CAPCOA), 1987. *Toxic Air Pollutant Source Assessment Manual for California Air Pollution Control Districts and Applicants for Air Pollution Control District Permits,* prepared by Interagency Workshop Group, (Revised) December 1989.

3. California Air Resources Board, 1997. *Methods for Assessing Area Source Emissions in California: Volume III* (Revised).

4. California Air Resources Board, 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*.

5. California Air Resources Board, 2023. *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values*.

6. California Code of Regulations, Title 22, Section 12703.

7. California Code of Regulations, Section 93001.

8. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, 2015. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.

9. California Health and Safety Code, Section 44360.

10. City of Thousand Oaks, 2023. General Plan 2045. Website: https://toaks2045.org.

11. DiCecco Architecture Inc., 2023. Project Plan Set. Adams Lynn Road - 1651 Lynn Road, Thousand Oaks, California.

12. Envicom Corporation, 2024. CalEEMod output file - 1651 Lynn Road.

13. LGC Valley, Inc., 2023. Update Letter, 1651 Lynn Road, City of Thousand Oaks, California.

14. Pacific Coast Civil, Inc., 2024. Tentative Tract Map # 6081.

15. United States Environmental Protection Agency, Office of Emergency and Remedial Response, Toxics Integration Branch, December 1989. *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Part A, Interim Final*. EPA-540/1-89-002.

16. United States Environmental Protection Agency, Office of Emergency and Remedial Response, Toxics Integration Branch, March 1991. *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual, Supplemental Guidance, Standard Default Exposure Factors, Interim Final*. OSWER 9285.6-03.

17. United States Environmental Protection Agency, Office of Air Quality Planning and Standards, 1995. *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition. AP-42.

18. United States Environmental Protection Agency, Office of Research and Development, 1997. *Exposure Factors Handbook*.

19. United States Environmental Protection Agency, Office of Research and Development, 2002. *Health Assessment Document for Diesel Exhaust*. EPA/600/8-90/057F.

20. United States Environmental Protection Agency, 2015. Handbook for Implementing the Supplemental Cancer Guidance at Waste and Cleanup Sites. Website: http://www.epa.gov/oswer/riskassessment/sghandbook/chemicals.htm.

21. United States Environmental Protection Agency, 2023. *User's Guide for the AMS/EPA Regulatory Model - AERMOD*. EPA-454/B-23-008.

22. United States Environmental Protection Agency, 2023. *AERMOD Implementation Guide.* EPA-454/B-23-009.

23. United States Environmental Protection Agency, 2017. Guideline on Air Quality Models (Final Rule). 40 CFR Part 51.

24. United States Geological Survey, 2024. National Map Download Application. Website: https://apps.nationalmap.gov/downloader/#/.

25. South Coast Air Quality Management District, 2008. *Final Localized Significance Threshold Methodology.*

26. Ventura County Air Pollution Control District (VCAPCD), Meteorological Data Set for Thousand Oaks.

27. Ventura County Air Pollution Control District, 2003. *Ventura County Air Quality Assessment Guidelines.*

APPENDIX C

Biological Inventory Report

PAX
Environmental, Inc.

226 West Ojai Ave Ste. 101 #157 Ojai, CA 93023 805.633.9218 www.paxenviro.com

February 1, 2024 (Updated: March 28, 2024)

Attn: Jeb Adams
REMAX/ONE
30699 Russel Ranch Road, Suite 100
Westlake Village, CA 91362
phone: (818) 338-9296
mobile: (818) 681-4179
jeb@jebadams.com

Re: Biological Inventory Report for Assessor Parcel Number 660-0-030-165 at 1651 Lynn Rd, Thousand Oaks, Ventura County, California.

Dear Mr. Adams:

This report summarizes the results of a biological survey performed by Pax Environmental, Inc. (Pax) to assess existing biological conditions for the project at Assessor Parcel Number (APN) 660-0-030-165 at 1651 Lynn Road, Thousand Oaks, Ventura County, California (Study Area). The proposed Project is a tract development consisting of 18 single family residences with attached two-car garages and a common pool area with one restroom (Project).

Data collected during the surveys focused on existing habitat and site conditions, hydrological features, and any special-status species with the potential to occur. This report includes the findings of the surveys and includes a vegetation community analysis, maps (Appendix A); an inventory of observed plants and wildlife (Appendix B), a desktop analysis of rare plant, wildlife, or sensitive resources with the potential to occur (Appendix C), and representative photos of the Study Area (Appendix D).

Methods

Literature and Desktop Review

Prior to performing the field survey, Pax performed a records search for special-status plants, special-status wildlife, sensitive natural communities, critical habitat, and other sensitive resources species potentially occurring in the Project area. Sources utilized during the records search included the California Natural Diversity Database (CNDDB) (CDFW, 2024), the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2024), USFWS Threatened and Endangered Species Active Critical Habitat Report (USFWS, 2024), U.S. Geological Survey (USGS) topographic maps (USGS, 2024), and Natural Resource Conservation Service (NRCS) soils information (NRCS, 2024). The records search was performed using a 10-mile radius around the Study Area in all eight cardinal directions.

Field Surveys

A reconnaissance-level survey was conducted on January 5, 2024, by Pax senior biologist Andy Fredell. Table 1 summarizes the environmental conditions of the site at the time of the field survey. This survey consisted of meandering transects across the Study Area and a visual search for plants and wildlife, or evidence of their presence (scat, tracks, burrows, nests, etc.), with 100% visual coverage of the Study Area. Identifiable species were noted and recorded upon detection. Following the initial survey, a determination of the likelihood of occurrence was made for special-status species that were not detected based on species or habitat elements observed during the survey as well as putative flowering phenology (e.g., habitat type, elevation, slope, soil, etc.).

Table 1. Survey Conditions

Date	Start/ End Time	Temperature (°Fahrenheit)	Cloud Cover (%)	Wind Speed (miles/hour)	Surveyor
1/5/2024	1100/1500	80	0	1 - 4	Andy Fredell

Biological Resources

General Site Conditions

The general location of the Project is as United States Geological Survey 7.5' quadrangles: Newbury Park, township: 2 north range: 20 west latitude: 34°10'39.17" north longitude: 118°54'56.00" west. The Study Area is a privately owned lot with on existing single-family residence within a residential community (Figure 2). The surrounding parcels are privately owned and either fully or partially developed. No natural wetland features were observed within or near the Study Area.

Soils within the Study Area are comprised of Urban land – Typic Xerorthents; very gravelly, Topdeck complex with 10 to 35 percent slopes and Cropley clay 0 to 2 percent slopes warm MAAT, MLRA 19 (Figure 4). Urban land soils refer to soils in areas of high population density and exhibit a wide variety of conditions and properties and may have impervious surfaces. Typic Xerorthents complex soils are excessively drain human transported fill soils derived from schist. Topdeck loam series soils are comprised of shallow and well drained gravelly loams. Cropley clay soils are very deep, moderately well and well drained soils that formed in alluvium from mixed rock sources Cropley soils are on alluvial fans, floodplains and in small basins. Slopes range from 0 to 15 percent.

Flora

The plant communities within the Study Area are depicted in Figure 3 and include coast live oak (*Quercus agrifolia*) woodlands, upland mustards and star thistles fields and ornamental/landscapes. Descriptions of the communities are included below, and a list of native and non-native plant species observed during the site survey are included in Table 2 of Appendix B. Plants and Wildlife Species Observed.

Ornamental Plant Communities: Ornamental vegetation communities are dominated by intentionally

planted species in a landscaped setting. Native vegetation is generally lacking in these communities, ornamental plantings include lawns, shrubs, and trees.

Coast Live Oak Woodlands (*Quercus agrifolia* woodland alliance): This alliance is dominant in the on the edges of the Study Area. Within the Study Area, this community is moderately disturbed with some shrub clearance having been conducted in the understory. Membership rules for this community include a greater than 50% relative cover of coast live oak.

Upland Mustards or Star Thistle Fields (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance): This alliance is dominant in the four southern parcels and part of the parcel where the residence is located. These areas appear to be cleared regularly for fire clearance. Dominant species include wild oats (*Avena fatua* & *Avena barbata*), ripgut brome (*Bromus diandrus*), tumbleweed (*Salsola tragus*), and coastal heron's bill (*Erodium cicutarium*). Native species that were observed at a lower percentage include Canada horseweed (*Eridgeron canadensis*) and San Diego wreathplant (*Stephanomeria diegensis*).

Wildlife

Wildlife observed during the January 5, 2024, survey were species that are commonly observed on undeveloped land in the Conejo Valley, such as: California scrub-jay (*Aphelocoma californica*), red tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), northern flicker (*Colaptes auratus*), western fence lizard (*Sceloporus occidentalis*), and California ground squirrel (*Otospermophilus beecheyi*). A complete list of wildlife species observed during the site survey are included in Table 3 of Appendix B. The site also provides suitable nesting habitat for birds, which may be utilized during the breeding season of February 1 – September 1.

Special-Status Species

Appendix B provides a tabular list of all special status species occurrences documented in CNDDB within 10 miles of the Study Area. Based on the reconnaissance surveys, while suitable habitat is present for several special-status wildlife and plant species within the Study Area, no special-status species were observed during the surveys.

Several special plant species have a low potential to occur in the Study Area, including Braunton's milk-vetch, (*Astragalus brauntonii*), white-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*), Lyon's pentachaeta (*Pentachaeta lyonia*), and Nuttall's scrub oak (*Quercus Dumosa*). The potential for these plant species to occur is summarized Table 5 of Appendix D. Study Area Photos.

One special status wildlife species coastal whiptail (*Aspidoscelis tigris stejnegeri*) has a high potential to occur within the Study Area while Cooper's hawk (*Accipiter cooperii*), and southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) have a moderate potential to occur. Marginal habitat for several special status wildlife species with a low potential to occur, including California legless lizard (*Anniella* spp.) southern California legless lizard (*Anniella stebbinsi*), pallid bat (*Antrozous pallidus*), golden eagle (*Aquila chrysaetos*), California glossy snake (*Arizona elegans occidentalis*), burrowing owl

(*Athene cunicularia*), Monarch butterfly (*Danaus plexippus plexippus pop. 1*), white-tailed kite (*Elanus leucurus*), western mastiff bat (*Eumops perotis californicus*), coastal California gnatcatcher (*Polioptila californica californica*), coast horned lizard (*Phrynosoma blainvillii*). Table 4 of Appendix C summarizes the potential for these species to occur.

Discussion

The development of the Project in the ruderal and upland mustard and star thistle field portions of the Study Area will have negligible impacts to biological resources. This is due to the disturbed nature of these portions of the Study Area with its mostly non-native vegetation and lack of high quality or sensitive habitat. The proposed Project will remove 21 coast live oaks and impact 82 coast live oaks that are on the property. Oaks are protected in the City of Thousand Oaks under Municipal Code, Article 42. These impacts and minimization measures are documented in the Oak Tree Report (Scow 2023).

While no special status species were documented during the surveys species had a moderate of high potential to occur including coastal whiptail lizard, southern California rufous-crowned sparrow, and Cooper's hawk. Surveys for these species should be conducted prior to vegetation removal and ground disturbance. If presence is documented monitoring protocols should be implemented to minimize impacts.

Vegetation removal should be scheduled outside of bird breeding season (February 1 – August 15); if this is unavoidable, then preconstruction surveys and monitoring protocols should be implemented to minimize impact to nesting birds.

Please feel free to contact us if you have any questions or concerns.

Sincerely,



Andy Fredell, M.S. Project Manager/Senior Biologist

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Appendix A. Maps

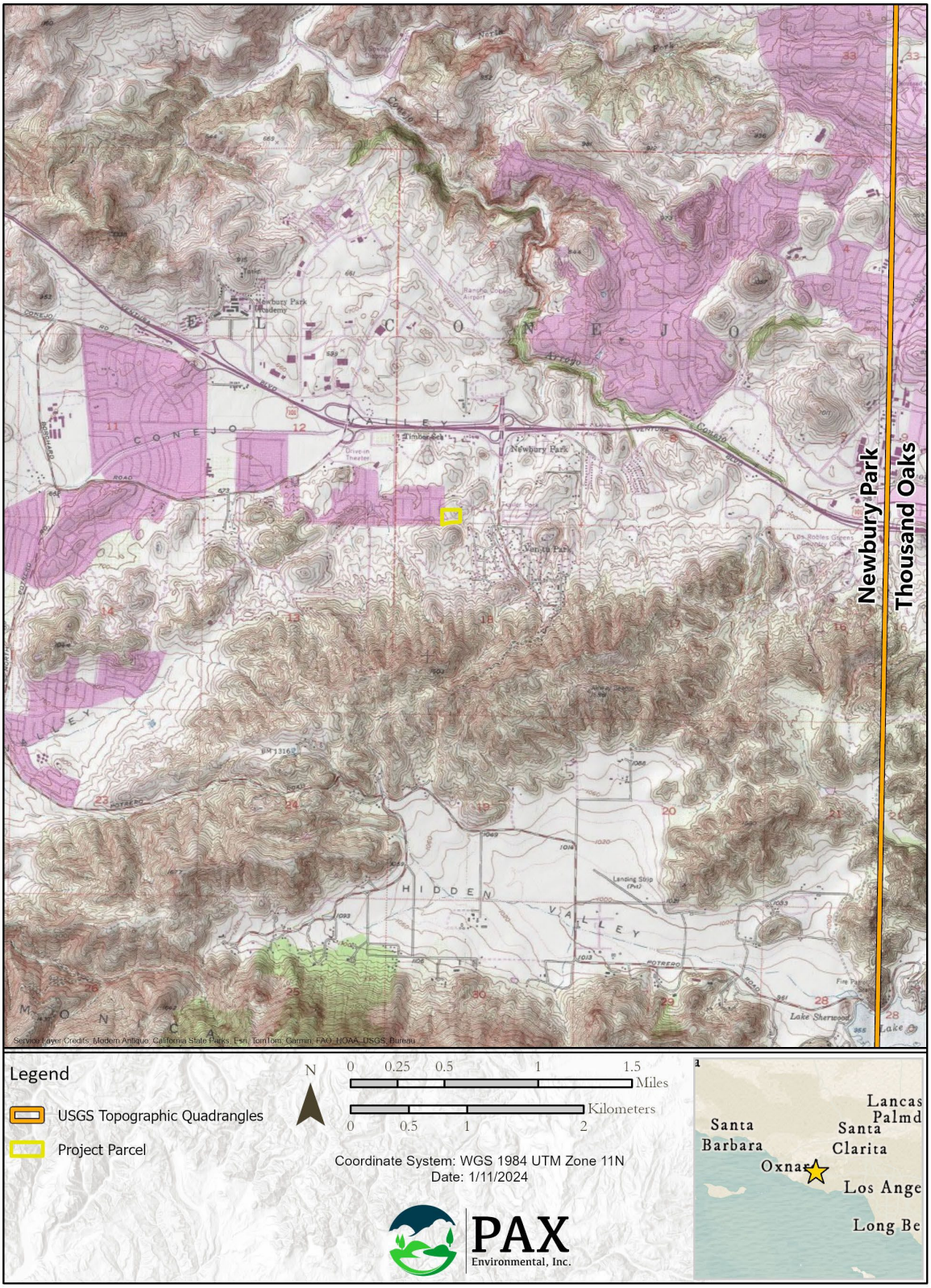


Figure 1. Vicinity map

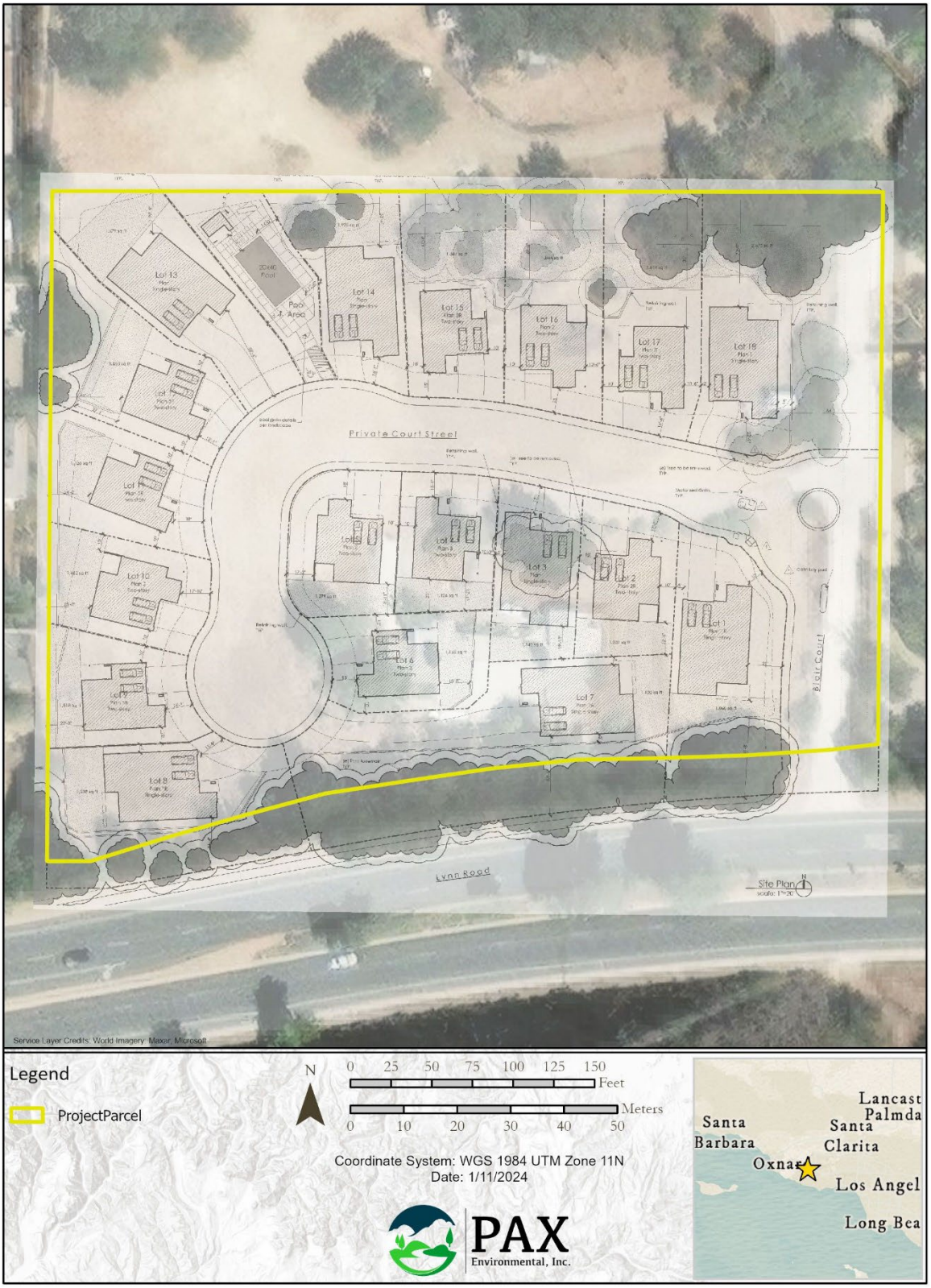


Figure 2. Project overview map

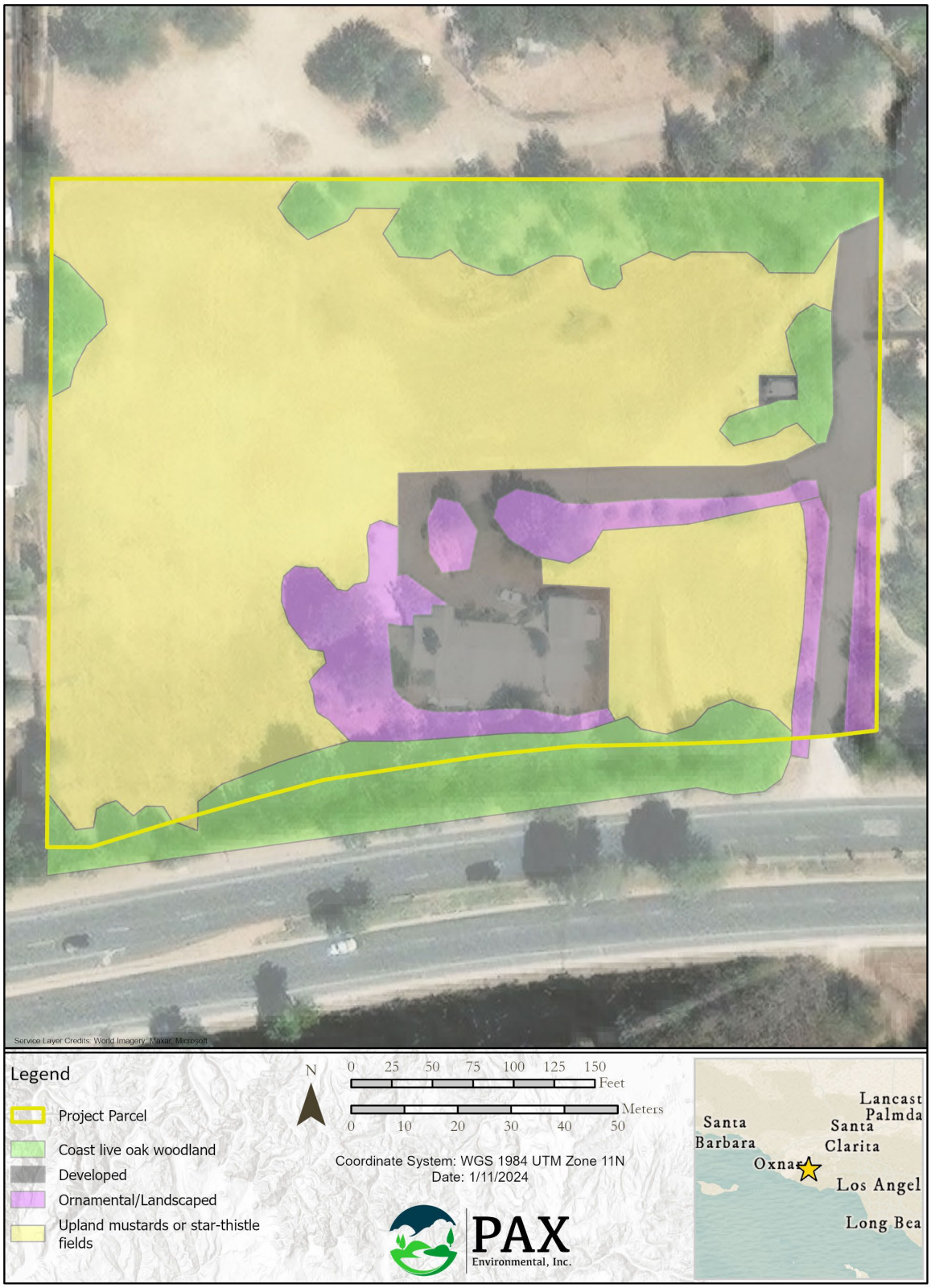


Figure 3. Vegetation communities and landuse types



Figure 4. USDA soils map

Appendix B. Plants and Wildlife Species Observed

Table 2. Plant species observed within the study area.

Scientific Name	Common Name	Status	Family
Acmispon glaber	Deerweed	native	Fabaceae
Agave americana	American century plant	invasive introduced	Poaceae
Avena fatua	Wildoats	invasive introduced	Brassicaceae
Bidens pilosa	Hairy beggarticks	invasive introduced	Poaceae
Brassica nigra	Black mustard	native	Convolvulaceae
Brickellia californica	California brickellia	native	Asteraceae
Bromus diandrus	Ripgut brome	native	Fagaceae
Calystegia macrostegia ssp. *cyclostegia*	Coast morning glory	introduced	Amaranthaceae
Ceanothus spinosus	Greenbark ceanothus	invasive introduced	Asteraceae
Chenopodium murale	Nettle leaf goosefoot	introduced	Chenopodiaceae
Corethrogyne filaginifolia var. *filaginifolia*	Common sandaster	native	Euphorbiaceae
Dryopteris arguta	Wood fern	invasive introduced	Geraniaceae
Erigeron canadensis	Canada horseweed	introduced	Euphorbiaceae
Eriogonum cinereum	Coastal buckwheat	native	Rubiaceae
Euphorbia peplus	Petty spurge	native	Asteraceae
Heteromeles arbutifolia	Toyon	introduced	Asteraceae
Keckiella cordifolia	Heart leaved keckiella	invasive introduced	Lamiaceae
Lysimachia arvensis	Scarlet pimpernel	invasive introduced	Oleaceae
Malosma laurina	Laurel sumac	invasive introduced	Plantaginaceae
Marah macrocarpa	Chilicothe	native	Fagaceae
Opuntia ficus-indica	Tuna	native	Adoxaceae
Pinus pinea	Italian stone pine	Introduced	Pinaceae
Quercus agrifolia var. *agrifolia*	Coast live oak	invasive introduced	Anacardiaceae
Rhamnus ilicifolia	Evergreen buckthorn	invasive introduced	Brassicaceae
Salvia spathacea	Hummingbird sage	introduced	Caryophyllaceae
Silene laciniata	Cardinal catchfly	native	Poaceae
Stachys bullata	Southern hedge nettle	native	Lamiaceae
Stephanomeria diegensis	San Diego wreathplant	native	Asteraceae
Toxicodendron diversilobum	Poison oak	native	Anacardiaceae
Venegasia carpesioides	Canyon sunflower	native	Asteraceae

Table 3. Wildlife species observed within the study area.

Scientific Name	Common Name
Reptiles	
Elgaria multicarinata webbii	San Diego alligator lizard
Sceloporus occidentalis	Western fence lizard
Uta stansburiana	Side-blotched lizard
Birds	
Aphelocoma californica	California scrub jay
Buteo jamaicensis	Red-tailed hawk
Callipepla californica	California quail
Calypte anna	Anna's hummingbird
Cathartes aura	Turkey vulture
Corvus brachyrhynchos	American crow
Haemorhous mexicanus	House finch
Melanerpes formicivorus	Acorn woodpecker
Melozone crissalis	California towhee
Psaltriparus minimus	American bushtit
Sayornis nigricans	Black phoebe
Selasphorus sasin	Allen's hummingbird
Sialia mexicana	Western bluebird
Spinus psaltria	Lesser goldfinch
Tyrannus verticalis	Western kingbird
Zenaida macroura	Mourning dove
Mammals	
Canis latrans	Coyote
Lynx rufus fasciatus	Bobcat
Otospermopilus beecheyi	California ground squirrel
Tomomys bottae	Botta’s pocket mouse

Appendix C. Potential Special Status Species

Table 4. Special status plants and wildlfe with the potential to occur in the study area.

Scientific Name	Common Name	Status	Habitat Description	Likelihood for Occurrence/Rationale[2]
Astragalus brauntonii	Braunton's milk-vetch	1B.1	Coastal prarie grasslands, coastal sage scrub, and chaparral communities often found in disturbed areas in carbonate soils areas from 295 to 4790 ft. Bloom period: Jan. - Aug.	Low: Marginally suitable habitat present
Atriplex coulteri	Coulter's saltbush	1B.2	Coastal bluff and coastal scrub or dune with alkaline or clay soils between 5 & 1,510 ft elevation. Bloom period: Mar. - Oct.	No: Suitable habitat is not present.
Baccharis malibuensis	Malibu baccharis	1B.1	Chaparral, coastal sage scrub, and oak woodlands between 395 - 1310 ft. elevation. Bloom period: August	No: Suitable habitat is not present and beyond known elevation range.
Calochortus clavatus var. gracilis	slender mariposa lily	1B.2	Chaparral between 0 and 3,200 ft elevation. Bloom period: Mar. - June	No: Suitable habitat is not present.
Calochortus plummerae	Plummer's mariposa-lily	4.2	Dry, rocky chaparral and yellow pine forests below 5,577 ft. elevation. Bloom period: May - Jul.	No: Suitable habitat is not present.
Centromadia parryi ssp. australis	southern tarplant	1B.1	Salt marshes, grassland, vernal pools, coastal scrub less than 1,015 feet elevation. Bloom period: May - Nov.	No: Suitable habitat is not present and lack of suitable substrate.
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	1B.1	Coastal dunes and sandy bluff scrub at elevations ranging from 0 - 300 ft. Bloom period: Apr - Jul	No: Suitable habitat is not present.
Deinandra minthornii	Santa Susana tarplant	SR, 1B.2	Coastal sage scrub and chaparral habitats of the California Coastal Sage and Chaparral ecoregion, and the Chaparral habitat of the inland adjacent California Montane Chaparral and Woodlands ecoregion on rocky outcroppings and sandstone crevices from 980 - 1640 ft in elevation. Bloom period: July - Nov.	No: Suitable habitat is not present and lack of suitable substrate.
Delphinium parryi ssp. blochmaniae	dune larkspur	1B.2	Rocky areas in chaparral and coastal dunes between 60 and 1,000 ft elevation. Bloom period: May – Aug.	No: Suitable habitat is not present and lack of suitable substrate.

Scientific Name	Common Name	Status	Habitat Description	Likelihood for Occurrence/Rationale[2]
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	1B.1	Serpentine outcrops or shallow clay above serpentine in coastal scrub, valley/foothill grassland, and chaparral between 15 and 1,475 ft elevation. Bloom period: May-June	No: Suitable habitat is not present and lack of suitable substrate.
Dudleya cymosa ssp. agourensis	Agoura Hills dudleya	FT, 1B.2	Coastal sage scrub, yellow pine forest, northern oak woodland, foothill woodland, and chaparral communities below 7645 ft. elevation. Bloom period: Mar. - July	No: Suitable habitat is not present and lack of suitable substrate.
Dudleya cymosa ssp. marcescens	marcescent dudleya	FT, SR, 1B.2	Shaded, rocky volcanic outcrops and slopes between 493 - 1641 ft. elevation. Bloom period: Apr. - July.	No: Suitable habitat is not present and lack of suitable substrate.
Dudleya cymosa ssp. ovatifolia	Santa Monica dudleya	FT, 1B.1	Shaded, rocky outcrops and slopes in Coastal sage scrub and chaparral communities between 493 - 1641 ft. elevation. Bloom period: Mar. - June	No: Suitable habitat is not present and lack of suitable substrate.
Dudleya parva	Conejo dudleya	FT, 1B.2	North facing volcanic cliffs and adjacent grasslands in coastal sage scrub and valley grassland communities between 690 - 7515 ft. elevation. Bloom period: May - June.	No: Suitable habitat is not present and lack of suitable substrate.
Dudleya verityi	Verity's dudleya	FT, 1B.1	N-facing volcanic outcrops between 196 - 394 ft. Bloom period: May - June.	No: Suitable habitat is not present and lack of suitable substrate.
Eriogonum crocatum	conejo buckwheat	1B.2	Open, dry hillsides, often in crags in rock faces in clay loam, loam, and bedrock soil types. Prefers coastal sage scrub, chaparral, and valley grassland communities between 65 - 1280 ft. elevation. Bloom period: Apr. - July.	No: Suitable habitat is not present and lack of suitable substrate.
Horkelia cuneata var. puberula	mesa horkelia	1B.1	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral between 15 and 1,410 ft elevation. Bloom period: Feb.-July	No: Suitable habitat is not present.
Lupinus paynei	Payne's bush lupine	1B.1	Coastal sage scrub and chaparral below 4,900 ft. elevation. Bloom period: Apr. - Jun	No: Suitable habitat is not present.
Monardella hypoleuca ssp. hypoleuca	white-veined monardella	1B.3	Dry slopes in chaparral, cismontane woodland less than 5,000 ft. elevation. Bloom period: May- Oct	No: Suitable habitat is not present.

Scientific Name	Common Name	Status	Habitat Description	Likelihood for Occurrence/Rationale[2]
Monardella sinuata ssp. *gerryi*	Gerry's curly-leaved monardella	1B.1	Sandy open areas in coastal scrub between 490 - 805 ft elevation. Bloom period: Apr. - June	Low: Marginally suitable habitat present.
Navarretia ojaiensis	Ojai navarretia	1B.1	Drying alkaline flats in chaparral, cismontane woodland, and coastal scrub between 900 & 9,202 ft elevation. Bloom period: Jan. - Apr.	No: Suitable habitat is not present.
Nolina cismontana	chaparral nolina	1B.2	Chaparral and coastal scrub primarily in gabbro soils between 460 & 3,610 ft elevation. Bloom period: May - Jul.	No: Suitable habitat is not present.
Orcuttia californica	California Orcutt grass	FE, SE, 1B.1	Vernal pools, and less than 2300 ft elevation. Bloom period: Apr – Aug.	No: Suitable habitat is not present and required soil moisture not present
Pelazoneuron puberulum var. *sonorense*	Sonoran maiden fern	2B.2	Along streams and seepage areas between 164 and 2,624 ft. elevation. Bloom period: N/A.	No: Suitable habitat is not present and required soil moisture not present
Pentachaeta lyonii	Lyon's pentachaeta	FE, SE, 1B.1	Coastal scrub, grassland, chaparral openings less than 1312 ft elevation. Bloom period: Mar - Aug.	Low: Marginally suitable habitat present
Pseudognaphalium leucocephalum	white rabbit-tobacco	2B.2	Sandy or gravelly benches, dry stream bottoms, canyon bottoms less than 1,540 ft elevation. Bloom period: Aug - Nov.	No: Suitable habitat is not present.
Quercus dumosa	Nuttall's scrub oak	1B.1	Closed-cone conifer forest, chapparal, and coatal scrub in sandy/clay loam soils between 50 & 1,310 ft elevation. Bloom period: Feb. - Apr.	Low: Marginally suitable habitat present
Senecio aphanactis	chaparral ragwort	2B.2	Chaparral, cismontane woodland, and coastal scrub between 65 and 2,805 ft elevation. Bloom period: April- Sept.	No: Suitable habitat is not present.
Texosporium sancti-jacobi	woven-spored lichen	3	In chaparral openings on soil, small mammal pellets, and dead twigs between 195 - 2165 ft elevation. Bloom period: N/A.	No: Suitable habitat is not present.
Tortula californica	California screw moss	1B.2	Chenopod scrub, valley, and foothill grassland between 35 - 4790 ft. elevation. Bloom period: N/A.	No: Suitable habitat is not present.
Invertebrates				

Scientific Name	Common Name	Status	Habitat Description	Likelihood for Occurrence/Rationale[2]
Bombus crotchii	Crotch bumble bee	SCE	Crotch's bumblebee is restricted to coastal California east towards the Sierra-Cascade Crest and, less commonly, in western Nevada. It prefers open grasslands and scrub and nests underground. This species' food plants include *Asclepias, Chaenactis, Lupinus, Medicago, Phacelia, and Salvia.*	Low. Marginal foraging and nesting habitat present.
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FCE	Fields, roadside areas, open areas, wet areas or urband gardens where milkweed and flowering plants occur.	Low: Marginal suitable habitat present.
Streptocephalus woottoni	Riverside fairy shrimp	FE	Inhabits vernal pools and other non-vegetated ephemeral pools that last for short periods of time.	No: No suitable habitat present.
Fishes				
Gila orcutti	arroyo chub	SSC,	Native streams from Malibu Creek to San Luis Rey River. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego River basins.	No. Lack of perennial freshwater creeks.
Oncorhynchus mykiss irideus pop. 9	steelhead - south-central California coast DPS	FT	Steelhead occupy freshwater streams or lakes during spawning and then migrate back through brackish water to the open ocean to live during their adult non-spawning phase of their life cycle. Steelhead spend most of the year in estuaries or open ocean and only return to fresh water to spawn.	No. Lack of perennial freshwater creeks.
Amphibians				
Spea hammondii	western spadefoot	FPT, SSC	Grasslands and woodlands with vernal pools.	No. No suitable habitat present.
Reptiles				
Actinemys marmorata	southwestern pond turtle	FPT, SSC	Ponds, marshes, rivers, streams, and irrigation ditches with basking sites and suitable upland habitat for egg-laying.	No. Lack of riparian habitat or perennial stream.

Scientific Name	Common Name	Status	Habitat Description	Likelihood for Occurrence/Rationale[2]
Anniella spp.	California legless lizard	SSC	Moist warm loose soil with plant cover. Moisture is essential, sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather. Sometimes found in suburban gardens in southern California.	Low. Marginal habitat present within the oak woodland but this species prefers sandy soils which are not present.
Anniella stebbinsi	southern California legless lizard	SSC	Moist warm loose soil with plant cover. Moisture is essential, sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather. Sometimes found in suburban gardens in southern California.	Low. Marginal habitat present within the oak woodland but this species prefers sandy soils which are not present.
Arizona elegans occidentalis	California glossy snake	SSC	Scrub or grassland with loose or sandy soils.	Low. Marginal habitat present within the oak woodland but this species prefers sandy soils which are not present.
Aspidoscelis tigris stejnegeri	coastal whiptail	SSC	Desert and semi-arid scrub, woodland, and riparian areas with sparse vegetation.	High: Suitable habitat present
Phrynosoma blainvillii	coast horned lizard	SSC	Sandy substrate with scattered low bushes and abundant native ants and other insects.	Low. Marginal habitat present within the oak woodland but this species prefers sandy soils which are not present.
Thamnophis hammondii	two-striped gartersnake	SSC	Riparian areas in coastal California from Salinas south to northwest Baja California up to 7,000 ft elevation.	No. Lack of riparian habitat or perennial stream.
Birds				

Scientific Name	Common Name	Status	Habitat Description	Likelihood for Occurrence/Rationale[2]
Accipiter cooperii	Cooper's hawk	WL	Forest, woodland birds and regular sight in parks, quiet neighborhoods, over fields, at backyard feeders, and even along busy streets if there are trees around.	Foraging: Moderate. Suitable habitat present. Nesting: Moderate. Suitable breeding habitat present.
Agelaius tricolor	tricolored blackbird	ST, SSC,	Open water with cattails or other protected nesting substrate within two miles of foraging habitat.	No. No suitable breeding or foraging habitat.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	WL	In southwestern California (slopes of Transverse and Coastal ranges, north to Los Angeles County) and northwestern Baja California (south to about 30 degrees 30' N latitude; Islas de San Martin, at least formerly; east to east base of Sierra San Pedro Martir).	Foraging: Moderate. Suitable habitat present. Nesting: Low. Marginal nesting habitat present.
Aquila chrysaetos	golden eagle	FP, WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons or large trees in open areas.	Foraging: Low. Marginal foraging habitat present. Nesting: No. No suitable breeding habitat present.
Athene cunicularia	burrowing owl	SSC	Open, dry annual or perennial grasslands and scrublands with low-growing vegetation.	Foraging: Low. Marginal foraging habitat present. Nesting: No. No suitable breeding habitat present.
Elanus leucurus	white-tailed kite	FP	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	Foraging: Low. Marginal foraging habitat present. Nesting: No. No suitable breeding habitat present.
Polioptila californica californica	coastal California gnatcatcher	FT, SSC	Low, coastal sage scrub in arid washes, on mesas and slopes below 2,500 ft elevation.	Foraging: Low. Marginal foraging habitat present. Nesting: No. No suitable breeding habitat present.
Riparia riparia	bank swallow	ST	Vertical banks, cliffs, and bluffs in alluvial, friable soils. Lowland areas along ocean coasts, rivers, streams, lakes, reservoirs, and wetlands.	No. No suitable breeding or foraging habitat present.
Vireo bellii pusillus	least Bell's vireo	FE, SE	Willow, baccharis, mesquite in low riparian in vicinity of water or dry river bottoms below 2,000 ft. elevation.	No. No suitable breeding or foraging habitat present.

Scientific Name	Common Name	Status	Habitat Description	Likelihood for Occurrence/Rationale[2]
Mammals				
Antrozous pallidus	pallid bat	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Low. Marginal habitat present.
Eumops perotis californicus	western mastiff bat	SSC	Roosts in cliff face crevices, high buildings, trees and tunnels among open semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral.	Low. Marginal habitat present.
Neotoma lepida intermedia	San Diego desert woodrat	SSC	Found in areas with succulent vegetation with moderate to dense canopies. Abundance in rock outcrops, and rocky cliffs and slopes.	No: No suitable habitat present.
Taxidea taxus	American badger	SSC	Drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	No: No suitable habitat present.

1: Status Definitions	
USFWS	
FE: Species designated as Endangered under the Federal Endangered Species Act. Endangered = "any species in danger of extinction throughout all or a significant portion of its range."	FT: Species designated as Threatened under the Federal Endangered Species Act. Threatened = "species likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.
FPT: Proposed for federal listing as Threatened under the Federal Endangered Species Act.	FPE: Proposed for federal listing as Endangered under the Federal Endangered Species Act.
CDFW	
SE: Endangered = "a species is Endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes."	ST: Threatened = "a species that, although not presently threatened with extinction, is likely to become an Endangered species in the foreseeable future in the absence of the special protection and management efforts required by this Act (California Endangered Species Act)."
SR: Rare = " not presently threatened with extinction, but in such small numbers throughout its range that it may become Endangered if its present environment worsens."	FP: Fully Protected species are protected by special legislation and cannot be taken at any time.
SSC: Species of Special Concern.	WL: Watch List
CRPR- CALIFORNIA RARE PLANT RANKING	
1A Plants Presumed Extinct in California	.1 Seriously threatened in California
2A Plants presumed extirpated in California, but more common elsewhere	.2 Fairly threatened in California
1B Plants Rare, Threatened, or Endangered in California and elsewhere	.3 Not very threatened in California
2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere	
3 - A review list for plants for which there is inadequate information to assign them to one of the other lists or to reject them.	4 - A watch list for plants that are of limited distribution in California.
2: POTENTIAL TO OCCUR IN THE PROJECT AREA	
No: Species not observed, the Project area does not meet the species habitat requirements.	**High:** Species not observed, suitable habitat is present, and the species could occur there frequently.
Low: Species not observed, marginal habitat is present and/or the species could occur temporarily.	**Present:** Species were observed or are known to occur with recent records in the area.
Moderate: Species not observed, suitable habitat is present, and the species is common in the area or could occur time to time.	

Appendix D. Study Area Photos



Photo 1. Photo of the single-family residence being developed with coast live oak woodland in the foreground.



Photo 2. Photo of the wild oats and annual brome grasslands.





Photo 3. Coast live oak woodland vegetation.	Photo 4. Property overview with upland mustard and coast live oak woodland in the foreground existing residence in the background.
	
Photo 5. Coast live oak woodland vegetation along Lynn Road portion of the property line.	**Photo 6. Photo of the wild oats and annual brome grasslands.**



Photo 7. Ornamental, upland mustard, and coast live oak woodland vegetation around the existing house.



Photo 8. Property overview with upland mustard and coast live oak woodland in the foreground existing residence in the background.

APPENDIX D

Oak Tree Report and Oak Tree Report Addendum

Jan C. Scow Consulting Arborists, LLC

Disease and Pest Diagnosis, Hazard Evaluation, Restorative Pruning Advice, Value Assessment

401 N. Ventura St.
Ojai, CA 93023
(805) 272-8095

9/13/23

Jeb Adams (applicant)
"1651 Lynn Rd. LLC"
6481 Winona Ct.
Oak Park, CA 91377

***SUBJECT**:* [REVISED] Oak Tree Report at 1651 Lynn Road, Thousand Oaks

REFERENCES:

1) The City of Thousand Oaks Municipal Code, Article 42. Oak Tree Preservation and Protection, no date
2) Resolution No. 2010-014 – Oak and Landmark Tree Protection and Preservation Guidelines, dated 2/23/10
3) Memo dated 8/15/23, "Rincon's Second Review…", Nate Ferris

EXECUTIVE SUMMARY

A previous report was submitted in March 2023, was reviewed by Rincon and corrections were required. In addition, the plan for this this project has changed since that report. There are a total of 140 trees on the site, including 126 protected coast live oak trees (*Quercus agrifolia*). Two of the oaks are located off property to the west.

Of the total of 126 protected oak trees at the Lynn Road site, the proposed project causes the removal of 21 oak trees, is expected to impact 82 protected oak trees, and will not impact another 23 protected oak trees. It should be noted that of the total 21 oak removals, 18 have a trunk largest trunk diameter of 3 inches or less; 14 of those have a largest trunk diameter of 2 inches or less, and one large tree (#7) has poor structure. If our mitigation measures are followed, we anticipate that impacts to the remaining protected oak trees will be greatly reduced or non-existent.

All required information about the trees is found on the accompanying Field Inventory Data spreadsheet, and their locations are found on the accompanying Oak Tree Location Map[1].

BACKGROUND

The applicant is proposing subdividing and developing the property at the subject address on Lynn Road in the City of Thousand Oaks. There are protected oak trees on and near the property, requiring an inventory of all trees and an arborist report to satisfy the City of Thousand Oaks municipal code for Oak Tree Preservation and Protection[2]. We initially visited the site on December 17, 2019 and did a complete inventory of all trees on or near the property for a previous applicant. On 2/22/22 we revisited the site to

[1] Oak trees that are being removed are circled in red on the Oak Tree Location Map.
[2] No qualifying Landmark Trees were observed on the property.

ensure there were no significant changes and to update the data. The following is an oak tree report based on the revised subdivision design. All information below is based on our site visits, upon discussion with the applicant, and upon the site plans that were provided. Issues brought to our attention in reference 3 are addressed herein and/or in the attachments.

ASSIGNMENT[3]

The initial Tree Inventory gathered *the following information about all qualifying trees on the property that are greater than 2" in trunk diameter at 4.5' above grade:*

1) *Tag number*
2) *Tree species*
3) *Trunk diameter at 4.5' above grade*
4) *Health*
5) *Structure*
6) *Canopy measured at dripline (8 compass readings)*
7) *Height of canopy*
8) *Canopy clearance above grade (8 compass readings)*
9) *Protected status (oak, landmark)*
10) *Disposition*

We agreed to do the following updates:

Tree Inventory- Verify that the information collected in December of 2019 is still valid. This required observing each tree to ensure that it was still present, still had a tag on it, and had not substantially changed.

1) Verify presence of tree
2) Verify tag number and species
3) Verify health
4) Verify no significant structural changes to tree (i. e. canopy dimensions not altered)
5) Reaffirm protected status (oak, landmark)
6) Determine disposition based on the new project

Protected Tree Report- Create a report addressing all impacts to qualifying protected trees and describing all measures required to protect trees during construction.

Site Plan- Trees plotted on a proposed site plan that meets all City requirements (base plan to be provided by client), including the following:

1) Oak tree canopies and protection zones
2) Protective fencing
3) Oak tree preservation guidelines (too numerous to put on plan but included in report)

[3] This is a revision of a report submitted on 9/19/22, intended to reduce removals of oak trees based on changes to the previous plan. The described assignment was for the previous report.

OBSERVATIONS

Site description:
The site is a partially developed residential property located north of Lynn Road in the Newbury Park neighborhood of Thousand Oaks. It is bordered by Lynn Road to the south, a private drive to the east, and residences to the north and west. Approximately one third of the property is developed with a house, asphalt and gravel driveway, and non-native landscaping. The remaining two thirds of the property consists of natural oak woodland and native and non-native groundcover, grasses, and weeds.

Project description:
The proposed project consists of demolition of the existing house, driveway, and landscaping. The site will then be graded into 18 separate residential lots each with a building pad, driveway, and garden/retaining walls and fences as needed. Each lot will be accessible from a private road proposed for construction as access for the entire subdivision. There will be a home constructed on each of the 18 lots. A community swimming pool will be built near the northwest corner of the property between lots 13 and 14. Grading near the oaks will be minimal[4], and there will be several retaining walls and garden walls built around various locations on the site. All boundary fencing around the entire development and between individual lots will be post-in-concrete type construction to minimize impacts. Finally, the proposed project includes construction of a sidewalk at the south of the site along Lynn Road per City of Thousand Oaks standards.

Tree description:
There are a total of 140 trees on or near the site, including 126 protected coast live oak trees (*Quercus agrifolia*). Two oak trees are located off property in the southwest corner of the site. Information about the trees is found on the accompanying Field Inventory Data spreadsheet, and their locations are found on the accompanying Oak Tree Location Map[5]. The report below addresses protected oak trees only, and there will be no further discussion regarding non-protected trees.

Tree safety:
We have not evaluated trees on this property for safety. Without a thorough and focused "risk assessment," it is difficult to estimate the likelihood that a tree may fail and cause damage to life or property. Even with such an assessment, there are no guarantees that a tree will not fail unexpectedly. Trees are dynamic living organisms subject to many influencing factors. All trees are potentially hazardous, regardless of their apparent health and vigor. It is impossible to be certain that a tree is absolutely safe.

IMPACTS

Impact assumptions:
The impact analysis is based on several assumptions, as stated below. Should these assumptions prove to be incorrect, additional impacts could result from the project.

1. All protective mitigation measures will be followed carefully as described.

[4] Grading for the perimeter walls near oaks is clearly shown on the Tree Location Map.
[5] Oak trees that are being removed are circled in red on the Oak Tree Location Map.

2. Our understanding of the proposed project is accurate.
3. The proposed project design will not change significantly.
4. All trees are mapped correctly.

Tree removals:
The proposed project will cause the removal of 21 protected oak trees to accommodate construction. Oak tree removals are indicated on the accompanying Oak Tree Impacts table and circled in red on the Oak Tree Location Map.

Removals of oaks extending into an adjacent property- There are two oak trees that will be removed that are overhanging the property line to some extent. Both are on the west property line.

- Tree 59 is adjacent to properties at 66 Ellis Pl. & 78 Ellis Pl.
- Tree 61 is adjacent to 1750 Rivendell Cr.

The applicant will notify those property owners.

Easement to property north of this site- It should be noted that the City has required an access easement be granted through the northeast corner of this site for access to the property to the north. Should this area be cleared for an access road and utilities an additional ten protected oak trees will be removed (trees 23-30, 32, 33) and two will have substantial impacts (trees 34, 35). ***That is not a part of this project****.*

Note: Before removing or impacting any tree that is near a property line it is the owner's responsibility to discuss this with the adjacent property owners and we advise that they be notified in writing before doing anything that may affect jointly-owned or off-property trees.

Tree encroachments:
82 of the remaining oak trees will be subjected to some form of encroachment. Impacts from these activities can be kept to a low level if mitigation measures are carefully adhered to. Impacts are addressed in the accompanying Oak Tree Impact table and range in intensity from very minor to, in a few cases, moderate (11 instances).

15' Rule- There are a total of 69 oaks that have some level of encroachment within 15 feet of the trunks. These encroachments are mostly minor or very minor but a few are moderate level impacts. The most significant of these moderate impacts will be to trees 55-58, where the canopies may require significant pruning to allow the construction of the boundary fencing along the west side of the site. The other seven instances involve minor excavation that may impact a large area of the root zone but probably few roots as the excavations will be relatively shallow and in poor soil where significant roots would not be expected. ***It is my professional opinion that none of the work will result in death or decline of any oak trees, providing requirements in this report are adhered to.***

General tree encroachments:

Deadwood removal- Several protected oak trees throughout the site have been recommended for removal of deadwood). While deadwood removal may not be necessary where trees are located safely away from proposed construction activities, we have recommended it regardless. Deadwood removal activities have the potential for major impact to branches and trunks of protected oak trees if proper tree climbing/access and pruning standards are not applied. However, if our specific tree protection measures for deadwood removal are adhered to, we anticipate this impact will be minor.

Grubbing- Grubbing activities include removal of groundcovers, shrubs, small trees, and organic and inorganic debris from underneath the protected oak trees. Grubbing activities can have major impact on protected oak trees when their root systems are heavily disturbed during digging, root removal, stump grinding, etc. However, if our specific tree protection measures for protective fencing are followed, we anticipate this impact will be greatly reduced or non-existent.

Soil compaction- Soil compaction reduces pore space, prevents water infiltration, and limits gas exchange in the soil, thereby decreasing or blocking uptake of water and nutrients by tree roots. Soil compaction can be caused by foot traffic during all phases of construction, equipment movement/storage, debris storage, etc. We anticipate minor soil compaction impacts to some protected oak trees as a result of the proposed project if tree roots are left unprotected. However, if our mitigation measures for protective fencing are adhered to, soil compaction impacts should be reduced. Most soil compaction will occur the narrow zone between protective fencing and construction activities. (See accompanying Oak Tree Impacts table for trees possibly affected by incidental soil compaction).

Demolition- The existing house, driveway, and landscaping will be demolished before grading and other activity on the site can begin. Primary impacts during demolition include mechanical damage to protected oak trees by impact from demolition equipment or debris, and root zone impacts by demolition equipment, personnel, or debris. When not carefully planned, demolition can be a major impact to protected oak trees. However, if our protective fencing measures are followed, we anticipate this impact will be greatly reduced or non-existent.

Grading- Grading near oak trees could have significant impacts. However, if our protective fencing measures are adhered to, this impact should be reduced or non-existent.

Retaining walls, garden walls, fences- This will be a primary impact and could do substantial damage to remaining oak trees if recommendations are not followed carefully. See "*Specific tree encroachments*" section below.

Utilities- Based on the plans provided, it is our understanding that utility services will be located where they will not impact any remaining protected oak trees.

Landscaping- Landscaping and irrigation under oak trees can be very damaging and may lead to disease and death. Following the mitigation requirements below will limit that damage.

Specific tree encroachments:

Removal of pine tree #89- This could damage the adjacent oak tree if the stump is ground.

Moderate impacts- Eleven oak trees are expected to have potentially moderate impacts as a result of clearance pruning, root loss, or a combination of both. These estimates of impact are “worst case” scenarios. The fencing along the west edge will be post-in-concrete type and will undoubtedly require some pruning to install the fencing but it may be substantially less than the estimated impact. Likewise, sidewalk excavation along the south property edge will probably not affect as many roots as estimated. The depth of excavation will likely be 6-8” at most. The soil in this area is highly compacted and root density is anticipated to be low.

Tree #	Maximum pruning loss	Maximum root loss	Impact
44	15%	10%	Retaining wall, boundary fence
55	20%	<5%	West boundary fence pruning
56	20%	<5%	West boundary fence pruning
57	20%	<5%	West boundary fence pruning
58	20%	<5%	West boundary fence pruning
111	—	30%	Sidewalk excavation
120	—	20%	Sidewalk excavation
124	—	30%	Sidewalk excavation
125	—	30%	Sidewalk excavation
126	—	20%	Sidewalk excavation
129	—	30%	Sidewalk excavation

Clearance pruning- Some clearance pruning of protected oak trees will be needed to install boundary fencing along the west edge and the clear the proposed retaining wall near tree 44. We anticipate that clearance pruning could be a moderate impact for five protected oak trees (trees 44, 55, 56, 57). Other pruning will be a minor to very minor impact. Specific tree protection measures for clearance pruning shall be followed, keeping impacts at an acceptable level.

Excavation for sidewalk on Lynn Road- Excavation for the sidewalk along Lynn Road is expected to have a moderate impact to six protected oak trees along the south edge (trees 111, 120, 124, 125, 126, and 129). Additional root zone impacts from sidewalk excavation will be minor to very minor. Tree protection measures for excavation for the sidewalk shall be adhered to, keeping impacts at an acceptable level.

Excavation for various walls, house footings- Footings for various retaining walls and garden walls around the property could have significant effects of adjacent oak trees due to the typical large footings associated with such walls (see accompanying Oak Tree Impacts table for trees possibly affected by retaining wall impacts.) We have outlined specific measures below to reduce this impact to any protected oak trees.

Tract boundary fencing- The boundary around the perimeter of this housing tract will be all of post-in-concrete fencing, as per the applicant. As a result, root zone impacts will be minimal. (See accompanying Oak Tree Impacts table above for trees possibly affected by boundary wall impacts). We have outlined specific measures to reduce this impact to any protected oak trees.

Property line fencing- Fencing between individual lots will also be post-in-concrete fencing, as per the applicant. This could impact protected oak trees in a few locations (see accompanying Oak Tree Impacts table for trees possibly affected by property line fencing impacts.) We have outlined specific measures to reduce this impact to any protected oak trees.

MITIGATION

Tree replacement mitigation:

The following replacement plantings are required to mitigate for the 21 oak trees being removed by this project:

42- 24” boxed coast live oak (*Quercus agrifolia*)
21- 36” boxed coast live oak (*Quercus agrifolia*)

Planting locations will be provided by the project Landscape Architect.

Specific tree protection measures:

Contractor responsibility- The project applicant will ensure that all contractors have read and are familiar with the requirements laid out in this report. A copy of this document and the Oak Tree Location Map shall be kept on site at all times. It is the contractors’ responsibility to become familiar with all tree protection measures described below and to adhere to them as they apply to their portion of the work.

Project Arborist- There are certain situations where the ***Project Arborist is required to be on-site***. It is the applicant’s responsibility to notify the Project Arborist when those milestones requiring arborist presence are reached.

48-hour notice- The ***Project Arborist*** will be notified at least 48 hours before:

- any digging, excavating, trenching, or building within the canopy dripline of any protected oak tree commences;
- any pruning of any protected oak tree’s canopy or roots takes place;
- commencement of any other activity within the canopy dripline of any protected oak tree.

Protective fencing- In order to limit impacts due to soil compaction and other construction activities protective fencing shall be installed as shown on the Oak Tree Location Map. ***Protective fencing shall be installed and inspected by the Project Arborist before any activity on the site begins.***

If it is done properly, protective fencing around trees in construction zones is the best possible means of minimizing impacts related to construction. ***Fencing will be chain-link, at least 5 feet high, and held in place by steel stakes driven directly into the ground.*** Gates will be installed as required for operational access, but shall not be utilized for construction activities. All protective fencing shall remain intact until all major construction is completed.

No workers shall enter the fenced protection zones. No debris or equipment storage, waste disposal, equipment cleanout, outhouse, or vehicle parking will be allowed within the fenced areas. The purpose is to keep the tree's root zone area free from any disturbance of any sort throughout the period of construction activity.

Once protective fencing is removed, after all major construction is completed, work behind the fencing can be completed. This work includes the wrought iron boundary fence along the northern boundary of the development and property line fences between lots (see below for specifics).

For additional information about required protective fencing, please see Section V.B.1.2 "The Fencing Plan" in found in Reference 3.

Deadwood removal- Care should be taken by the pruning contractor and crews not to damage the branches or trunks of protected oak trees during deadwood removal. No tree climbing spurs shall be used during deadwood removal activities. All deadwood removal shall be carried out by an ISA Certified Arborist, and shall conform to ANSI A-300 standards at a minimum. Deadwood will be shredded and left on site as mulch.

Grubbing- Grubbing activity shall be done after protective fencing is installed and limited to the areas where construction requires it. No grubbing shall be done in otherwise undeveloped areas, except as required by relevant fire codes. If fire clearance is required, brush will be shredded and left on site as mulch. Removing plants, duff, brush, and organic matter from under the oak trees may be harmful to them and may affect their chances of survival, as well as leading to potential erosion of slopes.

Removal of tree #89- When this pine tree is removed, do not grind the stump.

Demolition- ***No demolition shall be undertaken until all protective fencing is in place.*** The demolition contractor should also take care not to bump or damage any protected oak tree trunks or limbs, or their protective fencing during demolition. The demolition contractor should also ensure that all demolition debris remains outside the protection zone of all protected oak trees.

Grading- ***No grading shall be undertaken until all protective fencing is in place***.

If any roots are encountered during grading, no roots two inches or larger are to be cut or removed unless the ***Project Arborist*** is present. Cuts should be made cleanly with a sharp saw or pruning tool, far enough behind the damage that all split and cracked root portions are removed. The cut should be made at right angles to the root so that the wound is no larger than necessary. When practical, cut roots back to a branching lateral root. Do not apply any pruning wound treatment to cuts.

Clearance pruning- In order to clear the sidewalk, boundary and property line fencing, and retaining walls some pruning will be required. The ***Project Arborist*** must be consulted prior to any pruning. All pruning shall be carried out by an ISA Certified Arborist, or under the direction of the ***Project Arborist***. All pruning shall conform to ANSI A-300 part 1 standards at a minimum.

Sidewalk excavation- All excavation for the sidewalk along Lynn Road where it passes within the protection zone of a protected oak tree must be completed using hand tools only. We recommend hand-digging an exploratory trench to the required depth of the sidewalk base layer along the excavation limit where it falls within the protection zone of a protected oak tree prior to full excavation for the sidewalk base. The exploratory trench allows as many roots as possible to be detected and cut properly before damage can occur. If roots are encountered during exploratory trenching or full excavation, then no roots two inches or larger are to be cut or removed unless the ***Project Arborist*** is present. Cuts should be made cleanly with a sharp saw or pruning tool, far enough behind any damage that all split and cracked root portions are removed. The cut should be made at right angles to the root so that the wound is no larger than necessary. When practical, cut roots back to a branching lateral root. Do not apply any pruning wound treatment to cuts.

Excavation for footings for garden walls, or retaining walls- When excavating for walls all excavation shall be done using hand tools only when within 10 feet of any oak tree.
If roots are encountered during excavation, no roots two inches or larger are to be cut or removed unless the ***Project Arborist*** is present. The cut should be made at right angles to the root so that the wound is no larger than necessary. When practical, cut roots back to a branching lateral root. Do not apply any pruning wound treatment to cuts.

Excavation for fencing posts- Post holes for perimeter and boundary fencing shall be no wider than ten inches, and shall be dug manually. While digging, if any roots two-inches in diameter or larger are encountered, the post-hole shall be moved to avoid the root.

Landscaping- The following measures are to be adhered to by the landscape contractor:

- No planting of any type, irrigation, or irrigation overspray shall occur within ten feet of any oak trunk;
- Only drought tolerant native plants shall be planted within the dripline of any oak tree;
- No lawn or groundcover requiring irrigation shall be planted within the dripline of any oak trunk;
- Three to four inches of organic mulch (arborist chips) should be maintained within twenty feet of all oak trunks;

- Underground irrigation lines should be kept out of the oak dripline to the extent possible, and should be installed (when they are necessary within the dripline) without doing any root damage to the oak.

General tree protection measures:
The following additional measures should be applied where they are relevant. If there is a conflict between the Specific tree protection measures for this project (see above) and any of these general tree protection measures, the Specific tree protection measures supersede.

1. All work conducted in the ground within the protected zone of any protected tree should be accomplished with hand tools only. The protected zone is defined as the area within a circle with a radius equal to the greatest distance from the trunk to any overhanging foliage in the canopy plus 5 feet.

2. Where structural footings are required and major roots will be impacted, the footing depth should be reduced to 12". This may require additional "rebar" for added strength. An alternative would involve bridging footings over roots and covering each root with plastic cloth and 2-4" of Styrofoam matting before pouring concrete.

3. Any required trenching which has multiple trench path options should be routed in such a manner to minimize root damage. Radial trenching is less harmful than tangential trenching because it runs parallel to tree roots rather than diagonal or perpendicular to them. Whenever possible trenching should work around roots rather than cutting them. Place pipes and cables below uncut roots, and utilize the same trench for as many utilities as possible.

4. "Natural" or pre-construction grade should be maintained for as great a distance from the trunk of each tree as construction permits. At no time during or after construction should soil be in contact with the trunk of the tree above natural grade.

5. In areas where grade will be lowered, or where footings will be dug, some root cutting may be unavoidable. Cuts should be made cleanly with a sharp saw or pruning tool, far enough behind the damage that all split and cracked root portions are removed. The cut should be made at right angles to the root so that the wound is no larger than necessary. When practical, cut roots back to a branching lateral root. Do not apply any pruning wound treatment to cuts.

6. When removing pavement, as little disruption of soil as necessary should be attempted.

7. Pruning of protected oak trees should be limited to the removal of dead wood and the correction of potentially hazardous conditions, as evaluated by a qualified arborist. Pruning trees excessively is harmful to them. Removal or reduction of major structural limbs should be done only as required for actual building clearance or safety. If limbs must be removed, cuts should be made perpendicular to the branch, to limit the size of the cut face. The branch bark collar should be preserved (i.e. no “flush cuts”), and cuts

should be made in such a way as to prevent the tearing of bark from the tree. All pruning should be done in accordance with ANSI A300 pruning standards. No pruning wound treatment (e.g. “Tree Seal”) should be applied.

8. To minimize soil compaction, keep all activity and traffic to a minimum within the root protection zone.

9. It is important that the root protection zone not be subjected to flooding incidental to the construction work, or to disposal of construction debris such as paints, plasters, or chemical solutions. No equipment fueling or chemical mixing should be done within the root protection zone.

10. In general, it is best to minimize the amount of environmental change which trees will be subjected to. This includes drastic changes in watering practices from historic conditions, including drastic increases as well as decreases in the amount or frequency of water applied.

11. Care should be exercised not to allow equipment to physically damage the tree’s trunk, root crown, or lower scaffold branches during construction. This includes but is not limited to 1) impact damage by scrapers, buckets, or hoes; or 2) damage by tires, wheels, or tracks from operating in close proximity to trees.

City of Thousand Oaks “Oak and Landmark Tree Protection and Preservation Guidelines”: The protection and preservations measures found in Reference 3 should be applied where they are relevant. If there is a conflict between the specific tree protection measures for this project (see above) and any of the protection and preservations measures in Reference 3, the specific tree protection measures in this report supersede.

CONCLUSIONS

There are a total of 140 trees on the site, including 126 protected coast live oak trees (*Quercus agrifolia*). Two of the oaks are located off property to the west.

Of the total of 126 protected oak trees at the Lynn Road site, the proposed project causes the removal of 21 protected oak trees, is expected to impact 82 protected oak trees, and will not impact another 23 protected oak trees. It should be noted that of the total 21 oak removals, 18 have a trunk largest trunk diameter of 3 inches or less; 14 of those have a largest trunk diameter of 2 inches or less, and one large tree (#7) has poor structure. If our mitigation measures are followed, we anticipate that impacts to the remaining protected oak trees will be greatly reduced or non-existent.

All required information about the trees is found on the attached Field Inventory Data Excel spreadsheet, impacts are listed in the attached Oak Tree Impacts table, and their locations are found on the accompanying Oak Tree Location Map.

Please let me know if I can be of any further assistance or if you have any additional questions. My goal is to satisfy my clients and help them to better care for their trees in the most effective way possible. I look forward to working with you toward that goal!

Sincerely,

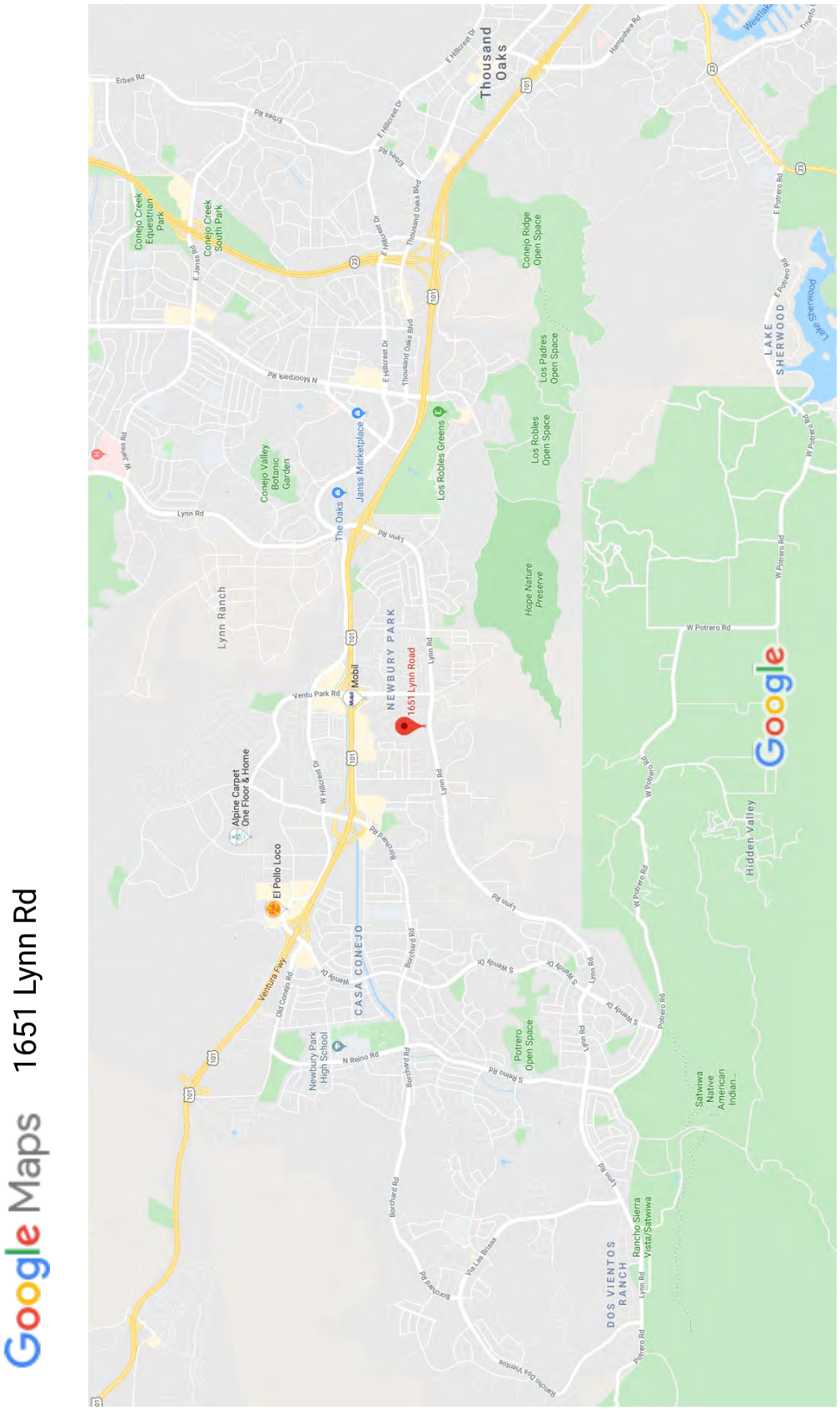
Jan C. Scow
ASCA Registered Consulting Arborist #382
ISA Board Certified Master Arborist #WE-1972B

Attached:
Response to Rincon Corrections
Site Location Map
Arborist Disclosure Statement
Arborist Qualification Certificate

Via separate email:
Oak Tree Location Map (36 x 48")
Oak Tree Impacts Table (Excel spreadsheet)
Corrections Tables (Excel spreadsheet)
1) Pruning and Dripline Analysis Table
2) 15' Rule Table
Field Inventory Data (Excel spreadsheet)
Photos of all trees [sent previously]

Response to Rincon Corrections

Item #	Subject	Status
1.2	Protective fencing not shown	Please see “Oak Tree Location Map,” dated 9/13/23 (sent via separate email)
2.1	Replacement trees	See page 7
3.1	Grading	All grading that will have an impact on oaks is clearly shown on the “Oak Tree Location Map,” as previously discussed with Rincon
3.2	% dripline affected	Please see “**Pruning and Dripline Analysis Table**”
3.3	Pruning table	Please see “**Pruning and Dripline Analysis Table**”
4.1	15’ rule	Please see boxed text at bottom of page 4 and the “**15’ Rule Table**”
5.1	Removal of neighbor adjacent trees	See page 4 under “Tree Removals”


Google Maps 1651 Lynn Rd
Map data ©2019 Google 2000 ft
1651 Lynn Road
Thousand Oaks
NEWBURY PARK
CASA CONEJO
DOS VIENTOS RANCH
LAKE SHERWOOD
Hidden Valley
Lynn Ranch
Conejo Creek Equestrian Park
Conejo Creek South Park
Conejo Ridge Open Space
Los Padres Open Space
Los Robles Open Space
Los Robles Greens
Hope Nature Preserve
Janss Marketplace
The Oaks
Conejo Valley Botanic Garden
Alpine Carpet One Floor & Home
El Pollo Loco
Mobil
Newbury Park High School
Potrero Open Space
Satwiwa Native American Indian...
Rancho Sierra Vista/Satwiwa
Lynn Rd
Ventu Park Rd
Ventura Fwy
Borchard Rd
Potrero Rd
W Potrero Rd
Thousand Oaks Blvd
E Hillcrest Dr
W Hillcrest Dr
Erbes Rd
N Moorpark Rd
E Janss Rd
W Janss Rd
N Reino Rd
S Reino Rd
Old Conejo Rd
Wendy Dr
S Wendy Dr
Via Las Brisas
Rancho Dos Vientos
Hampshire Rd
Google

Jan C. Scow Consulting Arborists, LLC
Disease and Pest Diagnosis, Hazard Evaluation, Restorative Pruning Advice, Value Assessment

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Ojai, CA 93023
info@janscow.com

ARBORIST DISCLOSURE STATEMENT

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures.

Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk. The only way to eliminate all risks is to eliminate all trees.

Please note the following important considerations:

- You should never authorize or do any work on any tree unless you are certain of that tree’s ownership, and you have confirmed that you solely own the tree, or that anyone else having a claim to the tree has given you permission in writing authorizing your proposed action.
- Before removing a tree, be sure it is your tree to remove.
- Trees on property lines belong to both properties.
- Working on trees hanging into or over your yard that belong to a neighbor may result in “unreasonable damage” to their tree and could expose you to litigation.

The American Society of Consulting Arborists

upon recommendation of the Membership Committee, and in recognition of professional qualifications in the field of Arboricultural Consultation, confers upon

Jan C. Scow

Registered Membership

with all the rights, privileges, and responsibilities provided by the Bylaws and Standards of Professional Practice of the Society.

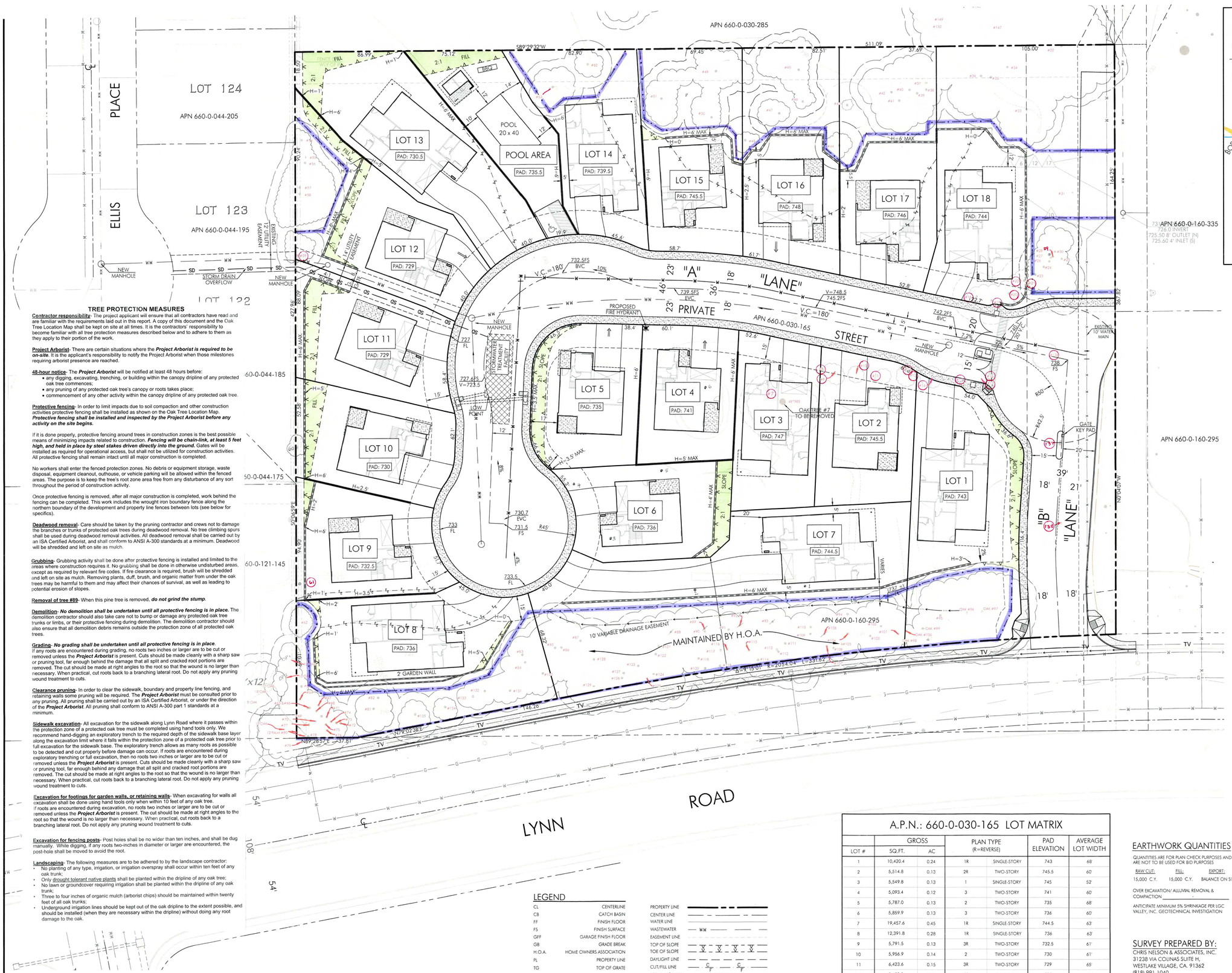
Registered Member Number #382

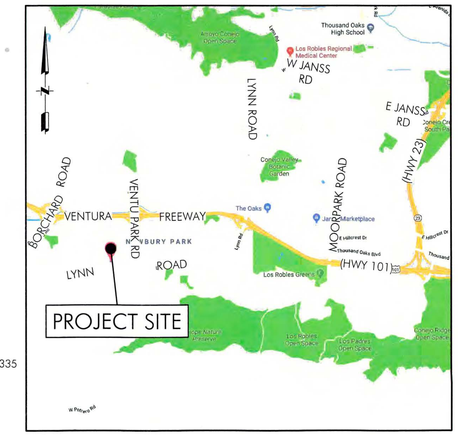
JAN C. SCOW
ASCA
AMERICAN SOCIETY OF CONSULTING ARBORISTS
Registered Consulting Arborist #382

Registered Member Since July 14, 1999

John T. Morris
President

Beth W. Palys
Executive Director





VICINITY MAP
N.T.S.

TREE PROTECTION MEASURES

Contractor responsibility- The project applicant will ensure that all contractors have read and are familiar with the requirements laid out in this report. A copy of this document and the Oak Tree Location Map shall be kept on site at all times. It is the contractors' responsibility to become familiar with all tree protection measures described below and to adhere to them as they apply to their portion of the work.

Project Arborist- There are certain situations where the ***Project Arborist is required to be on-site***. It is the applicant's responsibility to notify the Project Arborist when those milestones requiring arborist presence are reached.

48-hour notice- The ***Project Arborist*** will be notified at least 48 hours before:
- any digging, excavating, trenching, or building within the canopy dripline of any protected oak tree commences;
- any pruning of any protected oak tree's canopy or roots takes place;
- commencement of any other activity within the canopy dripline of any protected oak tree.

Protective fencing- In order to limit impacts due to soil compaction and other construction activities protective fencing shall be installed as shown on the Oak Tree Location Map. ***Protective fencing shall be installed and inspected by the Project Arborist before any activity on the site begins.***

If it is done properly, protective fencing around trees in construction zones is the best possible means of minimizing impacts related to construction. ***Fencing will be chain-link, at least 5 feet high, and held in place by steel stakes driven directly into the ground.*** Gates will be installed as required for operational access, but shall not be utilized for construction activities. All protective fencing shall remain intact until all major construction is completed.

No workers shall enter the fenced protection zones. No debris or equipment storage, waste disposal, equipment cleanout, outhouse, or vehicle parking will be allowed within the fenced areas. The purpose is to keep the tree's root zone area free from any disturbance of any sort throughout the period of construction activity.

Once protective fencing is removed, after all major construction is completed, work behind the fencing can be completed. This work includes the wrought iron boundary fence along the northern boundary of the development and property line fences between lots (see below for specifics).

Deadwood removal- Care should be taken by the pruning contractor and crews not to damage the branches or trunks of protected oak trees during deadwood removal. No tree climbing spurs shall be used during deadwood removal activities. All deadwood removal shall be carried out by an ISA Certified Arborist, and shall conform to ANSI A-300 standards at a minimum. Deadwood will be shredded and left on site as mulch.

Grubbing- Grubbing activity shall be done after protective fencing is installed and limited to the areas where construction requires it. No grubbing shall be done in otherwise undisturbed areas, except as required by relevant fire codes. If fire clearance is required, brush will be shredded and left on site as mulch. Removing plants, duff, brush, and organic matter from under the oak trees may be harmful to them and may affect their chances of survival, as well as leading to potential erosion of slopes.

Removal of tree #89- When this pine tree is removed, ***do not grind the stump***.

Demolition- ***No demolition shall be undertaken until all protective fencing is in place.*** The demolition contractor should also take care not to bump or damage any protected oak tree trunks or limbs, or their protective fencing during demolition. The demolition contractor should also ensure that all demolition debris remains outside the protection zone of all protected oak trees.

Grading- ***No grading shall be undertaken until all protective fencing is in place.*** If any roots are encountered during grading, no roots two inches or larger are to be cut or removed unless the ***Project Arborist*** is present. Cuts should be made cleanly with a sharp saw or pruning tool, far enough behind the damage that all split and cracked root portions are removed. The cut should be made at right angles to the root so that the wound is no larger than necessary. When practical, cut roots back to a branching lateral root. Do not apply any pruning wound treatment to cuts.

Clearance pruning- In order to clear the sidewalk, boundary and property line fencing, and retaining walls some pruning will be required. The ***Project Arborist*** must be consulted prior to any pruning. All pruning shall be carried out by an ISA Certified Arborist, or under the direction of the ***Project Arborist***. All pruning shall conform to ANSI A-300 part 1 standards at a minimum.

Sidewalk excavation- All excavation for the sidewalk along Lynn Road where it passes within the protection zone of a protected oak tree must be completed using hand tools only. We recommend hand-digging an exploratory trench to the required depth of the sidewalk base layer along the excavation limit where it falls within the protection zone of a protected oak tree prior to full excavation for the sidewalk base. The exploratory trench allows as many roots as possible to be detected and cut properly before damage can occur. If roots are encountered during exploratory trenching or full excavation, then no roots two inches or larger are to be cut or removed unless the ***Project Arborist*** is present. Cuts should be made cleanly with a sharp saw or pruning tool, far enough behind any damage that all split and cracked root portions are removed. The cut should be made at right angles to the root so that the wound is no larger than necessary. When practical, cut roots back to a branching lateral root. Do not apply any pruning wound treatment to cuts.

Excavation for footings for garden walls, or retaining walls- When excavating for walls all excavation shall be done using hand tools only when within 10 feet of any oak tree. If roots are encountered during excavation, no roots two inches or larger are to be cut or removed unless the ***Project Arborist*** is present. The cut should be made at right angles to the root so that the wound is no larger than necessary. When practical, cut roots back to a branching lateral root. Do not apply any pruning wound treatment to cuts.

Excavation for fencing posts- Post holes shall be no wider than ten inches, and shall be dug manually. While digging, if any roots two-inches in diameter or larger are encountered, the post-hole shall be moved to avoid the root.

Landscaping- The following measures are to be adhered to by the landscape contractor:
- No planting of any type, irrigation, or irrigation overspray shall occur within ten feet of any oak trunk;
- Only drought tolerant native plants shall be planted within the dripline of any oak tree;
- No lawn or groundcover requiring irrigation shall be planted within the dripline of any oak trunk;
- Three to four inches of organic mulch (arborist chips) should be maintained within twenty feet of all oak trunks;
- Underground irrigation lines should be kept out of the oak dripline to the extent possible, and should be installed (when they are necessary within the dripline) without doing any root damage to the oak.

BENCH MARK:

B.M. NO 52-9 NAVD 1988 COUNTY OF VENTURA DATUM

NGS PUB 1955 BENCH MARK DISK VCPID 1362

ELEVATION = 731.0878 FEET (222.836 METERS) (ADJUSTMENT OF 04-01-1997)

BASIS OF BEARINGS:

BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE OF LYNN ROAD AS SHOWN ON THE RECORD OF SURVEY, R.S. 55-86/89 AS N 79°02'28" E.

FLOOD ZONE:

FLOOD ZONE X- AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN PER FIRM COMMUNITY PANEL NO 06111C0966E DATED 01-20-2010

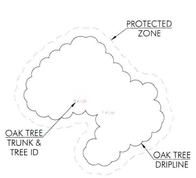
UTILITY SERVICE SUMMARY

WATER:	CITY OF THOUSAND OAKS 2100 THOUSAND OAKS BLVD. THOUSAND OAKS, CA 91362	(805) 499-2426
SEWAGE DISPOSAL:	CITY OF THOUSAND OAKS 2100 THOUSAND OAKS BLVD. THOUSAND OAKS, CA 91362	(805) 449-2100
TELEPHONE:	VERIZON 1 GTE PLACE THOUSAND OAKS, CA 91362	(805) 372-6000 (800) 483-4000
ELECTRIC:	SOUTHERN CALIFORNIA EDISON 3589 FOOTHILL DRIVE THOUSAND OAKS, CA 91360	(800) 655-4555
CABLE TV:	TIME WARNER 2323 TELLER ROAD NEWBURY PARK, CA 91320	(800) 427-3731

LEGEND

CL	CENTERLINE
CB	CATCH BASIN
FF	FINISH FLOOR
FS	FINISH SURFACE
GFF	GARAGE FINISH FLOOR
GB	GRADE BREAK
H.O.A.	HOME OWNERS ASSOCIATION
PL	PROPERTY LINE
TG	TOP OF GRATE
TW	TOP OF WALL
H=X	HEIGHT OF WALL EQUALS X'

PROPERTY LINE
CENTER LINE
WATER LINE
WASTEWATER
EASEMENT LINE
TOP OF SLOPE
TOE OF SLOPE
DAYLIGHT LINE
CUT/FILL LINE
RETAINING WALL
SITE WALL
WATER LATERAL
SEWER LATERAL
25 H.O.A. EASEMENT ZONE
100 BRUSH CLEARANCE
SLOPES



LOT SUMMARY:

JOB ADDRESS:
1651 LYNN ROAD
NEWBURY PARK, CA 91320

A.P.N.:
660-0-030-165
660-0-030-175

TOTAL LOT AREA
A.P.N.:660-0-030-165
GROSS (AC): 4.30 AC
GROSS (SQ.FT.): 187,438.64

A.P.N.:660-0-030-175
GROSS (AC): 0.31 AC
GROSS (SQ.FT.): 13,551.12

CURRENT ZONING:
R-E-1AC

GENERAL PLAN ZONING:
LOW DENSITY RESIDENTIAL (2-4.5 DU/NET ACRE)

EXISTING LAND USE DENSITY: 4.5 DU/AC
YIELDS 19 SINGLE FAMILY RESIDENCE

APPROVED GENERAL PLAN DENSITY: 6.5 DU/AC
YIELDS 27 SINGLE FAMILY RESIDENCE

NOTES :

1. EXISTING POWER POLE LINES TO REMAIN IN PLACE.
2. PROPOSED WASTEWATER SYSTEM TO GRAVITY FLOW WESTWARD AND CONNECT WITH EXISTING 8" WASTEWATER LINE IN ADRIAN ST.
3. PRIVATE STREET IMPROVEMENTS PER CITY OF THOUSAND OAKS STANDARDS PLATE NO. 2-9.
4. EXISTING SECURITY GATE SERVING ADJACENT HOMES TO REMAIN.
5. PROPOSED ENTRY ROADWAY IMPROVEMENTS TO MATCH EXISTING DRIVEWAY EDGE, AS POSSIBLE.
6. ALL SLOPES TO BE 2:1 OR FLATTER.
7. PRIVATE STREET AND ADJACENT SLOPE ALONG LYNN ROAD.
8. STORMWATER TREATMENT AND DETENTION SYSTEM TO BE DESIGNED TO COMPLY WITH VENTURA COUNTRY WATERSHED PROTECTION DISTRICTS TECHNICAL GUIDANCE MANUAL (TGM).
9. WATER SYSTEMS TO BE DESIGNED PER CITY OF THOUSAND OAKS AND VENTURA COUNTY FIRE DEPARTMENT STANDARDS.
10. ALL RETAINING WALLS ARE 6 FOOT MAX.
11. PROPOSED SIDEWALK PER CITY OF THOUSAND OAKS STANDARDS.
12. SIGHT DISTANCE EXCEEDS MINIMUM DISTANCE PER CITY OF THOUSAND OAKS PUBLIC WORK DEPARTMENT PLATE NUMBER 3-10.

OAK TREE LOCATION MAP

TENTATIVE TRACT MAP #6081

A.P.N.: 660-0-030-165 LOT MATRIX

LOT #	GROSS SQ.FT.	GROSS AC	PLAN TYPE (R=REVERSE)		PAD ELEVATION	AVERAGE LOT WIDTH
1	10,420.4	0.24	1R	SINGLE-STORY	743	68'
2	5,514.8	0.13	2R	TWO-STORY	745.5	60'
3	5,549.8	0.13	1	SINGLE-STORY	745	52'
4	5,093.4	0.12	3	TWO-STORY	741	60'
5	5,787.0	0.13	2	TWO-STORY	735	68'
6	5,859.9	0.13	3	TWO-STORY	736	60'
7	19,457.6	0.45	1R	SINGLE-STORY	744.5	63'
8	12,391.8	0.28	1R	SINGLE-STORY	736	63'
9	5,791.5	0.13	3R	TWO-STORY	732.5	61'
10	5,956.9	0.14	2	TWO-STORY	730	61'
11	6,423.6	0.15	3R	TWO-STORY	729	65'
12	8,488.2	0.19	3R	TWO-STORY	729	67'
13	9,032.7	0.21	1	SINGLE-STORY	729.5	57'
14	7,010.4	0.16	1	SINGLE-STORY	741.5	52'
15	7,907.5	0.18	3R	TWO-STORY	745.5	62'
16	8,209.5	0.19	2	TWO-STORY	748	60'
17	8,843.2	0.20	3	TWO-STORY	745	60'
18	17,836.5	0.41	1	SINGLE-STORY	742	111' TOTAL AVERAGE 64 FT
POOL	5,005.7	0.11			735.5	
PRIVATE STREET	40,408.9	0.93				
660-0-030-165	187,438.64	4.30				
660-0-030-175	13,551.12	0.31				
660-0-030-165	200,989.76	4.61				

EARTHWORK QUANTITIES

QUANTITIES ARE FOR PLAN CHECK PURPOSES AND ARE NOT TO BE USED FOR BID PURPOSES

RAW CUT:	FILL:	EXPORT:
15,000 C.Y.	15,000 C.Y.	BALANCE ON SITE

OVER EXCAVATION/ ALLUVIAL REMOVAL & COMPACTION -

ANTICIPATE MINIMUM 5% SHRINKAGE PER LGC VALLEY, INC. GEOTECHNICAL INVESTIGATION

SURVEY PREPARED BY:
CHRIS NELSON & ASSOCIATES, INC.
31238 VIA COLINAS SUITE H,
WESTLAKE VILLAGE, CA. 91362
(818) 991-1040

SCALE: 1" = 20'
0 20 40 60

KEY
Protective fencing
#16 Tree removal

Jan C Scow Consulting Arborists, LLC
401 N Ventura St
Ojai, CA 93023
9/13/23

September 5, 2023

PREPARED BY:

PACIFIC COAST CIVIL, INC.
30141 AGOURA ROAD, SUITE 200
AGOURA HILLS, CA 91301
PH: (818) 865-4168
FAX: (818) 865-4198

OWNER/DEVELOPER:

JEB ADAMS
30699 RUSSELL RANCH RD. #100
WESTLAKE VILLAGE, CA 91362
PHONE: (818) 338-9296
MOBILE: (818) 681-4179

line	Tree #	3.2 % dripline affected	3.3 pruned yes/no or possibly	pruning objective	pruning cut type	% canopy removed	maximum allowed % removed	cut size(s)	removed tree shared with neighbor	estimated impact
1	1									
2	2									
3	3									
4	4									
5	5									
6	6									
7	7	removed							NO	remove
8	8	removed							NO	remove
9	9	removed							NO	remove
10	10	removed							NO	remove
11	11	removed							NO	remove
12	12	removed							NO	remove
13	13	removed							NO	remove
14	14	removed							NO	remove
15	15	removed							NO	remove
16	16	removed							NO	remove
17	17	removed							NO	remove
18	18	removed							NO	remove
19	19	removed							NO	remove
20	20	removed							NO	remove
21	21	removed							NO	remove
22	22	removed							NO	remove
23	23	0%	yes	clear wall	clearance	10%	15%	<2"		minor
24	24	0%	yes	clear wall	clearance	5%	10%	<2"		very minor
25	25	0%	no							none
26	26	0%	yes	clear wall	clearance	<5%	5%	<2"		very minor
27	27	0%	yes	clear wall	clearance	<5%	5%	<2"		very minor
28	28	0%	yes	clear wall	clearance	<5%	5%	<2"		very minor
29	29	0%	no							none

30	30	0%	no							none
31	31									
32	PL32	<5%	possibly	clear fence	clearance	<5%	5%	<2"		very minor
33	33	<5%	yes	clear fence	clearance	<5%	5%	<2"		very minor
34	34	0%	possibly	clear fence	clearance	<5%	5%	<2"		very minor
35	35	0%	possibly	clear fence	clearance	<5%	5%	<2"		very minor
36	36	0%	possibly	clear fence	clearance	<5%	5%	<2"		very minor
37	37	<5%	possibly	clear fence	clearance	<5%	5%	<2"		very minor
38	38	<5%	possibly	clear fence	clearance	<5%	5%	<2"		very minor
39	39	<5%	no							very minor
40	40	0%	no							none
41	41	0%	no							none
42	42	0%	no							none
43	43	0%	no							very minor
44	44	<10%	yes	clear wall	clearance	10%	15%	<2"		moderate
45	45	<5%	possibly	clear fence	clearance	<5%	5%	<2"		very minor
46	46	0%	no							none
47	47	0%	no							very minor
48	48	0%	possibly	clear wall	clearance	<5%	5%	<2"		minor
49	49	<5%	possibly	clear fence	clearance	<5%	5%	<2"		very minor
50	50	0%	no							very minor
51	51	<5%	no							none
52	52	<5%	no							none
53	53	<10%	possibly	clear fence	clearance	<5%	5%	<2"		minor
54	54	<5%	yes	clear fence	clearance	<5%	5%	<2"		very minor
55	55	<5%	yes	clear fence	clearance	15%	20%	<2"		moderate
56	56	<5%	yes	clear fence	clearance	15%	20%	<2"		moderate
57	57	<5%	yes	clear fence	clearance	15%	20%	<2"		moderate
58	58	<5%	yes	clear fence	clearance	15%	20%	<2"		moderate
59	59	removed							YES	remove
60	60									
61	61	removed							YES	remove
62	62	<5%	yes	clear fence	clearance	<10%	10%	<2"		minor

63	OP1	<5%	yes	clear fence	clearance	<5%	5%	<2"		very minor
64	OP2	<5%	yes	clear fence	clearance	<10%	10%	<2"		very minor
65	63	<5%	yes	clear fence	clearance	<10%	10%	<2"		minor
66	64	<5%	yes	clear fence	clearance	<10%	10%	<2"		minor
67	65	<5%	yes	clear fence	clearance	<5%	5%	<2"		very minor
68	66	<5%	yes	clear fence	clearance	<5%	5%	<2"		very minor
69	67	0%	no							none
70	68	0%	no							none
71	69	<5%	yes	clear fence	clearance	<10%	10%	<2"		very minor
72	70	0%	no							none
73	71	0%	no							none
74	72	0%	no							none
75	73	0%	no							none
76	74	0%	no							none
77	75	0%	no							none
78	76	<5%	no							very minor
79	77	<5%	yes	clear fence	clearance	<5%	5%	<2"		very minor
80	78	<5%	yes	clear fence	clearance	<5%	5%	<2"		very minor
81	79	<5%	no							very minor
82	80									
83	81	<5%	no							very minor
84	82	<5%	no							very minor
85	83	0%	no							none
86	84	0%	no							none
87	85	0%	no							none
88	86	0%	no							none
89	87	0%	no							none
90	88									
91	89									
92	90	0%	no							none
93	91	0%	no							none
94	92									
95	93									

96	94	0%	no							none
97	95	10%	no							none
98	96	10%	no							none
99	97	15%	no							none
100	98	15%	no							minor
101	99	<5%	no							very minor
102	100	<5%	no							very minor
103	101	<5%	no							very minor
104	102	<5%	no							very minor
105	103	<10%	no							very minor
106	104	<5%	no							very minor
107	105	10%	yes	clear sidewalk	clearance	<10%	10%	1-4"		minor
108	106	10%	no							very minor
109	107	10%	no							very minor
110	108									
111	109	<10%	no							very minor
112	110	0%	no							none
113	111	30%	no							moderate
114	112	20%	no							minor
115	113	10%	no							very minor
116	114	10%	no							minor
117	115	<5%	no							very minor
118	116	<5%	no							very minor
119	117	<10%	no							very minor
120	118	<5%	no							very minor
121	119	5%	no							very minor
122	120	20%	no							moderate
123	121	0%	no							none
124	122	0%	no							none
125	123	0%	no							none
126	124	30%	no							moderate
127	125	30%	no							moderate
128	126	20%	no							moderate

129	127	5%	no							very minor
130	128	0%	no							none
131	129	30%%	no							moderate
132	130	0%	no							none
133	131	0%	no							very minor
134	132	0%	no							very minor
135	133	0%	no							very minor
136	134	0%	no							very minor
137	135	<5%	no							very minor
138	136	removed							NO	remove
139	137	removed							NO	remove
140	138	removed							NO	remove

141 Clearance pruning IAW ANSI A-300 part 1, sec. 8.4

142 Not a protected species

143 Protected tree to be removed

line	Tree #	4.1 15' rule applies yes or no	objective	distance to impact in feet	maximum % root loss	maximum % canopy losss	what's happening here that causes impacts? PF, W, BF, SW, F	estimated impact level
1	23	yes	clear wall	5	10%	10%	PF, W	minor
2	24	yes	wall	10	<5%	—	PF, W	very minor
3	25	no						
4	26	yes	clear wall	13	5%	5%	PF, W	very minor
5	27	yes	clear wall	14	<5%	5%	PF, W	very minor
6	28	yes	clear wall	15	<5%	5%	PF, W	very minor
7	29	no						
8	30	no						
9	PL32	yes	clear fence	1	<5%	5%	BF	very minor
10	33	yes	clear fence	0	<5%	5%	BF	very minor
11	34	yes	clear fence	13	<5%	<5%	BF	very minor
12	35	no						very minor
13	36	no						very minor
14	37	yes	clear fence	6	<5%	<5%	BF	very minor
15	38	yes	clear fence	6	<5%	<5%	BF	very minor
16	39	yes	clear fence	12	<5%	<5%	BF	very minor
17	40	no						
18	41	no						
19	42	no						
20	43	yes	fence	5	<5%	—	BF	very minor
21	44	yes	clear fence, wall	8	10%	15%	BF, W	moderate
22	45	yes	clear fence	13	—	5%	BF	very minor
23	46	no						
24	47	yes	wall	13	<5%	—	W	very minor
25	48	yes	clear fence, wall	8	10%	5%	BF, W	minor
26	49	yes	—	14	—	—	—	very minor
27	50	yes	wall	10	<5%	—	W	very minor
28	51	yes	—	13	—	—	—	none
29	52	yes	—	10	—	—	—	none

30	53	yes	clear fence, foundation	13	10%	5%	BF, F, PF	minor
31	54	yes	clear fence	4	—	5%	BF	very minor
32	55	yes	clear fence	6	<5%	20%	BF	moderate
33	56	yes	clear fence	6	<5%	20%	BF	moderate
34	57	yes	clear fence	3	<5%	20%	BF	moderate
35	58	yes	clear fence	3	<5%	20%	BF	moderate
36	62	yes	clear fence	2	<5%	10%	BF	minor
37	OP1	yes	clear fence	5	<5%	5%	BF	very minor
38	OP2	yes	clear fence	6	—	10%	BF	very minor
39	63	yes	clear fence, wall	3, 9	<5%	10%	BF, W	minor
40	64	yes	clear fence, wall	2, 15	<5%	10%	BF, W	minor
41	65	yes	clear fence	6	—	5%	BF	very minor
42	66	yes	clear fence	6	—	5%	BF	very minor
43	67	yes	—	12, 10	—	—	—	none
44	68	yes	—	15	—	—	—	none
45	69	no						very minor
46	70	yes	—	11	—	—	—	none
47	71	no						
48	72	yes	—	15	—	—	—	none
49	73	no						
50	74	no						
51	75	no						
52	76	yes	sidewalk	12	<5%	—	SW	very minor
53	77	yes	clear fence	7	—	5%	BF	very minor
54	78	yes	clear fence, sidewak	7, 11	<5%	5%	BF, SW	very minor
55	79	no						
56	81	yes	—	15	—	—	—	very minor
57	82	yes	wall	8	<5%	—	W	very minor
58	83	no						
59	84	no						
60	85	no						
61	86	no						
62	87	no						

63	90	no						
64	91	no						
65	94	yes	—	15	—	—	—	none
66	95	no						
67	96	no						
68	97	no						
69	98	yes	sidewalk	8	15%	—	SW	minor
70	99	yes	sidewalk	15	<10%	—	SW	very minor
71	100	yes	sidewalk	14	<10%	—	SW	very minor
72	101	yes	sidewalk	12	<10%	—	SW	very minor
73	102	no						
74	103	yes	—	13	<10%	—	SW	very minor
75	104	no						
76	105	yes	clear sidewalk	10	<10%	10%	SW	minor
77	106	yes	sidewalk	9	<10%	—	SW	very minor
78	107	yes	sidewalk	10	<10%	—	SW	very minor
79	109	no						
80	110	no						
81	111	yes	sidewalk	15	30%	—	SW	moderate
82	112	yes	sidewalk	12	<10%	—	SW	minor
83	113	yes	sidewalk	10	<10%	—	SW	very minor
84	114	yes	sidewalk	7	20%	—	SW	minor
85	115	yes	sidewalk	13	<10%	—	SW	very minor
86	116	no						very minor
87	117	no						very minor
88	118	yes	sidewalk	13	<10%	—	SW	very minor
89	119	yes	sidewalk	7	<10%	—	SW	very minor
90	120	yes	sidewalk	7	20%	—	SW	moderate
91	121	no						
92	122	no						
93	123	no						
94	124	yes	sidewalk	8	30%	—	SW	moderate
95	125	yes	sidewalk	7	30%	—	SW	moderate

96	126	yes	sidewalk	10	20%	—	SW	moderate
97	127	yes	sidewalk	12	<10%	—	SW	very minor
98	128	no						
99	129	yes	sidewalk	8	30%	—	SW	moderate
100	130	no						
101	131	yes	sidewalk	15	<10%	—	SW	very minor
102	132	yes	sidewalk	13	<10%	—	W	very minor
103	133	yes	sidewalk	15	<10%	—	W	very minor
104	134	yes	sidewalk	12	<10%	—	SW	very minor
105	135	yes	sidewalk	12	10%	—	SW	very minor

106 very minor 10% or less
107 minor 10-20%
108 moderate 20-30%
109 PF = protective fencing
110 W = retaining wall
111 BF = boundary fencing
112 SW = sidewalk
113 F = foundation

line	Tree #	3.2 % dripline affected	3.3 pruned yes/no or possibly	pruning objective	pruning cut type	% canopy removed	maximum allowed % removed	cut size(s)
21	44	<10%	yes	clear wall	clearance	10%	15%	<2"
32	55	<5%	yes	clear fence	clearance	15%	20%	<2"
33	56	<5%	yes	clear fence	clearance	15%	20%	<2"
34	57	<5%	yes	clear fence	clearance	15%	20%	<2"
35	58	<5%	yes	clear fence	clearance	15%	20%	<2"
81	111	30%	no	none	—	—	—	—
90	120	20%	no	none	—	—	—	—
94	124	30%	no	none	—	—	—	—
95	125	30%	no	none	—	—	—	—
96	126	20%	no	none	—	—	—	—
99	129	30%%	no	none	—	—	—	—

line	Tree #	3.2: % dripline affected	3.3 pruned yes/no or possibly	pruning objective	cut type	% canopy removed	maximum allowed % removed	cut size(s)
44	44	<10%	yes	clear wall	clearance	10%	15%	<2"
55	55	<5%	yes	clear fence	clearance	15%	20%	<2"
56	56	<5%	yes	clear fence	clearance	15%	20%	<2"
57	57	<5%	yes	clear fence	clearance	15%	20%	<2"
58	58	<5%	yes	clear fence	clearance	15%	20%	<2"
113	111	30%	no					
122	120	20%	no					
126	124	30%	no					
127	125	30%	no					
128	126	20%	no					
131	129	40%	no					

4.1 15' rule applies yes or no	objective	distance to impact in feet	maximum % root loss	maximum % canopy losss	what's happening here that causes impacts? PF, W, BF, SW, F	estimated impact level
yes	clear fence, wall	8	10%	15%	BF, W	moderate
yes	clear fence	6	<5%	20%	BF	moderate
yes	clear fence	6	<5%	20%	BF	moderate
yes	clear fence	3	<5%	20%	BF	moderate
yes	clear fence	3	<5%	20%	BF	moderate
yes	sidewalk	15	30%	—	SW	moderate
yes	sidewalk	7	20%	—	SW	moderate
yes	sidewalk	8	30%	—	SW	moderate
yes	sidewalk	7	30%	—	SW	moderate
yes	sidewalk	10	20%	—	SW	moderate
yes	sidewalk	8	30%	—	SW	moderate

removed tree shared with neighbor	estimated impact
	moderate
	moderate
	moderate
	moderate
	moderate
	moderate
	moderate
	moderate
	moderate
	moderate
	moderate

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line	Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-F)	Structural comments
1	1	*Washingtonia robusta*	21	65	6r	n/a	good	good	none observed	good	C	none
2	2	*Washingtonia robusta*	22	65	6r	n/a	good	good	none observed	good	C	none
3	3	*Pinus eldarica*	17 @ 3'	35	15r	6r	good	good	none observed	fair	B	root crown buried, codominant leaders; no recs
4	4	*Pinus eldarica*	20.5 @ 1'	35	15r	6r	good	good	none observed	fair	B	codominant leaders; no recs
5	5	*Juniperus chinensis 'Torulosa'*	16, 6 @ 1'	15	10r	6r	good	fair	none observed	good	C	embedded stake; no recs
6	6	*Fraxinus uhdei*	8, 7, 7+	28	12r	5r	fair	fair	none observed	poor	C	multiple codominant trunks; no recs
7	7	*Quercus agrifolia*	47.5 @ 1'	40	12/15/30/23 / 24/25/20/19	20/0/0/14/ 28/30/11/2	fair	fair	interior dieback	poor	C	history of multiple failures, major trunk removed
8	8	*Quercus agrifolia*	2, 2, 1 @ grade	6	1r	2r	good	good	none observed	fair	C	none
9	9	*Quercus agrifolia*	2, 1 @ grade	3.5	1r	n/a	good	good	none observed	poor	C	topped; no recs
10	10	*Quercus agrifolia*	2, 2 @ 1'	7	3r	0r	good	good	none observed	fair	C	stump sprouts; no recs
11	11	*Quercus agrifolia*	2, 2 @ 1'	7	3r	0r	good	good	none observed	good	C	none
12	12	*Quercus agrifolia*	2 @ grade	4	2r	0r	good	good	none observed	good	C	none
13	13	*Quercus agrifolia*	2, 2 @ grade	8	3r	3r	good	goof	none observed	fair	C	stump sprouts; no recs
14	14	*Quercus agrifolia*	2, 2, 2+ @ grade	8	2r	4r	good	good	none observed	fair	C	stump sprouts; no recs
15	15	*Quercus agrifolia*	2, 2, 2 @ grade	8	4r	1r	good	good	none observed	fair	C	stump sprouts; no recs
16	16	*Quercus agrifolia*	2, 2+ @ grade	10	4r	4r	good	good	none observed	good	C	none

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line	Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-F)	Structural comments
17	17	*Quercus agrifolia*	2 @ grade	10	3r	5r	good	good	none observed	fair	C	codominant; no recs
18	18	*Quercus agrifolia*	2, 1.5, 1.5	13	6r	2r	good	good	none observed	fair	C	stump sprouts; no recs
19	19	*Quercus agrifolia*	2, 2, 2+	12	6r	1r	good	good	none observed	fair	C	stump sprouts; no recs
20	20	*Quercus agrifolia*	4 @ 1'	8	6r	0r	poor	good	none observed	good	C	none
21	21	*Quercus agrifolia*	2.5, 1, 1	10	8SE	2SE	good	good	none observed	fair	C	multi-trunk base; no recs
22	22	*Quercus agrifolia*	6	11	5r	3r	good	good	none observed	good	C	none
23	23	*Quercus agrifolia*	3, 2 @ 1'	9	2r	2r	good	good	none observed	fair	C	none
24	24	*Quercus agrifolia*	6, 5, 4, 4, 3+	14	8r	1r	good	good	none observed	fair	C	multi-trunk base; no recs
25	25	*Quercus agrifolia*	2	9	7SE	4SE	fair	fair	suppressed	fair	C	leaning, imbalanced; no recs
26	26	*Quercus agrifolia*	4.5	12	10SE	4SE	fair	fair	suppressed	fair	C	leaning, imbalanced; no recs
27	27	*Quercus agrifolia*	6	16	5r	6r	good	good	none observed	good	C	none
28	28	*Quercus agrifolia*	3.5	16	4r	8r	good	good	none observed	good	C	none
29	29	*Quercus agrifolia*	5.5	18	14NW	4NW	fair	fair	suppressed	fair	C	leaning, imbalanced; no recs
30	30	*Quercus agrifolia*	7, 5	18	13/12/10/6/ 8/6/4/9	2r	good	good	none observed	fair	C	multi-trunk base; no recs
31	31	*Acacia sp.*	10, 9, 5	12	6/—/20/20 (NESW)	2r	fair	good	dieback	good	C	fallen over; no recs
32	PL32	*Quercus agrifolia*	18.5, 18, 14.5, 12, 8, 7	30	25/28/30/28 / 30/25/20/22	6/4/7/5/ 8/12/18/17	fair	fair	interior dieback	good	C	history of failure; remove deadwood

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line	Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-F)	Structural comments
33	33	*Quercus agrifolia*	14.5, 12, 12, 2 @ 3'	35	12/14/21/20 / 18/25/15/14	18/6/6/5/ 3/0/18/20	good	fair	none observed	fair	B	multi-trunk base; no recs
34	34	*Quercus agrifolia*	17 @ 2.5'	32	3/18/18/22/ 22/8/5/3	6/5/14/8/ 11/10/6/8	poor	fair	dieback, suppressed	fair	D	history of failure; remove deadwood
35	35	*Quercus agrifolia*	15	38	20/18/12/18 / 18/22/12/19	14/14/12/12/ 20/28/12/12	poor	poor	very sparse	fair	D	cavities on west side, root cut on east side; remove deadwood
36	36	*Quercus agrifolia*	22.5, 15, 13	28	—/—/9/18/ 22/25/22/27	—/—/7/8/ 0/8/7/8	fair	poor	minor dieback	fair	C	history of failure, multi-trunk base; remove deadwood
37	37	*Quercus agrifolia*	10	30	21/12/—/—/ —/—/6/21	10/12/—/—/ —/—/6/11	poor	fair	dieback	fair	D	bowed trunk; remove deadwood
38	38	*Quercus agrifolia*	16, 9	30	12/18/12/14 / 19/12/6/9	10/12/12/12/ 2/14/12/18	poor	poor	dieback	fair	D	history of failure; remove deadwood
39	39	*Quercus agrifolia*	4	15	12S	4S	dead	dead	dead	good	F	none
40	40	*Quercus agrifolia*	9	27	23/20/6/20/ 5/2/2/7	6/8/12/12/ 20/20/12/12	fair	poor	sparse, minor dieback	fair	C	codominant; no recs
41	41	*Quercus agrifolia*	10, 9.5 @ 2'	22	6/9/12/18/ 18/—/—/2	4/5/12/0/ 3/—/—/3	fair	poor	minor dieback	poor	C	history of failure; remove deadwood
42	42	*Quercus agrifolia*	14, 13.5, 11, 11, 8	30	21/18/12/6/ 18/17/17/17	6/5/14/8/ 0/6/4/8	fair	poor	dieback	poor	C	history of failure, narrow crotch angles; remove deadwood
43	43	*Quercus agrifolia*	2, 1, 1, 1 @ 6"	6	3r	1r	poor	poor	dieback	poor	D	stump sprouts
44	44	*Quercus agrifolia*	11 @ 1'	10	7r	2r	fair	fair	none observed	fair	C	multi-attachment crotch, leaning; no recs
45	45	*Quercus agrifolia*	23	30	~20/12/6/19 / 20/21/25/20	6/6/10/0/ 4/20/0/2	fair	fair	dieback, sunburn	fair	C	none
46	46	*Quercus agrifolia*	3 @ 1'	6	4S	1S	good	good	minor dieback	good	C	none
47	47	*Quercus agrifolia*	16 @ 4'	20	6/8/6/8/ 10/12/15/12	4/4/6/4/ 5/4/2/6	poor	poor	major dieback	poor	D	none
48	48	*Quercus agrifolia*	6 @ 3'	13	6/6/5/6/ 6/7/5/5	1r	good	good	none observed	good	B	codominant; no recs

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line	Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-F)	Structural comments
49	49	*Quercus agrifolia*	25, 19 @ 2'	28	9/19/23/26/ 13/19/19/21	12/15/8/0/ 0/20/4/4	poor	poor	major dieback	fair	D	history of failure, codominant with included bark;no recs
50	50	*Quercus agrifolia*	15.5, 8, 6, 3.5 @ 4'	28	12/11/6/8/ 10/12/13/12	8/8/8/4/ 2/2/2/7	fair	poor	dieback	fair	D	multi-trunk base with included bark; no recs
51	51	*Quercus agrifolia*	17, 14.5, 13.5, 8	28	19/18/11/13 / 18/13/10/10	5/5/6/10/ 0/1/4/4	poor	poor	dieback	poor	D	history of failure, multi-trunk base; no recs
52	52	*Quercus agrifolia*	10 @ grade	12	5/6/7/8/ 8/7/8/7	4/2/2/2/ 2/4/1/3	fair	poor	minor dieback	fair	B	codominant; remove deadwood
53	53	*Quercus agrifolia*	15, 12.5 @ 6"	22	9/12/14/9/ 8/8/8/9	0r	good	fair	none observed	fair	B	multi-attachment, included bark; no recs
54	54	*Quercus agrifolia*	3, 2, 2, 2, 1	12	7r	0r	good	good	none observed	fair	B	stump sprouts; no recs
55	55	*Quercus agrifolia*	6 @ 4'	15	6r	0r	good	good	none observed	fair	C	codominant; no recs
56	56	*Quercus agrifolia*	3+	8	4r	0r	good	fair	none observed	good	C	none
57	57	*Quercus agrifolia*	2.5	12	10NE	8NE	fair	fair	suppressed	fair	C	codominant, leaning; no recs
58	58	*Quercus agrifolia*	22 @ 4'	38	24/20/22/21 / 21/22/18/23	0r	good	good	minor dieback, oak leaf miner	fair	A	codominant with included bark, pruned for HV lines above; remove deadwood
59	59	*Quercus agrifolia*	10, 5 @ 1'	20	7r	0r	good	good	powdery mildew	fair	B	leaning, below HV lines; no recs
60	60 (no tag)	*Washingtonia robusta*	16	20	6r	n/a	good	good	none observed	good	C	below HV lines; remove tree
61	61	*Quercus agrifolia*	2.5	14	3/4/3/5/ 6/2/2/2	0r	fair	fair	chlorotic, oak leaf miner	fair	C	poor location; no recs
62	62	*Quercus agrifolia*	9 @ 3'	21	7r	0r	good	good	none observed	fair	B	codominant with included bark; no recs
63	OP1 (no tag)	*Quercus agrifolia*	9, 6	21	0' @ PL	n/a	fair	fair	none observed	fair	C	included bark, below HV lines; no recs

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line	Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-F)	Structural comments
64	OP2 (no tag)	*Quercus agrifolia*	9 @ 4'	22	5' @ PL	8' @ PL	fair	fair	none observed	fair	C	multi-attachment crotch, below HV lines; no recs
65	63	*Quercus agrifolia*	2 @ 3'	8	2r	1r	fair	fair	none observed	good	C	none
66	64	*Quercus agrifolia*	4 @ 2'	13	5/6/6/—/—/—/4/4	3r	very poor	poor	dieback	fair	D	multi-attachment crotch; remove deadwood
67	65	*Quercus agrifolia*	3.5	12	3r	3r	fair	fair	none observed	fair	C	codominant; no recs
68	66	*Quercus agrifolia*	5	14	4/4/4/5/5/—/—/—	2/2/2/2/2/—/—/—	fair	fair	none observed	fair	C	included bark; no recs
69	67	*Quercus agrifolia*	2.5 @ 6"	8	4E	1E	fair	poor	dieback	fair	C	none
70	68	*Quercus agrifolia*	2.5 @ 2'	12	5NE	2NE	fair	fair	none observed	fair	C	codominant; no recs
71	69	*Quercus agrifolia*	4, 3 @ 4'	13	6E	2E	fair	fair	none observed	fair	C	codominant; no recs
72	70	*Quercus agrifolia*	2, 2	13	2r	2r	fair	poor	dieback	fair	C	codominant, growing in fence; remove fence
73	71	*Quercus agrifolia*	3	13	6E	2E	fair	fair	none observed	good	C	none
74	72	*Quercus agrifolia*	3.5 @ 3'	12	5/5/5/5/5/—/—/—	0/0/0/0/0/—/—/—	fair	fair	none observed	good	C	none
75	73	*Quercus agrifolia*	2, 2	15	5r	2r	fair	fair	none observed	fair	C	codominant; no recs
76	74	*Quercus agrifolia*	2.5 @ 2.5'	12	2r	0r	fair	fair	none observed	good	C	none
77	75	*Quercus agrifolia*	5	17	2r	5r	fair	fair	none observed	good	C	none
78	76	*Quercus agrifolia*	11.5 @ 1'	18	4/5/6/7/8/8/8/10	0r	fair	fair	none observed	fair	C	multi-attachment, included bark; no recs
79	77	*Quercus agrifolia*	4.5	16	3r	1r	fair	fair	none observed	good	C	none

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line	Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-F)	Structural comments
80	78	*Quercus agrifolia*	4	16	—/2/4/5/ 4/—/—/—	—/2/2/2/ 2/—/—/—	fair	fair	none observed	good	C	none
81	79	*Quercus agrifolia*	3.5 @ 1'	7	—/—/3/4/ 2/4/3/—	—/—/2/2/ 2/2/2/—	fair	fair	none observed	fair	C	multi-attachment crotch; no recs
82	80	*Washingtonia robusta x 2*	12-each	55, 12	6r	n/a	good	good	none observed	good	C	none
83	81	*Quercus agrifolia*	11, 10, 8 @ 3.5'	22	6/7/10/14/ 12/12/12/9	0r	fair	fair	sparse, oak leaf miner	fair	C	codominant, growing in fence; remove fence
84	82	*Quercus agrifolia*	2, 1, 1 @ 1'	5	3r	0r	fair	fair	none observed	fair	C	stump sprouts; no recs
85	83	*Quercus agrifolia*	6, 2, 2 @ 3.5'	18	6/8/7/4/ 4/6/8/8	2/3/4/5/ 5/3/0/0	fair	fair	possible oak canker disease	fair	C	codominant; no recs
86	84	*Quercus agrifolia*	4.5, 4.5	20	6r	2r	fair	fair	dieback	fair	C	codominant; no recs
87	85	*Quercus agrifolia*	2.5, 2, 1.5	10	10W	0W	fair	poor	suppressed	fair	C	codominant, leaning; no recs
88	86	*Quercus agrifolia*	18 @ 3'	30	14/13/19/12 / 18/19/20/18	0r	fair	fair	dieback, sparse	good	C	none
89	87	*Quercus agrifolia*	4.5	14	5/6/6/5/ 2/—/—/—	2/2/2/2/ 2/—/—/—	fair	fair	none observed	fair	C	codominant; no recs
90	88	*Pinus sp.*	17.5	38	20r	8r	poor	poor	dieback	fair	D	leaning; no recs
91	89	*Pinus sp.*	25	38	20r	8r	poor	poor	dieback	fair	D	history of failure, leaning;no recs
92	90	*Quercus agrifolia*	2, 1+ @ 2.5'	7	6N	0N	fair	fair	none observed	fair	C	stump sprouts; no recs
93	91	*Quercus agrifolia*	14	36	11/8/5/10/ 20/8/10/11	4/4/6/8/ 0/20/20/6	fair	fair	interior dieback	fair	C	codominant; no recs
94	92	*Pinus sp.*	24	40	8r	0r	poor	poor	dieback	fair	D	history of failure, leaning; no recs
95	93	*Pinus sp.*	29	40	16r	0r	fair	fair	dieback	fair	C	multi-attachment crotch; no recs
96	94	*Quercus agrifolia*	2.5, 1.5, 1.5, 1+	11	6r	0r	good	good	none observed	fair	B	stump sprouts; no recs

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line	Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-F)	Structural comments
97	95	*Quercus agrifolia*	13, 9, 7, 6, 6, @ 3'	33	18/15/8/11/ 22/16/9/20	0/4/15/15/ 6/7/20/0	good	fair	sparse	poor	C	trunk failure with possible decay, codominants; remove deadwood
98	96	*Quercus agrifolia*	16, 14 @ 3'	38	22/20/6/12/ 28/30/15/23	0/20/28/28/ 3/14/16/0	fair	fair	minor dieback, oak leaf miner	fair	C	codominant, possible included bark; remove deadwood
99	97	*Quercus agrifolia*	16, 14, 13, 12, 10, 10 @ 5'	38	22/28/30/25 / 28/17/6/20	0/0/0/0/ 5/25/28/0	good	fair	minor dieback, oak leaf miner	poor	B	multi-attachment, included bark; remove deadwood
100	98	*Quercus agrifolia*	9 @ 3'	24	6/5/5/8/ 10/11/12/7	20/15/12/4/ 6/4/0/6	fair	fair	minor dieback	fair	C	codominant; no recs
101	99	*Quercus agrifolia*	2, 1	9	9NW	2NW	poor	fair	suppressed, dieback	good	D	none
102	100	*Quercus agrifolia*	2.5	10	4r	1r	fair	fair	none observed	good	C	none
103	101	*Quercus agrifolia*	2.5, 1	12	6E	0E	fair	fair	dieback	good	C	none
104	102	*Quercus agrifolia*	26 @ grade	33	18r	0r	fair	fair	sparse	fair	C	codominant with included bark; no recs
105	103	*Quercus agrifolia*	4.5	8	8W	0W	fair	fair	dieback, oak leaf miner	fair	C	codominant with included bark; no recs
106	104	*Quercus agrifolia*	3, 2.5	10	4r	2r	fair	fair	none observed	fair	C	codominant; no recs
107	105	*Quercus agrifolia*	10	20	8/5/9/10/ 12/18/4/6	0r	fair	poor	sparse, sunburn	fair	C	none
108	106	*Quercus agrifolia*	3 @ 1'	10	10N	6N	poor	fair	suppressed	fair	D	none
109	107	*Quercus agrifolia*	6, 2 @ 4'	22	3r	3r	fair	fair	none	fair	C	narrow attachments; no recs
110	108	*Malosma laurina*	1.5, 1	7	9NE	0NE	good	good	none	fair	B	abnormal growth habit; no recs
111	109	*Quercus agrifolia*	5.5	28	6/6/8/6/ 4/2/4/6	6r	fair	fair	dieback	good	C	none
112	110	*Quercus agrifolia*	7	30	8/12/12/8/ 4/2/2/5	0r	fair	fair	dieback	fair	C	codominant; no recs

Property: 1651 Lynn Road

FIELD INVENTORY DATA

Date: 12/17/19

line	Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-F)	Structural comments
113	111	*Quercus agrifolia*	14	25	6/6/20/22/ 22/12/6/4	12/12/10/0/ 6/6/5/6	fair	fair	minor dieback, oak leaf miner	fair	C	codominant with included bark; no recs
114	112	*Quercus agrifolia*	5.5	15	10S	4S	poor	fair	suppressed	fair	D	leaning; no recs
115	113	*Quercus agrifolia*	3, 3	6	—/—/—/8/ 8/8/—/—	—/—/—/0/ 0/0/—/—	fair	fair	oak leaf miner	fair	C	codominant; no recs
116	114	*Quercus agrifolia*	10	21	—/3/6/9/ 12/13/8/2	12/6/2/2/ 5/5/2/12	fair	fair	none observed	fair	C	codominant; no recs
117	115	*Quercus agrifolia*	6, 2	21	—/—/—/—/— 6/8/5/3	—/—/—/—/— 3/3/3/3	fair	fair	dieback	good	C	none
118	116	*Quercus agrifolia*	1.5, 1	8	2r	0r	poor	fair	suppressed	good	D	none
119	117	*Quercus agrifolia*	7	20	12S	10S	fair	fair	dieback	poor	C	bowed, codominant; no recs
120	118	*Quercus agrifolia*	4.5, 2, 1	22	6r	0r	poor	fair	suppressed	good	D	none
121	119	*Quercus agrifolia*	2.5, 1	10	4E	0E	fair	fair	none observed	good	C	none
122	120	*Quercus agrifolia*	8, 6, 6, 4, 2	23	6/6/11/10/ 12/13/13/6	3r	poor	fair	dieback, sparse	fair	C	codominant with included bark, imbalanced; no recs
123	121	*Quercus agrifolia*	2, 2, 1 @ 1.5'	8	5r	2r	fair	fair	none observed	fair	C	codominant; no recs
124	122	*Quercus agrifolia*	2, 1, 1 @ 2'	8	6N	0N	poor	fair	suppressed	fair	D	codominant; no recs
125	123	*Quercus agrifolia*	22, 17, 12, 7 @ 2'	35	18r	8/2/2/4/ 3/4/6/5	fair	fair	dieback, oak leaf miner	good	C	history of failure; no recs
126	124	*Quercus agrifolia*	10, 10, 3	24	18SE	4SE	poor	poor	dieback, sparse	fair	D	codominant, imbalanced; no recs
127	125	*Quercus agrifolia*	5.5	21	17SW	3SW	fair	fair	oak leaf miner	fair	C	leaning; no recs
128	126	*Quercus agrifolia*	5, 2+	24	13S	2S	fair	fair	none observed	fair	C	codominant; no recs
129	127	*Quercus agrifolia*	2	10	12W	6W	very poor	poor	suppressed	fair	D	leaning; no recs
130	128	*Quercus agrifolia*	8 @ 2.5'	27	7r	3r	poor	fair	suppressed	fair	D	codominant; no recs
131	129	*Quercus agrifolia*	18 @ 2'	30	22/18/12/13 / 18/18/15/18	0/4/4/4/ 4/4/1/0	fair	fair	none observed	poor	B	multi-attachment, included bark; no recs

Property: 1651 Lynn Road

FIELD INVENTORY DATA

Date: 12/17/19

line	Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-F)	Structural comments
132	130	*Quercus agrifolia*	20 @ grade	32	12r	0r	fair	fair	none observed	fair	B	codominant with included bark; no recs
133	131	*Quercus agrifolia*	8, 7, 6, 5, 4, 2+	20	11r	0r	poor	poor	dieback, oak leaf miner	fair	D	codominant with included bark; no recs
134	132	*Quercus agrifolia*	8, 5.5, 2+	25	8r	0r	fair	fair	oak leaf miner	fair	C	codominant; no recs
135	133	*Quercus agrifolia*	11, 7 @ 3'	24	8r	0r	good	fair	dieback, oak leaf miner	fair	C	codominant; no recs
136	134	*Quercus agrifolia*	9, 2, 2 @ 1.5'	13	5/6/6/8/ 12/9/8/7	0r	good	fair	sparse, oak canker disease	fair	C	abnormal growth habit; no recs
137	135	*Quercus agrifolia*	12, 10, 9, 8 @ 2'	22	11r	0r	fair	fair	interior dieback	fair	B	included bark; no recs
138	136	*Quercus agrifolia*	3	12	5NE	4NE	good	good	none observed	fair	C	codominant; no recs
139	137	*Quercus agrifolia*	2, 2+ @ 2.5'	5	3r	0r	fair	fair	dieback, chlorotic	fair	C	stump sprouts; no recs
140	138 (no tag)	*Quercus agrifolia*	2, 1, 1 @ grade	6	3r	0r	good	good	none observed	fair	C	stump sprouts; no recs

* Diameter measured at the standard height of 4.5-feet above grade, unless otherwise specified.

** Height is estimated in feet.

*** For protected trees, spread is the distance to dripline and clearance is the height of lowest foliage or trunk item, in 8 compass directions.

shaded rows are non-protected trees

Property: 1651 Lynn Road

FIELD INVENTORY DATA

Date: 12/17/19

Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-E)	Structural comments	Photo
1	*WARO*	21										
2	*WARO*	22										
3	*PIEL*	17 @ 3'										
4	*PIEL*	20.5 @ 1'										
5	*JUCH*	16, 6 @ 1'										
6	*FRUH*	8, 7, 7+										
7	*QUAG*	47.5 @ 1'										
8	*QUAG*	2, 2, 1 @ grade										
9	*QUAG*	2, 1 @ grade										
10	*QUAG*	2, 2 @ 1'										
11	*QUAG*	2, 2 @ 1'										
12	*QUAG*	2 @ grade										
13	*QUAG*	2, 2 @ grade										
14	*QUAG*	2, 2, 2+ @ grade										
15	*QUAG*	2, 2, 2 @ grade										
16	*QUAG*	2, 2+ @ grade										
17	*QUAG*	2 @ grade										
18	*QUAG*	2, 1.5, 1.5										

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FIELD INVENTORY DATA

Date: 12/17/19

Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-E)	Structural comments	Photo
19	*QUAG*	2, 2, 2+										
20	*QUAG*	4 @ 1'										
21	*QUAG*	2.5, 1, 1										
22	*QUAG*	4										
23	*QUAG*	3, 2 @ 1'										
24	*QUAG*	6, 5, 4, 4, 3+										
25	*QUAG*	2										
26	*QUAG*	4.5										
27	*QUAG*	6										
28	*QUAG*	3.5										
29	*QUAG*	5.5										
30	*QUAG*	7, 5										
31	*ACsp*	10, 9, 5										
32	*QUAG*	18.5, 18, 14.5, 12, 8, 7										
33	*QUAG*	14.5, 12, 12, 2 @ 3'										
34	*QUAG*	17 @ 2.5'										
35	*QUAG*	15										
36	*QUAG*	22.5, 15, 13										

Property: 1651 Lynn Road

FIELD INVENTORY DATA

Date: 12/17/19

Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-E)	Structural comments	Photo
37	*QUAG*	10										
38	*QUAG*	16, 9										
39	*QUAG*	4										
40	*QUAG*	9										
41	*QUAG*	10, 9.5 @ 2'										
42	*QUAG*	14, 13.5, 11, 11, 8										
43	*QUAG*	2, 1, 1, 1 @ 6"										
44	*QUAG*	11 @ 1'										
45	*QUAG*	23										
46	*QUAG*	3 @ 1'										
47	*QUAG*	16 @ 4'										
48	*QUAG*	6 @ 3'										
49	*QUAG*	25, 19 @ 2'										
50	*QUAG*	15.5, 8, 6, 3.5 @ 4'										
51	*QUAG*	17, 14.5, 13.5, 8										
52	*QUAG*	10 @ grade										
53	*QUAG*	15, 12.5 @ 6"										
54	*QUAG*	3, 2, 2, 2, 1										

Property: 1651 Lynn Road

FIELD INVENTORY DATA

Date: 12/17/19

Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-E)	Structural comments	Photo
55	*QUAG*	6 @ 4'										
56	*QUAG*	3+										
57	*QUAG*	2.5										
58	*QUAG*	22 @ 4'										
59	*QUAG*	10 @ 1'										
60	*WARO*	16										
61	*QUAG*	2.5										
62	*QUAG*	9 @ 3'										
63	*QUAG*	2 @ 3'										
64	*QUAG*	4 @ 2'										
65	*QUAG*	3.5										
66	*QUAG*	5										
67	*QUAG*	2.5 @ 6"										
68	*QUAG*	2.5 @ 2'										
69	*QUAG*	4, 3 @ 4'										
70	*QUAG*	2, 2										
71	*QUAG*	2.5										
72	*QUAG*	3.5 @ 3'										

Property: 1651 Lynn Road

FIELD INVENTORY DATA

Date: 12/17/19

Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-E)	Structural comments	Photo
73	*QUAG*	2, 2										
74	*QUAG*	2.5 @ 2.5'										
75	*QUAG*	5										
76	*QUAG*	11.5 @ 1'										
77	*QUAG*	4.5										
78	*QUAG*	4										
79	*QUAG*	3.5 @ 1'										
80	*WAROx2*	12-each										
81	*QUAG*	11, 10, 8 @ 3.5'										
82	*QUAG*	2, 1, 1 @ 1'										
83	*QUAG*	6, 2, 2 @ 3.5'										
84	*QUAG*	4.5, 4.5										
85	*QUAG*	2.5, 2, 1.5										
86	*QUAG*	18 @ 3'										
87	*QUAG*	4.5										
88	*PINUS*	17.5										
89	*PINUS*	25										
90	*QUAG*	2, 1+ @ 2.5'										

Property: 1651 Lynn Road

FIELD INVENTORY DATA

Date: 12/17/19

Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance***	Health	Vigor	Pest or Disease	Structure	Appearance (A-E)	Structural comments	Photo
91	*QUAG*	14										
92	*PINUS*	24										
93	*PINUS*	29										
94	*QUAG*	2.5, 1.5, 1.5, 1+										
95	*QUAG*	13, 9, 7, 6, 6, @ 3'										
96	*QUAG*	16, 14										
97	*QUAG*	16, 14, 13, 12, 10, 10 @ 5'										
98	*QUAG*	9 @ 3'										
99	*QUAG*	2, 1										
100	*QUAG*	2.5										
101	*QUAG*	2.5, 1										
102	*QUAG*	26 @ grade										
103	*QUAG*	4.5										
104	*QUAG*	3, 2.5										
105	*QUAG*	10										
106	*QUAG*	3 @ 1'										
107	*QUAG*	6, 2 @ 4'										
108	*QUAG*	1.5, 1										

Property: 1651 Lynn Road

FIELD INVENTORY DATA

Date: 12/17/19

Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance** *	Health	Vigor	Pest or Disease	Structure	Appearance (A-E)	Structural comments	Photo
109	*QUAG*	5.5										
110	*QUAG*	7										
111	*QUAG*	14										
112	*QUAG*	5.5										
113	*QUAG*	3, 3										
114	*QUAG*	10										
115	*QUAG*	6, 2										
116	*QUAG*	1.5, 1										
117	*QUAG*	7										
118	*QUAG*	4.5, 2, 1										
119	*QUAG*	2.5, 1										
120	*QUAG*	8, 6, 6, 4, 2										
121	*QUAG*	2, 2, 1 @ 1.5'										
122	*QUAG*	2, 1, 1 @ 2'										
123	*QUAG*	22, 17, 12, 7 @ 2'										
124	*QUAG*	10, 10, 3										
125	*QUAG*	5.5										
126	*QUAG*	5, 2+										

Property: 1651 Lynn Road

FIELD INVENTORY DATA

Date: 12/17/19

Tree #	Species	DSH (inches)*	Height**	Spread***	Clearance** *	Health	Vigor	Pest or Disease	Structure	Appearance (A-E)	Structural comments	Photo
127	*QUAG*	2										
128	*QUAG*	8 @ 2.5'										
129	*QUAG*	18 @ 2'										
130	*QUAG*	20 @ grade										
131	*QUAG*	8, 7, 6, 5, 4, 2+										
132	*QUAG*	8, 5.5, 2+										
133	*QUAG*	11, 7 @ 3'										
134	*QUAG*	9, 2, 2 @ 1.5'										
135	*QUAG*	12, 10, 9, 8 @ 2'										
136	*QUAG*	3										
137	*QUAG*	2, 2+ @ 2.5'										
138	*QUAG*	2, 1, 1 @ grade										

* Diameter measured at the standard height of 4.5-feet above grade, unless otherwise specified.
** Height is estimated in feet.
*** For impacted protected trees, spread is the distance to dripline and clearance is the height of lowest foliage or trunk item, in 8 compass directions. "r" indicates spread or clearance is uniform in all compass directio

Oak Tree Impacts

Tree #	Species	tract boundary fence	property line fence	retaining wall	south sidewalk	house footings	incidental compaction, grading, disruption	cumulative impact	Disposition
23	*Quercus agrifolia*			X			X	minor	encroach
24	*Quercus agrifolia*			X			X	very minor	encroach
26	*Quercus agrifolia*			X			X	very minor	encroach
27	*Quercus agrifolia*			X			X	very minor	encroach
28	*Quercus agrifolia*			X			X	very minor	encroach
PL32	*Quercus agrifolia*	X						very minor	encroach
33	*Quercus agrifolia*		X	X			X	very minor	encroach
34	*Quercus agrifolia*	X						very minor	encroach
35	*Quercus agrifolia*	X					X	very minor	encroach
36	*Quercus agrifolia*	X					X	very minor	encroach
37	*Quercus agrifolia*		X					very minor	encroach
38	*Quercus agrifolia*		X					very minor	encroach
39	*Quercus agrifolia*							very minor	encroach
41	*Quercus agrifolia*						X	minor	encroach
43	*Quercus agrifolia*		X					very minor	encroach
44	*Quercus agrifolia*		X	X		X	X	moderate	encroach
45	*Quercus agrifolia*	X						very minor	encroach
47	*Quercus agrifolia*						X	very minor	encroach
48	*Quercus agrifolia*		X	X			X	minor	encroach
49	*Quercus agrifolia*	X						very minor	encroach
50	*Quercus agrifolia*			X			X	very minor	encroach
52	*Quercus agrifolia*	X						very minor	encroach
53	*Quercus agrifolia*		X			X	X	minor	encroach
54	*Quercus agrifolia*	X					X	very minor	encroach
55	*Quercus agrifolia*	X						moderate	encroach
56	*Quercus agrifolia*	X						moderate	encroach
57	*Quercus agrifolia*	X					X	moderate	encroach
58	*Quercus agrifolia*	X					X	moderate	encroach
62	*Quercus agrifolia*	X					X	minor	encroach
OP1	*Quercus agrifolia*	X						very minor	encroach

OP2	*Quercus agrifolia*	X						very minor	encroach
63	*Quercus agrifolia*	X					X	minor	encroach
64	*Quercus agrifolia*	X					X	minor	encroach
65	*Quercus agrifolia*	X						very minor	encroach
66	*Quercus agrifolia*	X						very minor	encroach
69	*Quercus agrifolia*	X						very minor	encroach
76	*Quercus agrifolia*				X			very minor	encroach
77	*Quercus agrifolia*				X			very minor	encroach
78	*Quercus agrifolia*				X			very minor	encroach
81	*Quercus agrifolia*							very minor	encroach
82	*Quercus agrifolia*						X	very minor	encroach
83	*Quercus agrifolia*						X	very minor	encroach
84	*Quercus agrifolia*						X	very minor	encroach
85	*Quercus agrifolia*						X	very minor	encroach
87	*Quercus agrifolia*						X	very minor	encroach
90	*Quercus agrifolia*						X	very minor	encroach
91	*Quercus agrifolia*						X	very minor	encroach
94	*Quercus agrifolia*						X	very minor	encroach
95	*Quercus agrifolia*						X	very minor	encroach
96	*Quercus agrifolia*						X	very minor	encroach
97	*Quercus agrifolia*						X	very minor	encroach
98	*Quercus agrifolia*				X			minor	encroach
99	*Quercus agrifolia*				X			very minor	encroach
100	*Quercus agrifolia*				X			very minor	encroach
101	*Quercus agrifolia*				X			very minor	encroach
102	*Quercus agrifolia*						X	very minor	encroach
103	*Quercus agrifolia*						X	very minor	encroach
104	*Quercus agrifolia*						X	very minor	encroach
105	*Quercus agrifolia*				X			minor	encroach
106	*Quercus agrifolia*				X			very minor	encroach
107	*Quercus agrifolia*				X			very minor	encroach
109	*Quercus agrifolia*						X	very minor	encroach
111	*Quercus agrifolia*				X			moderate	encroach

112	*Quercus agrifolia*				X		X	minor	encroach
113	*Quercus agrifolia*				X			very minor	encroach
114	*Quercus agrifolia*				X			minor	encroach
115	*Quercus agrifolia*				X			very minor	encroach
116	*Quercus agrifolia*						X	very minor	encroach
117	*Quercus agrifolia*						X	very minor	encroach
118	*Quercus agrifolia*				X			very minor	encroach
119	*Quercus agrifolia*				X			very minor	encroach
120	*Quercus agrifolia*				X			moderate	encroach
124	*Quercus agrifolia*				X			moderate	encroach
125	*Quercus agrifolia*				X			moderate	encroach
126	*Quercus agrifolia*				X			moderate	encroach
127	*Quercus agrifolia*						X	very minor	encroach
129	*Quercus agrifolia*				X			moderate	encroach
131	*Quercus agrifolia*				X			very minor	encroach
132	*Quercus agrifolia*				X		X	very minor	encroach
133	*Quercus agrifolia*				X		X	very minor	encroach
134	*Quercus agrifolia*				X			very minor	encroach
135	*Quercus agrifolia*				X			very minor	encroach
7	*Quercus agrifolia*								remove
8	*Quercus agrifolia*								remove
9	*Quercus agrifolia*								remove
10	*Quercus agrifolia*								remove
11	*Quercus agrifolia*								remove
12	*Quercus agrifolia*								remove
13	*Quercus agrifolia*								remove
14	*Quercus agrifolia*								remove
15	*Quercus agrifolia*								remove
16	*Quercus agrifolia*								remove
17	*Quercus agrifolia*								remove
18	*Quercus agrifolia*								remove
19	*Quercus agrifolia*								remove
20	*Quercus agrifolia*								remove

21	*Quercus agrifolia*								remove
22	*Quercus agrifolia*								remove
61	*Quercus agrifolia*								remove
136	*Quercus agrifolia*								remove
137	*Quercus agrifolia*								remove
138	*Quercus agrifolia*								remove
59	*Quercus agrifolia*								remove, utilities
25	*Quercus agrifolia*							—	save
29	*Quercus agrifolia*							—	save
30	*Quercus agrifolia*							—	save
40	*Quercus agrifolia*							—	save
42	*Quercus agrifolia*							—	save
46	*Quercus agrifolia*							—	save
51	*Quercus agrifolia*							—	save
67	*Quercus agrifolia*							—	save
68	*Quercus agrifolia*							—	save
70	*Quercus agrifolia*						X	—	save
71	*Quercus agrifolia*							—	save
72	*Quercus agrifolia*							—	save
73	*Quercus agrifolia*							—	save
74	*Quercus agrifolia*							—	save
75	*Quercus agrifolia*							—	save
79	*Quercus agrifolia*							—	save
86	*Quercus agrifolia*							—	save
110	*Quercus agrifolia*							—	save
121	*Quercus agrifolia*							—	save
122	*Quercus agrifolia*							—	save
123	*Quercus agrifolia*				X			—	save
128	*Quercus agrifolia*							—	save
130	*Quercus agrifolia*							—	save

Jan C. Scow Consulting Arborists, LLC

Disease and Pest Diagnosis, Hazard Evaluation, Restorative Pruning Advice, Value Assessment

401 N. Ventura St.
Ojai, CA 93023
(805) 272-8095

7/19/24

Jeb Adams (applicant)
"1651 Lynn Rd. LLC"
6481 Winona Ct.
Oak Park, CA 91377

***SUBJECT**:* Addendum [revised]: Oak Tree Report at 1651 Lynn Road, Thousand Oaks

REFERENCES:

1) The City of Thousand Oaks Municipal Code, Article 42. Oak Tree Preservation and Protection, no date
2) Resolution No. 2010-014 – Oak and Landmark Tree Protection and Preservation Guidelines, dated 2/23/10
3) [REVISED] Oak Tree Report, 9/13/23, Scow
4) "Oak Tree Location Map", 9/13/23, Scow
5) "Oak Tree Location Map", 6/24/24, Pacific Coast Civil, Inc.

BACKGROUND

The above referenced Report (ref 3) and Map (ref 4) are complete and accurate except for a few minor changes. This Addendum updates those documents in three locations, based on the new site plan I have been provided (ref 5). These changes are summarized below and there is a map cutout showing the protective fencing changes required to reference 4.

ADDENDUM

Changes to lots 15 and 16: The decision has been made to remove two oaks north of these homes. Trees to be removed as a result are oaks 44 and 48. These removals allow the wall north of the homes to extend in a relatively straight line from east to west behind them.

> Tree 44 is an 11" diameter coast live oak with fair health and structure at the time of our field survey.
>
> Tree 48 is a 6" diameter coast live oak with good health and structure at the time of our field survey.

The protective fencing will be modified as shown in lavender on the northern edge of the attached map cutout.

Changes in the NE corner of the property: Several changes were made in the area where trees 54-59 are located, including rerouting of the storm drain and the addition of a large bioswale. While this does not remove any additional trees (tree 59 was already to

be removed) it does change the protective fencing as shown in the NE corner in lavender.

Changes south of lot 6: A vegetated swale is now shown in the area south of lot 6. This is a designed swale and will impact soils in that location. While it will not significantly alter impacts to trees in the area, it will require modification of the protective fencing location as shown in the attached map cutout in lavender.

IMPACTS

Tree removals: [pg. 4 ref 3: Change this paragraph to read:]
"The proposed project will cause the removal of 23 protected oak trees to accommodate construction. Oak tree removals are indicated on the accompanying Oak Tree Impacts table and circled in red on the Oak Tree Location Map."

Tree encroachments[1]: [pg. 4 ref 3: Change this paragraph to read:]
"80 of the remaining oak trees will be subjected to some form of encroachment. Impacts from these activities can be kept to a low level if mitigation measures are carefully adhered to. Impacts are addressed in the accompanying Oak Tree Impact table and range in intensity from very minor to, in a few cases, moderate (10 instances).

MITIGATION

Tree replacement mitigation: [pg. 7 ref 3: Change this paragraph to read:]
"The following replacement plantings are required to mitigate for the 23 oak trees being removed by this project:

46- 24" boxed coast live oak (*Quercus agrifolia*)[2]
23- 36" boxed coast live oak (*Quercus agrifolia*)

Planting locations will be provided by the project Landscape Architect."

Oak Tree Impacts Table: [Excel spreadsheet sent as an attachment to ref 3 Change as follows:]

Tree 44: Change impact to "Remove"
Tree 48: Change impact to "Remove"

As stated previously, impacts to remaining oaks will not change appreciably.

[1] Based on the new plans that I reviewed on 7/3/24, impacts to the oak trees are hereby confirmed to remain at 80 as stated above. None of the design changes have materially affected the impacts to the remaining trees.
[2] Note that species recommended are my opinion of what should be planted. Obviously, the City can choose to plant non-native oaks if the wish.

Please let me know if I can be of any further assistance or if you have any additional questions. My goal is to satisfy my clients and help them to better care for their trees in the most effective way possible. I look forward to working with you toward that goal!

Sincerely,

Jan C. Scow
ASCA Registered Consulting Arborist #382
ISA Board Certified Master Arborist #WE-1972B

Attached: Map cutout showing protective fencing changes and 2 additional removals.

Fencing changes and removal of trees 44 and 48



Fencing changes are shown in lavender.
Tree removals are shown as red X's (note that tree 59 is not a new removal).

APPENDIX E

Cultural Resources Phase I Assessment

September 30, 2022

6481 Winona Court
Oak Park, California 91377

Attn: Mr. Jeb Adams

Subj: Cultural Resources Phase I Assessment for 1651 Lynn Road, Thousand Oaks, Ventura County, California (*Envicom Project # 2022-080-01*)

Dear Mr. Adams:

Envicom Corporation (Envicom) has completed a Phase I Cultural Resource Assessment for your 1651 Lynn Road, Thousand Oaks, Ventura County, California project (project) (**Figure 1**). The project is located at 1651 Lynn Road, Thousand Oaks, California. The project will subdivide the existing parcel into multiple separate residential lots. (**Figure 2**). The general location of the project is as follows:

United States Geological Survey 7.5' Quadrangles: Newbury Park
Township: 2 North Range: 20 West
Latitude: 34°10'39.17"North Longitude: 118°54'56.00"West
County: Ventura

The Phase I Cultural Resource Assessment included a cultural resource record search conducted by the South Central Coastal Information Center (SCCIC) and a Native American cultural resource record search conducted by the California Native American Heritage Commission (NAHC). Both record searches examined the project development site plus a 0.25-mile area ("study area") around the project development site (see Figure 1). The purpose of a cultural resource record search is to identify any known cultural resources previously recorded within or immediately adjacent to the proposed project development site, to provide cultural resource context for the project from the examination of the study area, and to assess the overall cultural resource sensitivity of the project region. A cultural resource is often defined as any building, structure, object, or archaeological site older than 50-years in age and can include historic or prehistoric locations of human habitation.

Additional databases examined during the Phase I Assessment included historic regional maps, historic United States Geological Survey (USGS) maps, and historic Google Earth images. The University of California Santa Barbara (UCSB) Library Historic Aerial Photograph Database was also examined. Dibblee geological maps were also examined to determine the paleontological sensitivity of the project property. Since the cultural resource assessment was negative for cultural resources within or adjacent to the project property, a letter report format will be used for the Phase I cultural resource report (this document).

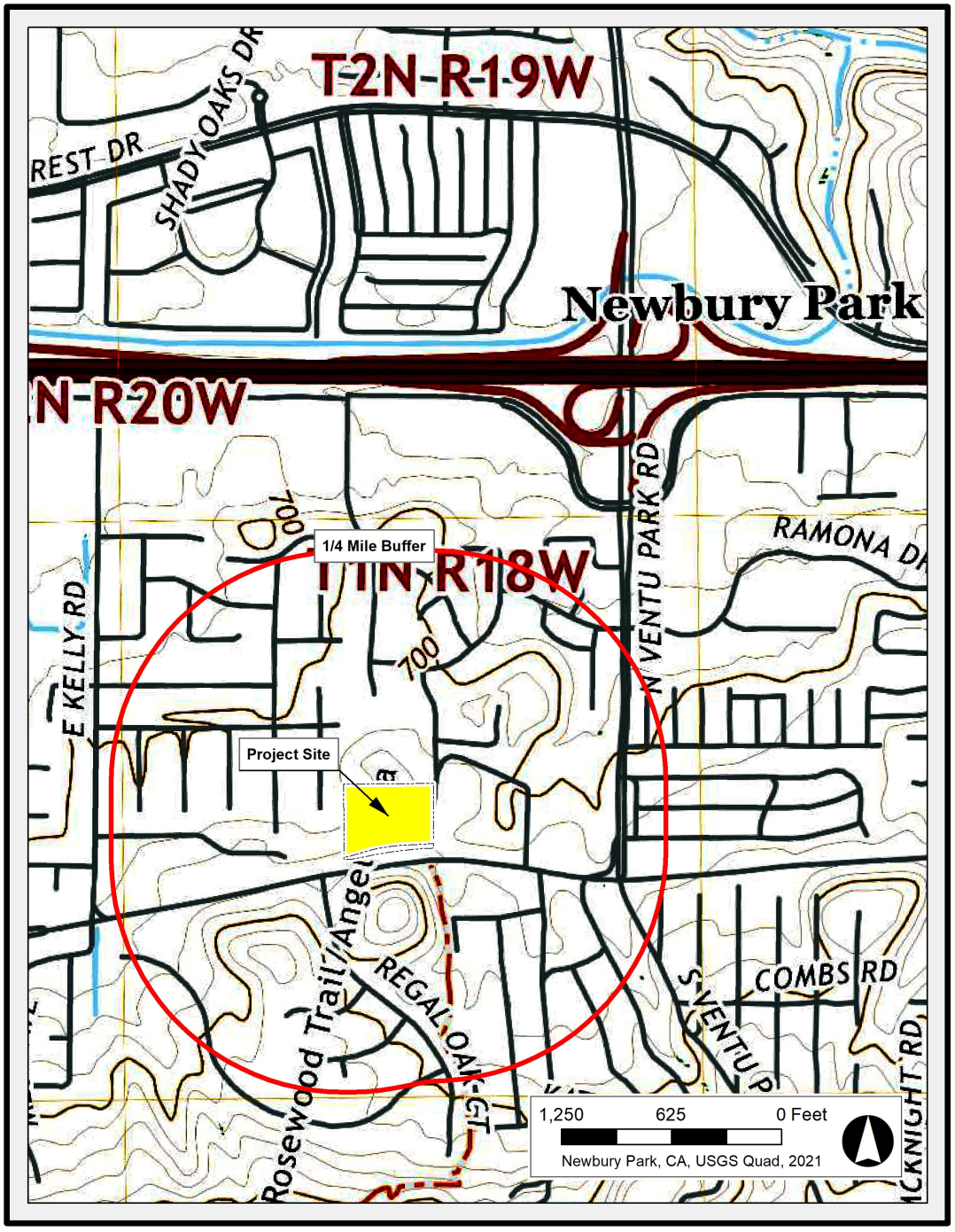


Figure 1: project location in Los Angeles County, California, with the 0.25-mile study area shown (2021 Thousand Oaks Quadrangle Topographic Map).



Figure 2: The project development site, showing the current site conditions (2021 Google Earth Image).

RECORD SEARCH RESULTS

SCCIC and NAHC Record Searches

On June 7, 2022, Envicom submitted a request to the SCCIC to conduct a search of their database for cultural resources located within the project development site, and within the surrounding project study area (defined as the project development site, plus a 0.25-mile buffer area) for regional cultural resource context (see Figure 1). The record search included a request for all complete site records for cultural resources within or adjacent to the project development site, as well as copies of all cultural resource technical reports that intersected with all or part of the project development site. Envicom also contacted the NAHC on September June 7, 2022, with a similar record search request.

Envicom received the cultural resource records search results from the SCCIC on September 28, 2022. The SCCIC record search found no previously identified cultural resources located within the project development site, but identified two historical cultural resources within the 0.25-mile surrounding study area. The first historic resource was recorded by W&S Consultants in 2002 and

is referred to as the Haigh Pioneer Cemetery. The second historical resource was recorded by James Gilmore in 1975 and is the Grand Union Hotel, Stagecoach Inn, which is currently operated as the Stagecoach Inn Museum and historic site. This built environment structure is listed on the National Register of Historic Places and is also listed as California Historical Landmark Number 659. The Museum site and surrounding property is managed by the Conejo Recreation and Park Department and includes several additional historical buildings and features that were not original to the location. Due to the distance from the subject project, neither of these historical resources will be impacted and further assessment is not recommended.

The SCCIC further identified that no cultural resource reports involved all or part of the project development site. The SCCIC did, however, identify eight (8) cultural resource reports that involved part of the surrounding project 0.25-mile study area. Review of these reports did not identify any specific cultural resources of concern for the proposed project. All relevant cultural resource reports provided by the SCCIC are summarized in **Appendix A** of this report.

The results from the 2022 NAHC record search were received on July 8, 2022, with negative findings. If the Lead/Permitting Agency for the project is required to perform an Assembly Bill (AB)-52 process, the NAHC letter should be made a part of the Native American consultation record. Envicom did not contact Native American groups on the NAHC list, as communications with Tribal Group representatives is the responsibility of the Lead/Permitting Agency, if required for this project. Examination of the State of California SCCIC database of previously recorded cultural resources and the NAHC Sacred Lands database were both ***negative for cultural resources within the project property.*** Any findings from the SCCIC as to the physical location of cultural resources, except for public-knowledge built environment resources, is considered confidential by state law and are, therefore, not included in this report. Copies of the request letter to the SCCIC, NAHC, and NHM are included in **Appendix B** of this report, as are the response letters from the NAHC and NHM. The Principal Author's resume is provided in **Appendix C**.

Historical Map Database Search

Examination of historic maps included thirteen (13) historic USGS maps, dating between 1900 and 1979. The 1900 Triunfo Pass USGS map shows no improvement within the project development site, but does show limited development within the local project region (**Figure 3**). The 1903 Camulos USGS map and the 1921 Triunfo Pass map both show the same local conditions. The oldest aerial photograph in the UCSB Library historic aerial photography database is from 1947 (**Figure 4**). This photo shows the project area undeveloped with no structures visible immediately around the project, though some residential structures appear toward the southeast.

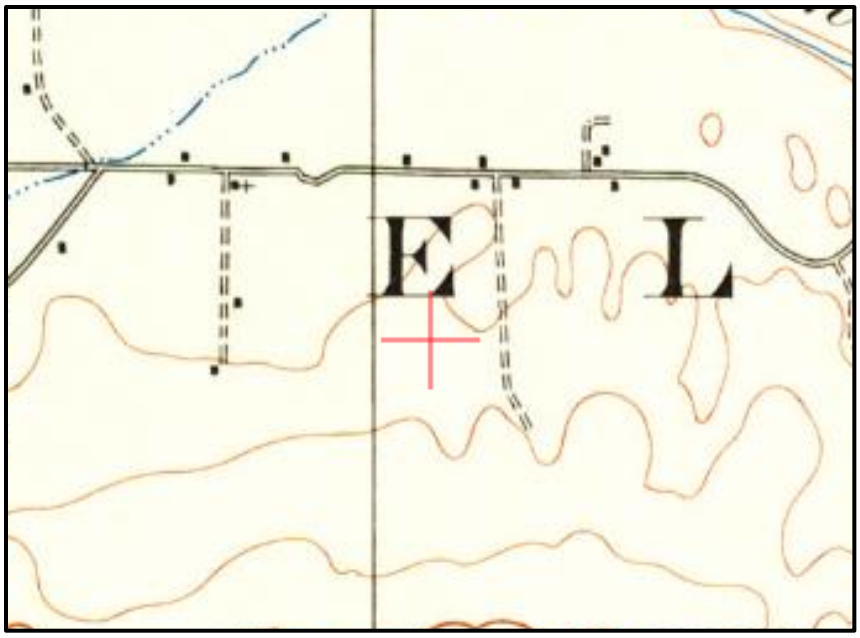


Figure 3: The 1900 Triunfo Pass USGS Map (red cross marks the project location).



Figure 4: The project area in 1947 image, showing the project development site (center-right) (UCSB Historic Aerial Image Database).

The 1943 Triunfo Pass USGS map shows the project property as still undeveloped, however, residential development was beginning to take place to the southeast of the property, which oriented on the newly paved Ventu Park Road (**Figure 5**). The 1950 Newbury Park USGS Map and 1959 Los Angeles USGS Maps show the same conditions, with limited additional development in the surrounding region. From 1900 to the 1950s, the project property and surrounding area was, therefore, undeveloped and used for ranching or limited agriculture and orchards. It is highly unlikely that previously unrecorded older historical cultural resources will be encountered during project grading.

The current residential structure is not shown on the 1967 Newbury Park USGS map, and real estate records show that it was constructed in 1977. The existing residence is, therefore, not yet a historical built environment cultural resource and does not need to be assessed as part of this study. Examination of historic Google Earth satellite images shows the local area and developed project site from 1985 to current, with constant in-filling of the region with residential and commercial development, but no additional development of the subject property except for a new garage that was added in 2004. Examination of historic map and aerial photograph databases was, therefore, ***negative for the potential of older historic resources being found within the project property***.

Field Survey Results

Envicom staff visited the project development site on June 7, 2022. The project site is a developed parcel on the south end, with a single-family residence. The rest of the property has not been developed but has been graded to keep the vegetation down (**Figure 6, Figure 7**, **Figure 8**, **Figure 9**, and **Figure 10**). Ground visibility was excellent, with most of the landscape surface being free of vegetation and consisting of bare earth except for the paved driveway. No older historical or prehistoric artifacts or features were observed on the surface. The findings were, therefore, ***negative for cultural resources within the project property***.

Paleontological Resource Assessment

Envicom examined the 1993 Dibblee geological map for the project property, which is based on the 1986 Newbury Park USGS quadrangle map (**Figure 11**). The property is dominated by the Conejo Volcanic Formation (Tcvb), which is igneous and non-fossil bearing. The project property is surrounded by fossil-bearing Miocene sandstone formations (Tvcg) and Pleistocene alluvial material (Qoa), however, the intrusive Conejo Volcanic formation dominates the site subsurface making the likelihood of encountering the fossil-bearing formations unlikely, especially given the shallow nature of the proposed residential construction. Envicom, therefore, does not recommend further paleontological studies for the project, nor is paleontological monitoring recommended.

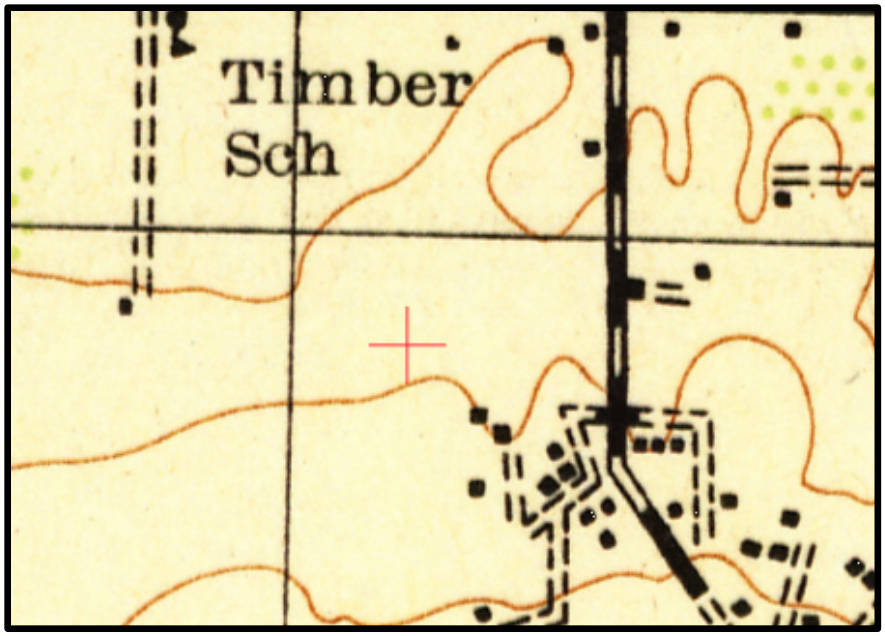


Figure 5: The 1943 Triunfo Pass USGS Map, again showing no development on the project property (red cross marks the general project location).



Figure 6: Overview of the project property facing west.



Figure 7: Overview of the original 1977 single-family residence.



Figure 8: Overview of the project property facing west.



Figure 9: Overview of the project property facing north.



Figure 10: Overview of the project property facing northeast.

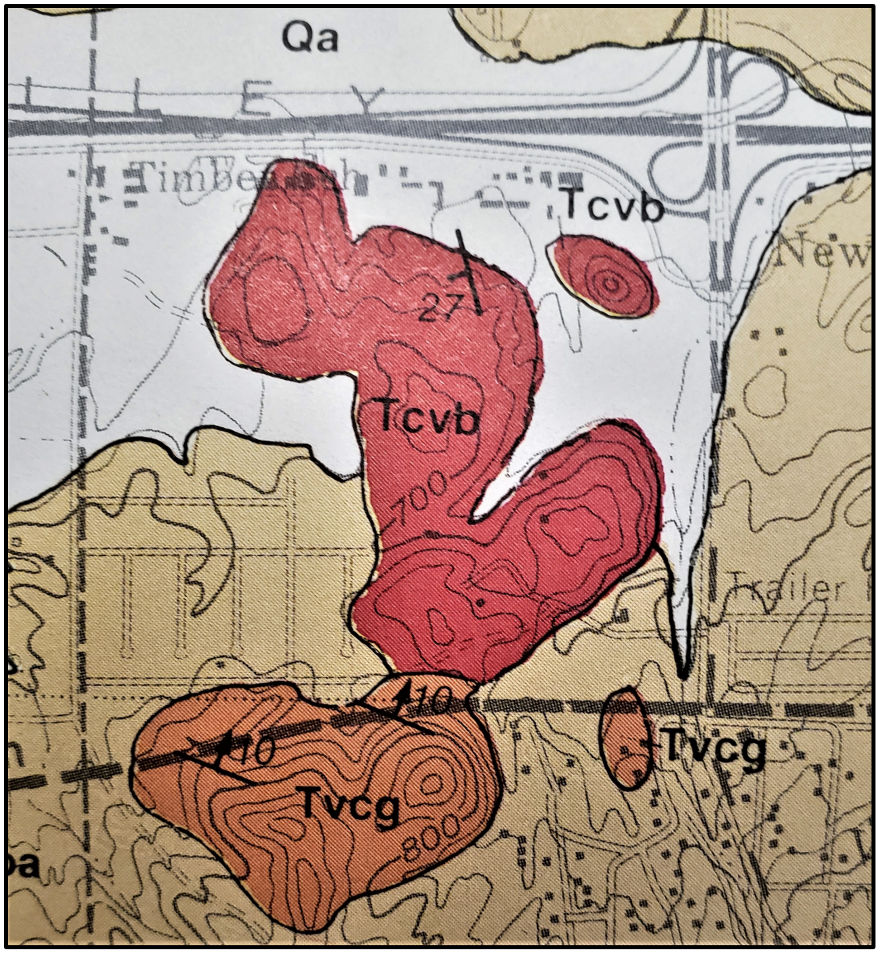


Figure 11: The major rock formations of the project area; the project property is located at the bottom of the red Conejo Volcanics Formation (Tcvb).

RECOMMENDATIONS

The results of the SCCIC and NAHC database record searches were negative for prehistoric or historical cultural resources within or adjacent to the project development site. The historical maps and aerial photograph databases were also negative for older historical cultural resources being located within the project development site. The project property and surrounding region also had limited historical development up through the 1950s. The project property, therefore, should be considered to be within an area with low sensitivity for older historical resources. Additionally, the systematic pedestrian survey was negative for cultural resources.

Envicom does not recommend further assessment of the project for cultural resources, nor does Envicom recommend archaeological or Native American monitoring during construction activities. Envicom does, however, recommends contingency measures for situations where cultural or fossil resources are unexpectedly encountering during grading:

Recommendation 1: Archaeological or Fossil Resource Discovery Protocol

If previously unknown and potentially significant intact archaeological or fossil deposits are encountered within an undisturbed context during grading, then a cultural/fossil resource "discovery" protocol will be followed. If older historical or prehistoric features, artifact concentrations, or significant fossils are encountered during project grading within native soils or original context, then all work in that area shall be halted or diverted away from the discovery to a distance of 30-feet until a qualified senior archaeologist/paleontologist can evaluate the nature and/or significance of the find(s). If a senior archaeologist/paleontologist confirms that the discovery is potentially significant, then the Lead/Permitting Agency will be contacted and informed of the discovery.

Construction will not resume in the locality of the discovery until consultation between the senior archaeologist/paleontologist, the owner's project manager, the Lead/Permitting Agency, and any other concerned parties (such as additional regulatory agencies or Native American Tribal Groups), takes place and reaches a conclusion approved by the Lead/Permitting Agency. If a significant cultural or fossil resource is discovered during earth-moving, complete avoidance of the find is preferred. However, if the discovery cannot be avoided, further survey work, evaluation tasks, or data recovery of the significant resource may be required by the Lead/Permitting Agency. The Lead/Permitting Agency may also require site monitoring, based on the discovery. All individual reports will be submitted to the SCCIC or to the Natural History Museum of Los Angeles County at the conclusion of the project.

Recommendation 2: Inadvertent Discovery of Human Remains

The inadvertent discovery of human remains is always a possibility during ground disturbances; State of California Health and Safety Code Section 7050.5 addresses these findings. This code section states that in the event human remains are uncovered, no further disturbance shall occur until the County Coroner has made a determination as to the origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98. The Coroner must be notified of the find immediately, together with the City and the property owner. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials and an appropriate re-internment site. The Lead/Permitting Agency and a qualified archaeologist shall also establish additional appropriate mitigation measures for further site construction.

Sincerely,

Wayne R

Dr. Wayne Bischoff, Principal
(with Ms. Samantha Renta)

ATTACHMENTS:

Appendix A: List of previously completed cultural resource reports in the project property and surrounding study area.
Appendix B: SCCIC and NAHC request letters, and the NAHC Response Letter
Appendix C: Resume of Dr. Wayne Bischoff (Principal).

APPENDIX A
List of Previously Completed Cultural Resource Reports in the Project Property and Surrounding Study Area

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-00041		1976	Kaufman, Susan Hector	Evaluation of the Archaeological Resources and Potential Impact of Proposed Industrial Tract 2488, Rpd-75-141, Ventura County	University of California, Los Angeles Archaeological Survey	56-000065, 56-000261
VN-00386	Paleo -	1981	Ancient Enterprises, Inc.	Archaeological and Paleontological Resource Assessment of Tract 3534, City of Thousand Oaks, Ventura County, California	Ancient Enterprises, Inc.	
VN-00487		1986	Underwood, Jackson and Dennis Gallegos	Archaeological Survey of Oakview Gardens, Newbury Park, California	Westec Services, Inc.	
VN-01996		2000	Whitley, David S.	Phase I Archaeological Survey of the 125 Culver Road Study Area (ap#673-0-020-430), Ventura County, California	W&S Consultants	
VN-02592		1986	Anonymous	Addendum Report to the Archaeological Assessment of the Ventu Park Apartments, Project Property, Ventura County, Thousand Oaks, California	W and S Consultants	
VN-02633		2003	Whitley, David S.	Phase I Archaeological Survey of a 15 Acre Parcel on Ventu Park Road, Thousand Oaks, Ventura County, California	W & S Consultants	
VN-02636		2002	Whitley, David S.	Limited Archaeological Testing at the Haigh Family (pioneer) Cemetery, Ventu Park Road, Thousand Oaks, Ventura County, California	W & S Consultants	56-001776

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-02843		2005	Amaglio, Alessandro	Conejo Fire Mitigation, Conejo Recreation and Park District, FEAM-1498-DR-CA, HMGP #1498-98-36	URS	56-000038, 56-000039, 56-000040, 56-000041, 56-000042, 56-000043, 56-000046, 56-000047, 56-000065, 56-000078, 56-000079, 56-000080, 56-000081, 56-000120, 56-000180, 56-000181, 56-000186, 56-000197, 56-000198, 56-000199, 56-000257, 56-000258, 56-000259, 56-000260, 56-000261, 56-000262, 56-000267, 56-000268, 56-000311, 56-000312, 56-000313, 56-000315, 56-000322, 56-000323, 56-000325, 56-000326, 56-000405, 56-000441, 56-000442, 56-000443, 56-000457, 56-000483, 56-000484, 56-000485, 56-000491, 56-000504, 56-000544, 56-000556, 56-000560, 56-000607, 56-000608, 56-000609, 56-000610, 56-000611, 56-000632, 56-000640, 56-000653, 56-000654, 56-000752, 56-000787, 56-000792, 56-000793, 56-000794, 56-000795, 56-000804, 56-000805, 56-000806, 56-000807, 56-000808, 56-000809, 56-000810, 56-000811, 56-000837, 56-000897, 56-000983, 56-001031, 56-001107, 56-001240, 56-001644, 56-100141

APPENDIX B
SCCIC and NAHC Request Letters, and the NAHC Response Letter

CHRIS Data Request Form

ACCESS AND USE AGREEMENT NO.: _____ **IC FILE NO.:** _____

To: Information Center

Print Name: Samantha Renta Date: 6/6/22

Affiliation: Envicom Corporation

Address: 4165 E. Thousand Oaks Blvd

City: Westlake Village State: CA Zip: 91362

Phone: 818-879-4700 Fax: _____ Email: srenta@envicomcorporation.com

Billing Address (if different than above): _____

Billing Email: wbischoff@envicomcorporation.com Billing Phone: 818-879-4700

Project Name / Reference: 1651 Lynn Road, Thousand Oaks, Ventura County, Ca, #2022-080-01

Project Street Address: _____

County or Counties: Ventura

Township/Range/UTMs: T 2N, R 20W, 34.10'39.17"N, 118.54'56.00"W

USGS 7.5' Quad(s): Newbury Park

PRIORITY RESPONSE (Additional Fee): yes ☐ / no ☐

TOTAL FEE NOT TO EXCEED: $_____
(If blank, the Information Center will contact you if the fee is expected to exceed $1,000.00)

Special Instructions:

Information Center Use Only

Date of CHRIS Data Provided for this Request: _____

Confidential Data Included in Response: yes ☐ / no ☐

Notes: _____

CHRIS Data Request Form

Mark the request form as needed. Attach a PDF of your project area (with the radius if applicable) mapped on a 7.5' USGS topographic quadrangle to scale 1:24000 ratio 1:1 neither enlarged nor reduced and include a shapefile of your project area, if available. Shapefiles are the current CHRIS standard for submitting digital spatial data for your project area or radius. **Check with the appropriate IC for current availability of digital data products.**

- Documents will be provided in PDF format. Paper copies will only be provided if PDFs are not available at the time of the request or under specially arranged circumstances.
- Location information will be provided as a digital map product (Custom Maps or GIS data) unless the area has not yet been digitized. In such circumstances, the IC may provide hand drawn maps.
- In addition to the $150/hr. staff time fee, client will be charged the Custom Map fee when GIS is required to complete the request [e.g., a map printout or map image/PDF is requested and no GIS Data is requested, or an electronic product is requested (derived from GIS data) but no mapping is requested].

For product fees, see the CHRIS IC Fee Structure on the OHP website.

1. Map Format Choice:

Select One: Custom GIS Maps ☐ GIS Data ☑ Custom GIS Maps **and** GIS Data ☐ No Maps ☐

Any selection below left unmarked will be considered a "no. "

Location Information:

	Within project area	Within 0.25 mi. radius
ARCHAEOLOGICAL Resource Locations[1]	yes ☑ / no ☐	yes ☑ / no ☐
NON-ARCHAEOLOGICAL Resource Locations	yes ☑ / no ☐	yes ☑ / no ☐
Report Locations[1]	yes ☑ / no ☐	yes ☑ / no ☐
"Other" Report Locations[2]	yes ☐ / no ☐	yes ☐ / no ☐

3. Database Information:
(contact the IC for product examples, or visit the SSJVIC website for examples)

	Within project area	Within 0.25 mi. radius
ARCHAEOLOGICAL Resource Database[1]		
List (PDF format)	yes ☑ / no ☐	yes ☑ / no ☐
Detail (PDF format)	yes ☑ / no ☐	yes ☑ / no ☐
Excel Spreadsheet	yes ☐ / no ☑	yes ☐ / no ☑
NON-ARCHAEOLOGICAL Resource Database		
List (PDF format)	yes ☑ / no ☐	yes ☑ / no ☐
Detail (PDF format)	yes ☑ / no ☐	yes ☑ / no ☐
Excel Spreadsheet	yes ☐ / no ☑	yes ☐ / no ☑
Report Database[1]		
List (PDF format)	yes ☑ / no ☐	yes ☑ / no ☐
Detail (PDF format)	yes ☑ / no ☐	yes ☑ / no ☐
Excel Spreadsheet	yes ☐ / no ☑	yes ☐ / no ☑
Include "Other" Reports [2]	yes ☐ / no ☑	yes ☐ / no ☑

4. Document PDFs (paper copy only upon request)**:**

	Within project area	Within 0.25 mi. radius
ARCHAEOLOGICAL Resource Records[1]	yes ☑ / no ☐	yes ☑ / no ☐
NON-ARCHAEOLOGICAL Resource Records	yes ☑ / no ☐	yes ☐ / no ☑
Reports[1]	yes ☑ / no ☐	yes ☐ / no ☑
"Other" Reports[2]	yes ☑ / no ☐	yes ☐ / no ☑

June 6, 2022

Native American Heritage Commission
1550 Harbor Boulevard, Room 100
West Sacramento, CA 95691

Subj: Cultural Resources Phase I Assessment for 1651 Lynn Road, Thousand Oaks, Ventura County, California *(Envicom Project #2022-080-01)*

To Whom It May Concern,

Envicom Corporation (Envicom) is requesting a record review of the Native American Heritage Commission (NAHC) records of cultural resources for the Project site, plus a **0.25-mile study area**. We also request a list of Tribal Group representatives for the area in the event we need to contact their offices. The Project site is located at:

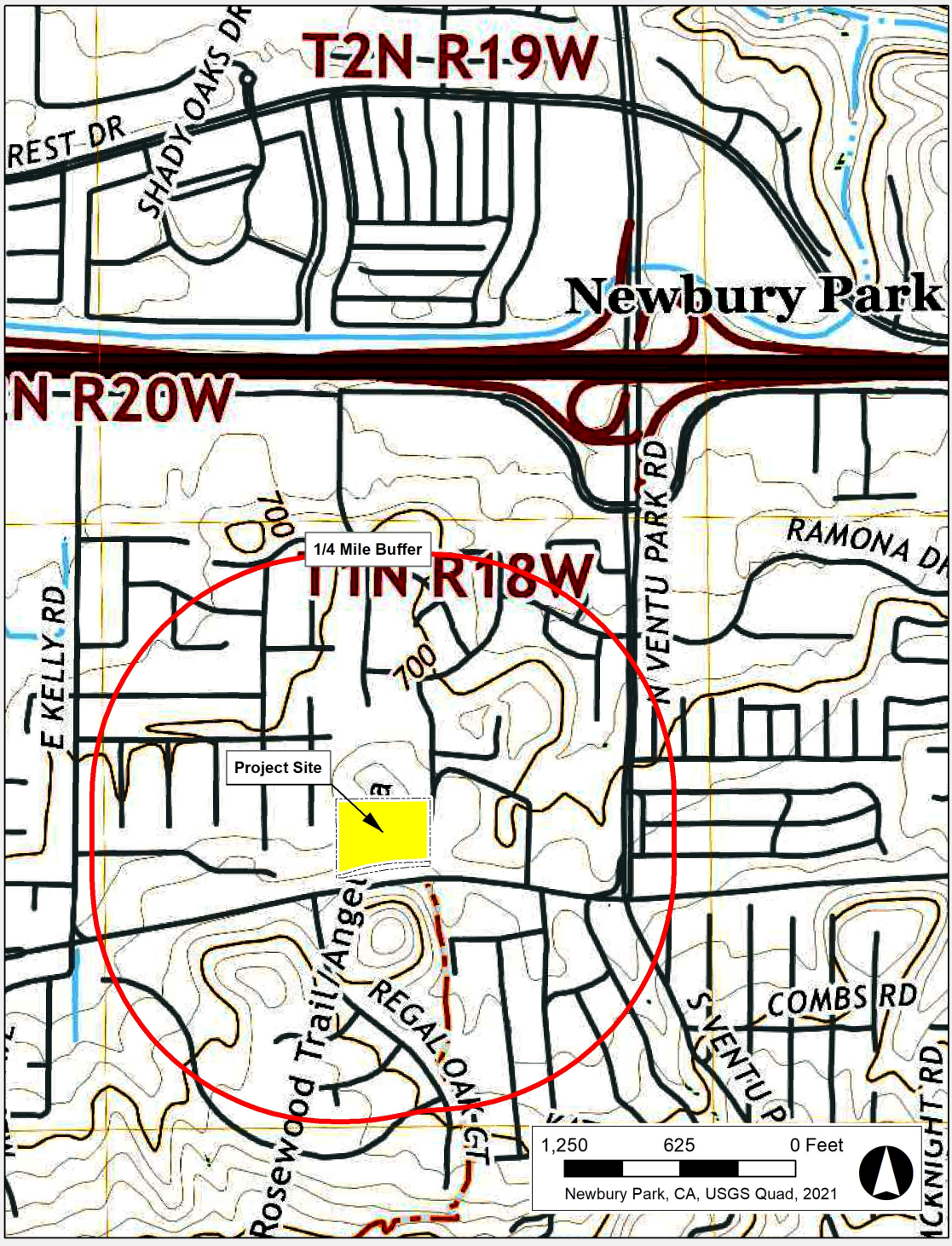
United States Geological Survey 7.5' Quadrangles: Newbury Park
Township: 2 North Range: 20 West
Latitude: 34°10'39.17"North Longitude: 118°54'56.00"West
County: Ventura

Envicom appreciates the NAHC's help with this request. For correspondence or questions regarding this Project, please contact Wayne Bischoff at 818-879-4700 (wbischoff@envicomcorporation.com).

Sincerely,

Wayne Bischoff
Director of Cultural Resources

Attachment:
Project vicinity map on 1:24,000 topographic map


T2N-R19W
SHADY OAKS DR
REST DR
Newbury Park
N-R20W
700
1/4 Mile Buffer
T1N-R18W
RAMONA DR
N VENTU PARK RD
E KELLY RD
700
Project Site
Rosewood Trail/Angel
REGAL OAK CT
S VENTU P
COMBS RD
CKNIGHT RD
1,250
625
0 Feet
Newbury Park, CA, USGS Quad, 2021

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
Russell Attebery
Karuk

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

July 8, 2022

Dr. Wayne Bischoff
Envicom Corporation

Via Email to: wbischoff@envicomcorporation.com

Re: 1651 Lynn Road (Envicom #2202-080-01) Project, Ventura County

Dear Dr. Bischoff:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

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. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

CHRIS Data Request Form

5. Eligibility Listings and Documentation:

	Within project area	Within 0.25 mi. radius
OHP Built Environment Resources Directory[3]:		
Directory listing only (Excel format)	yes ☐ / no ☑	yes ☑ / no ☐
Associated documentation[4]	yes ☐ / no ☑	yes ☐ / no ☑
OHP Archaeological Resources Directory[1,5]:		
Directory listing only (Excel format)	yes ☑ / no ☐	yes ☐ / no ☑
Associated documentation[4]	yes ☑ / no ☐	yes ☐ / no ☑
***California Inventory of Historic Resources* (1976):**		
Directory listing only (PDF format)	yes ☑ / no ☐	yes ☑ / no ☐
Associated documentation[4]	yes ☑ / no ☐	yes ☑ / no ☐

6. Additional Information:

The following sources of information may be available through the Information Center. However, several of these sources are now available on the OHP website and can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through these sources. Indicate below if the Information Center should review and provide documentation (if available) of any of the following sources as part of this request.

Caltrans Bridge Survey	yes ☑ / no ☐
Ethnographic Information	yes ☑ / no ☐
Historical Literature	yes ☑ / no ☐
Historical Maps	yes ☐ / no ☑
Local Inventories	yes ☑ / no ☐
GLO and/or Rancho Plat Maps	yes ☑ / no ☐
Shipwreck Inventory	yes ☐ / no ☑
Soil Survey Maps	yes ☐ / no ☑

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[1] In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User or Conditional User under an active CHRIS Access and Use Agreement.

[2] "Other" Reports GIS layer consists of report study areas for which the report content is almost entirely non-fieldwork related (e.g., local/regional history, or overview) and/or for which the presentation of the study area boundary may or may not add value to a record search.

[3] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Previously known as the HRI and then as the HPD, it is now known as the Built Environment Resources Directory (BERD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

[4] Associated documentation will vary by resource. Contact the IC for further details.

[5] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Previously known as the Archaeological Determinations of Eligibility, now it is known as the Archaeological Resources Directory (ARD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

Native American Heritage Commission
Native American Contact List
Ventura County
7/8/2022

Barbareno/ Ventureno Band of Mission Indians
Patrick Tumamait,
992 El Camino Corto — Chumash
Ojai, CA, 93023
Phone: (805) 216 - 1253

Barbareno/ Ventureno Band of Mission Indians
Brenda Guzman,
58 N. Ann Street, #8 — Chumash
Ventura, CA, 93001
Phone: (209) 601 - 4676
brendamguzman@gmail.com

Barbareno/Ventureno Band of Mission Indians
Julie Tumamait-Stenslie, Chairperson
365 North Poli Ave — Chumash
Ojai, CA, 93023
Phone: (805) 646 - 6214
jtumamait@hotmail.com

Barbareno/ Ventureno Band of Mission Indians
Annette Ayala,
188 S. Santa Rosa Street — Chumash
Ventura, CA, 93001
Phone: (805) 515 - 9844
annetteayala78@yahoo.com

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street — Chumash
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net

Coastal Band of the Chumash Nation
Mia Lopez, Chairperson
P. O. Box 4464 — Chumash
Santa Barbara, CA, 93140
Phone: (805) 324 - 0135
cbcntribalchair@gmail.com

Coastal Band of the Chumash Nation
Gabe Frausto, Vice Chair
P.O. Box 4464 — Chumash
Santa Barbara, CA, 93140
Phone: (805) 324 - 0135
cbcn22vicechair@gmail.com

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 — Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231 — Gabrielino
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Gabrielino-Tongva Tribe
Charles Alvarez,
23454 Vanowen Street — Gabrielino
West Hills, CA, 91307
Phone: (310) 403 - 6048
roadkingcharles@aol.com

Northern Chumash Tribal Council
Violet Walker, Chairperson
P.O. Box 6533 — Chumash
Los Osos, CA, 93412
Phone: (760) 549 - 3532
violetsagewalker@gmail.com

San Luis Obispo County Chumash Council
1030 Ritchie Road — Chumash
Grover Beach, CA, 93433

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 Resource 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 1651 Lynn Road (Envicom #2202-080-01) Project, Ventura County.

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517 Chumash
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
kkahn@santaynezchumash.org

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 Resource 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 1651 Lynn Road (Envicom #2202-080-01) Project, Ventura County.

APPENDIX C
Resume of Dr. Wayne Bischoff (Principal)

DR. WAYNE BISCHOFF
Director of Cultural Resources

Years of Experience
Over 25 years

Education
Ph.D. Anthropology,
Michigan State University

B.A. Anthropology, Purdue University

Certifications
Registry of Professional Archaeologists (RPA)

Hazwoper 24-hour

Professional Affiliations
Society for California Archaeology

Southern California Paleontological Society

Specialized Training
Built Environment Assessments

Paleontological Assessments

Ethnographic Reports

AB-52/Tribal Consultation

Dr. Bischoff has over 25 years of experience in managing cultural resource projects and ensuring compliance with the California Environmental Quality Act (CEQA), Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Protection Act (NEPA), and state, county, city, and local government cultural laws, guidelines, and procedures. He is experienced with the City of Los Angeles, having completed dozens of cultural resource projects within the City and surrounding municipalities. He has also completed numerous cultural, paleontological, and built environment projects throughout Los Angeles County. Dr. Bischoff has worked with all Tribal Groups of the Greater Los Angeles area and has provided expert consultation, including Assembly Bill (AB) 52 consultation, writing support, and coordination. He has also written, planned, and enforced cultural resource components of many forms of CEQA and NEPA documents and been a part of Memorandum of Agreement (MOA), Memorandum of Understanding (MOU), and Programmatic Agreement (PA) development teams.

Dr. Bischoff's experience includes residential and commercial development, public works, storm and sewer projects, environmental restoration, water resources, energy and transmission line, highway and bridge, telecommunication, educational facility, and park and trail project. Dr. Bischoff has been the principal or project manager for hundreds of cultural projects in California, including Phase I literature searches and surveys, Phase I(b) subsurface surveys, Phase II evaluations, and Phase III data recoveries.

Dr. Bischoff also has extensive experience consulting with state and federal agencies, including the State Historic Preservation Office (SHPO), California Department of Transportation (Caltrans), the Department of Defense, the General Services Agency (GSA), California Department of Parks and Recreation, the U.S. Department of Agriculture (USDA), many U.S. Army Corps of Engineers (ACOE) districts, Fish and Wildlife, the California Public Utilities Commission (CPUC), and the National Park Service, among others.

REPRESENTATIVE PROJECT EXPERIENCE

1413 Michigan Avenue Archaeological and Native American Monitoring and SHPO Reporting Coordination for a HUD housing project located in Santa Monica, California

Envicom will be managing the archaeological and Native American monitoring tasks for this large HUD housing project. The project will also involve periodic reporting to SHPO and the creation of a final monitoring report (Upcoming).

Phase I Survey of the Pepperdine University Alumni Park Development Project, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this university development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. (Upcoming).

Archaeological Monitoring for the 623 South La Brea Affordable Housing Project, Los Angeles, Los Angeles County, California

Principal and Project Manager for this large archaeological monitoring project. (Upcoming).

Paleontological Monitoring of 15353 Camarillo, Sherman Oaks, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this paleontological monitoring project. (Upcoming).

Phase I Survey of 3555 Chaney, Altadena, Los Angeles County, California (with Samantha Renta)

Principal and Field Director for this 40-acre survey project, which included SCCIC, NHM, and NAHC record searches (April 2022 – Current).

Phase I Survey of the Princeton Road Mixed-Use Project, Moorpark, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this large 21-acre commercial project, which included SCCIC, NHM, and NAHC record searches and a site survey. (April 2022 – Current).

Phase I Survey of the Canwood Mixed-Use Development Project, Agoura Hills, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this large mixed-use project, which included SCCIC and NAHC record searches and a site survey. The site survey discovered an early 20th Century older historical site, which will require recordation (January 2022 – Current).

Phase I Survey of the Oxnard Landing Commercial Development Project, Oxnard, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this small commercial development project, which included a site survey and archaeological monitoring. (March 2022 – Current).

Phase I Survey of the Paramount Senior Assisted Living Center, Paramount, Los Angeles County, California (with Samantha Renta)

Principal and Field Director for this survey project, which includes SCCIC, NHM, and NAHC record searches. This project also required the recordation of a 1950s church, which would be demolished as part of the project (November 2021 – Current).

Phase I Survey of 6500 Sunset Boulevard, Los Angeles, Los Angeles County, California (with Samantha Renta)

Principal and Field Director for this survey project, which includes SCCIC, NHM, and NAHC record searches (October 2021 – Current).

Paleontological Monitoring of the Citrus Commons Project, Sherman Oaks, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this paleontological monitoring project. (October 2021 – Current).

Archaeological and Paleontological Monitoring for the San Pedro High School Upgrade Project for LAUSD, Long Beach, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this large archaeological and paleontological monitoring project. (June 2021 – Current).

Los Angeles Unified Schools Department (LAUSD) Environmental On-Call (including cultural resources), Los Angeles, Los Angeles County, California

Principal, Project Manager, and cultural resource consultant as needed. Envicom was one of 15 companies to be awarded this large on-call contract. (February 2017 – Current).

Los Angeles Community College District Environmental On-Call (including cultural resources), Los Angeles County, California

Principal, Project Manager, and cultural resource consultant as needed. (February 2018 – Current).

Phase I Survey of the Agoura Recreational Trail Project, Agoura Hills, Los Angeles County, California

Principal and Field Director for this public trail survey project, which included SCCIC, and NAHC record searches as well as a project survey. The discovery of five (5) prehistoric quarrying and lithic reduction sites resulted in an extensive Phase I report (April 2022 – May 2022).

Phase I Survey of the Rancho Santa Susana Park Phase 4 Development, Simi Valley, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this 4-acre commercial project, which included SCCIC and NAHC record searches and a site survey. (March 2022 – May 2022).

Phase I(b) Survey of APN 673-0-460-190, Newbury Park, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included subsurface shovel test pits as part of the surface survey as well as construction phase monitoring (April 2022 – April 2022).

Peer Review of the Cultural Phase I Report for the Eternal Valley Cemetery Expansion, Santa Clarita, Los Angeles County, California

Peer review was conducted on behalf of the City for this project (February 2022 – April 2022).

Phase I Survey of the Rolling Oaks Proposed Open Space, Thousand Oaks, Ventura, California (with Samantha Renta). Principal and Project Manager for this proposed park property for the Conejo Recreation and Parks District, which included SCCIC and NAHC record searches. (December 2021 – April 2022).

Phase I Survey of 4303 Ocean View Drive, Malibu, Los Angeles County, California (with Samantha Renta)
Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase I Survey of 3948 Las Flores Canyon Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase I Survey of 3942 Las Flores Canyon Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase I Survey of 21373 Rambla Vista Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase I Survey of 21425 Rambla Vista Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase II Evaluation of the "Lancaster 3" site, Lancaster Tract 72534, Lancaster, Los Angeles County, California

Principal and Project manager for this evaluation report, which evaluated an older historical archaeological site as per CRHR Criteria 1, 2, and 4. Two temporal elements were identified; one from the early 20th Century, and another from the 1950s/1960s. Neither was recommended as eligible (December 2021 – April 2022).

1413 Michigan Avenue, NEPA Environmental Assessment (EA) for a HUD housing project located in Santa Monica, California

Cultural Resource consultant for the project, which involved potential impacts to a City historic landmark – the Nikkei Hall – and authoring a "No Impact" letter to SHPO for the Client. Tasks also included consultation with SHPO and Tribal Groups, and support of an architectural evaluation of the structure as per the NRHP and CRHR. A final DPR for the local landmark was also produced by the project team (October 2021 – April 2022).

Phase I Survey of the Palmdale 70 Affordable Housing Project, Palmdale, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this affordable housing residential development project, which included SCCIC, NHM, and NAHC record searches (January 2022 – March 2022).

Phase I Survey of 400 Gorham Road, Ojai, Ventura County, California

This was a NEPA/Section 106 project. Principal and Project Manager for this affordable housing project, which included an SCCIC and NAHC record searches. (January 2022 – March 2022).

Archaeological and Paleontological Monitoring of the Twin Lakes Water Tank Construction for the Las Virgenes Water District, Porter Ranch, California

Principal and Project Manager for this archaeological and paleontological monitoring project. (November 2021 – March 2022).

Oakmont Senior Living Historic and Archaeological Display Production, Agoura Hills, Los Angeles County, California (with Samantha Renta)

Project Manager for this historical interpretation display project (October 2020 – March 2022).

Phase I Survey of 5809 Trancas Canyon Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – February 2022).

Phase I Survey of a Parcel at 30th Street and Avenue I in Lancaster, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. Additional tasks included a paleontological survey of the property and the recordation of a large 1930s/1940s residential archaeological site (September 2021 – February 2022).

Phase I Survey of 325 and 391 Hampshire, Thousand Oaks, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this mixed-use development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. This project also included an architectural assessment and evaluation of the utilitarian commercial building (August 2021 – February 2022).

Phase I Survey of the 2301 Santiago Court, Oxnard, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this 4-acre commercial project, which included a record search and a site survey. (October 2021 – January 2022).

Phase I Survey of 5868 Deerhead Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included a SCCIC and NAHC record search and a site visit (October 2021 – January 2022).

Oakmont Senior Housing Archaeological, Paleontological, and Native American Monitoring Project, Agoura Hills, California (with Samantha Renta)

Principal and Project Manager for this archaeological, paleontological, and Native American monitoring project. (January 2020 – January 2022).

Phase I Survey of a Parcel at 40th Street and Avenue L in Lancaster, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. Additional tasks included a paleontological survey of the property (September 2021 – December 2021).

Phase I Survey of the Sagebrush II Battery Storage Project, Terra Gen Windfarms, Kern County, California (with Samantha Renta)

Principal and Project Manager for this project, which included a record search and a site survey. (October 2021 – December 2021).

Phase I Survey of the Rob's Acre Battery Storage Project, Terra Gen Windfarms, Kern County, CA (with Samantha Renta)

Principal and Project Manager for this project, which included a record search and a site survey. (October 2021 – December 2021).

Phase I Survey of the Sagebrush I (extended) Battery Storage Project, Terra Gen Windfarms, Kern County, CA (with Samantha Renta)

Principal and Project Manager for this project, which included a Bakersfield record search and a site survey. (October 2021 – December 2021).

Phase I Survey of the Barrera Hacienda Heights Residential Project, Unincorporated Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this 12-acre residential development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. (August 2021 – December 2021).

CA-LAN-320 Phased Evaluation Project, Agoura Hills, Los Angeles County, California

Principal and Project Manager for the phased evaluation (Phase II) of CA-LAN-320 in response to potential impacts from the construction of the Conrad N. Hilton Foundation Phase 2 Campus Building. The site is a prehistoric Chumash residential and ceremonial center of over 80-acres in size and that was used by prehistoric Native Americans from 300 B.C. to the late 1700s. Dozens of test units, hundreds of shovel test pits, surface collection, and surface feature mapping have been completed to date planned. (August 2015 – December 2021).

Phase I Survey of 11480 Sulphur Mountain Road, Unincorporated Ventura County, California

Principal and Project Manager for this commercial development project, which included a SCCIC and NAHC record search and a site visit (September 2021 – November 2021).

Phase I Survey of 710 West Harvard, Santa Paula, Ventura County, California

This is a NEPA/Section 106 project. Principal and Project Manager for this mixed-use development project, which included an SCCIC and NAHC record searches and a site visit. This project also included later consultation with the Client and City on the discovery of a previously unknown historic well (August 2021 – November 2021).

Phase I Survey of the Bixby Villas Development Project, Long Beach, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this residential development project, which included an SCCIC and NAHC record searches and a site visit. (July 2021 – November 2021).

Phase I Survey of the Dorothy Drive Residential Development Project, Agoura Hills, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this 9-acre residential development project, which included an SCCIC, NHM, and NAHC record searches and a site visit. (August 2021 – September 2021).

Archaeological, Paleontological, and Native American Monitoring for the JPA/Las Virgenes Water District Solar Farm Expansion, Calabasas, California

Principal and Project Manager for this monitoring project. This project encountered a prehistoric lithic scatter at depth, which included lithic material, a point fragment, and groundstone artifacts. An older historic hearth was also discovered. The project concluded with a prehistoric site form and a small display at the Las Virgenes Water District headquarters (April 2020 – September 2021).

Phase I Survey of the Agoura Yard Development Project, Agoura Hills, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this mixed-use development project, which included an SCCIC and NAHC record searches and a site visit. (July 2021 – September 2021).

Cultural Resource Monitoring for the Oasis Windmill Farm Phase II, Kern County, California (with Samantha Renta)

Project manager for the monitoring of impacts to cultural resources as part of the Oasis Windmill Farm Phase II upgrade. Project including updating numerous cultural resources and the recordation of one new prehistoric site with bedrock milling and other surface features (March 2021 – August 2021).

Archaeological Monitoring at the Sakioka Business Park, Oxnard, Ventura County, California (with Samantha Renta)

Project Manager for this large archaeological monitoring project, which included the recordation of a significant early historic cultural resource (1860s through 1920s) and the processing of hundreds of older historic artifacts. (October 2020 – August 2021).

Phase I Survey of the Sagebrush Battery Storage Project, Terra Gen Windfarms, Kern County, California (with Samantha Renta)

Principal and Project Manager for this project, which included a Bakersfield record search and a site survey. (July 2021 – August 2021).

Ferro Ditch Biological and Archaeological Monitoring, County of Ventura Public Works Osteology, Somis, Ventura County, California

Principal Archaeologist and Project Osteologist for this public improvement project. This project also involved the field analysis of excavated bones as being non-human. (January 2021 – July 2021).

Phase I Survey of "The Malibu Club" Project, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this commercial development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. (June 2021 – July 2021).

Phase I Survey of the Moorpark 67 Residential Development Project, Moorpark, Ventura County, California

Principal and Project Manager for this 67-acre project, which included an SCCIC, NAHC, and NHM record searches and a site visit, as well as responses to peer review. (May 2021 – July 2021).

Review of Technical Documents, Cultural Resource Consultant for the City of Agoura Hills, and EIR Cultural Section Writing for "The Agoura Village Expansion" project, Agoura Hills, Los Angeles County, California

Professional review of project cultural resource documents and authoring of cultural resource section of MND for this large mixed-use project. The primary challenge is that the entire development is located on a CRHR-eligible prehistoric Native American cultural resource. (January 2018 – June 2021).

Archaeological Monitoring for 1055 North Signal, Ojai, Ventura County, California

Principal and Project Manager for this small archaeological monitoring project. (February 2021 – June 2021).

Phase I Survey of the Agoura Kanan Village Project; Additional Project Areas to be Impacted, Agoura Hills, Los Angeles County, California

Principal and Project Manager for this project, which involved the survey of additional project areas and the recordation and updating of two previously known prehistoric cultural resources. (April 2021 – May 2021).
Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. (April 2021 – May 2021).Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. The discovery of an older historic cultural resource also resulted in the recordation of a cultural resource on State of California DPR forms. A paleontological survey report was also completed by PaleoWest as per the NHM findings (March 2021 – May 2021).

Phase I Survey of a Property on Giles Road, Lake Sherwood, Ventura County, California (with Samantha Phase I Survey of the Dorothy Drive Residential Development Project, Agoura Hills, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this 9-acre residential development project, which included an SCCIC, NHM, and NAHC record searches and a site visit. (August 2021 – September 2021).

Archaeological, Paleontological, and Native American Monitoring for the JPA/Las Virgenes Water District Solar Farm Expansion, Calabasas, California

Principal and Project Manager for this monitoring project. This project encountered a prehistoric lithic scatter at depth, which included lithic material, a point fragment, and groundstone artifacts. An older historic hearth was also discovered. The project concluded with a prehistoric site form and a small display at the Las Virgenes Water District headquarters (April 2020 – September 2021).

Phase I Survey of the Agoura Yard Development Project, Agoura Hills, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this mixed-use development project, which included an SCCIC and NAHC record searches and a site visit. (July 2021 – September 2021).

Cultural Resource Monitoring for the Oasis Windmill Farm Phase II, Kern County, California (with Samantha Renta)

Project manager for the monitoring of impacts to cultural resources as part of the Oasis Windmill Farm Phase II upgrade. Project including updating numerous cultural resources and the recordation of one new prehistoric site with bedrock milling and other surface features (March 2021 – August 2021).

Archaeological Monitoring at the Sakioka Business Park, Oxnard, Ventura County, California (with Samantha Renta)

Project Manager for this large archaeological monitoring project, which included the recordation of a significant early historic cultural resource (1860s through 1920s) and the processing of hundreds of older historic artifacts. (October 2020 – August 2021).

Phase I Survey of the Sagebrush Battery Storage Project, Terra Gen Windfarms, Kern County, California (with Samantha Renta)

Principal and Project Manager for this project, which included a Bakersfield record search and a site survey. (July 2021 – August 2021).

Ferro Ditch Biological and Archaeological Monitoring, County of Ventura Public Works Osteology, Somis, Ventura County, California

Principal Archaeologist and Project Osteologist for this public improvement project. This project also involved the field analysis of excavated bones as being non-human. (January 2021 – July 2021).

Phase I Survey of "The Malibu Club" Project, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this commercial development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. (June 2021 – July 2021).

Phase I Survey of the Moorpark 67 Residential Development Project, Moorpark, Ventura County, California

Principal and Project Manager for this 67-acre project, which included an SCCIC, NAHC, and NHM record searches and a site visit, as well as responses to peer review. (May 2021 – July 2021).

Review of Technical Documents, Cultural Resource Consultant for the City of Agoura Hills, and EIR Cultural Section Writing for "The Agoura Village Expansion" project, Agoura Hills, Los Angeles County, California

Professional review of project cultural resource documents and authoring of cultural resource section of MND for this large mixed-use project. The primary challenge is that the entire development is located on a CRHR-eligible prehistoric Native American cultural resource. (January 2018 – June 2021).

Archaeological Monitoring for 1055 North Signal, Ojai, Ventura County, California

Principal and Project Manager for this small archaeological monitoring project. (February 2021 – June 2021).

Phase I Survey of the Agoura Kanan Village Project; Additional Project Areas to be Impacted, Agoura Hills, Los Angeles County, California

Principal and Project Manager for this project, which involved the survey of additional project areas and the recordation and updating of two previously known prehistoric cultural resources. (April 2021 – May 2021).
Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. (April 2021 – May 2021).Principal and Project Manager for this project, which included an SCCIC and NHAC record search and a site visit. Exploration of all rock shelters and cache openings on the property for historic artifacts was part of this project. A pre-construction survey was also completed for the project. (July 2020 – May 2021).

Phase I Survey of 12772 San Fernando Road, Sylmar, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. (March 2021 – May 2021).

Phase I Survey of a large parcel located off of West Avenue I, Antelope Valley, Lancaster, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC, NHM, and NAHC record searches and a site visit. The discovery of an older historic cultural resource also resulted in the recordation of a cultural resource on State of California DPR forms. A paleontological survey report was also completed by PaleoWest as per the NHM findings (March 2021 – April 2021).

Phase I Survey of 2140 Stunt Road, Unincorporated Los Angeles County, California

Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. (March 2021 – April 2021).

Arts District Archaeological Monitoring Project, Los Angeles, California
Principal and Project Manager for this archaeological monitoring project. (October 2020 – April 2021).

Phase I Survey of the Lynch Land and Cattle Property near Somis, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. (February 2021 – April 2021).

Phase I Survey of 3870 Puerco Canyon Road (Lot 1), Malibu, Los Angeles County, California with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (February 2021 – April 2021).

Phase I Survey of 3870 Puerco Canyon Road (Lot 2), Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (February 2021 – April 2021).

Phase I Survey of the Ladyface Vista project, Agoura Hills, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included SCCIC, NAHC, and NHM record searches and a site visit. This large project had complex paleontological issues, which Envicom addressed with the NHM report and an excellent geotechnical report (February 2021 – March 2021).

Phase I Survey of the Central Plaza Shopping Center Project, Camarillo, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this project, which included SCCIC, NAHC, and NHM record searches and a site visit. (February 2021 – March 2021).

Phase I Survey of 3426 Serra Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (January 2021 – March 2021).

Oakmont Senior Living Historic and Archaeological Display Production, Simi Valley, Ventura County, California (with Samantha Renta)

Project Manager for this historical interpretation display project (with the Strathearn Historic Park and Museum) (September 2020 – February 2021).

Cultural Resource Monitoring for the Oasis Windmill Farm, Kern County, California

Project manager for the monitoring of impacts in six cultural resources as part of the Oasis Windmill Farm upgrade (August 2020 – February 2021).

Archaeological Monitoring at the Arctic Cold Industrial Project Site, Oxnard, Ventura County, California (with Samantha Renta)

Project Manager for this large archaeological and Native American monitoring project. (November 2020 – February 2021).

Phase Ib (subsurface) Survey 239 Oak Glen Avenue, Ojai, Ventura County, California

Principal and Project Manager for this City-requested Phase Ib survey, which included the excavation of six shovel test pits and a comprehensive site assessment to supplement work completed in 2020 as the "Rancho Ojai" project. (February 2021 – February 2021).

Entitlement Phase Cultural Resource Tasks, Arrowhead Estate Residential Development, Banning, Riverside County, California

Project Manager for all cultural tasks, which included HAER documentation of the Gilman House Channel, team meetings, and the development of a construction phase Monitoring Plan that incorporated the history of the St. Boniface Indian School. (January 2021 – February 2021).

Phase I Survey of a Proposed Little Rock Mobile Home Park, Unincorporated Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. The recordation of a large early 20th Century residential and farm complex on State of California DPR forms was

also completed as part of this project. A paleontological survey report was also completed by PaleoWest as per the NHM findings (November 2020 – February 2021).

Phase I survey of the Chadwick School Development Project, Palos Verdes, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (December 2020 – February 2021).

Phase I Survey of 3142 Subida Circle, Santa Rosa, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC and NAHC record search and a site survey. (August 2020 – February 2021).

Keyes Porsche Archaeological, Paleontological, and Native American Monitoring Project, Woodland Hills, California (with Samantha Renta)

Principal and Project Manager for this archaeological, paleontological, and Native American monitoring project. (August 2020 – February 2021).

Los Angeles Unified School District (LAUSD) Environmental On-Call for Archaeological and Paleontological tasks, Los Angeles County, California

Principal, Project Manager, and cultural resource task completion as needed. Envicom is one of three selected vendors for one year, with four potential renewable years in the contract (eventually rolled in with LAUSD environmental on-call contract) (February 2019 – February 2021).

Conrad N. Hilton Foundation Phase Ib of Proposed Phase II Building Locations, Agoura Hills, California

This project involved the excavation of 48 shovel test pits within the western periphery of cultural resource CA-LAN-320 on Foundation property. (January 2020 – January 2021).

Phase I Survey of the Sandefer Residential Project, Unincorporated Ventura County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC and NAHC record search and a site survey. (August 2020 – January 2021).

Phase I Survey of 122 acres of the Canyon Ostara residential development project, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC and NAHC record search and a site survey. (August 2020 – January 2021).

Summit View Apartments Project Paleontological Monitoring for this Veterans Housing Project, Los Angeles, California (with Samantha Renta)

Principal and Project Manager for this paleontological monitoring project. (February 2020 – January 2021).

Native American Monitoring at the Los Angeles International Airport (LAX), Los Angeles, Los Angeles County, California

Project Manager for this long term Native American monitoring project, which includes a Discovery Plan and a final Monitoring Report. (October 2020 – December 2020).

18800 Gale Avenue Archaeological, Biological, and Paleontological Monitoring Project, Rowland Heights, California

Principal and Project Manager for this archaeological, biological, and paleontological monitoring project. (November 2019 – December 2020).

Phase I survey of 410 Tico Road, Ojai, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (November 2020 – December 2020).

Phase I Survey of a property within the Rancho Ojai subdivision, Ojai, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (October 2020 – November 2020).

Fillmore Terrace Phase I and Native American Consultation, Fillmore, Venture County, California (with Samantha Renta)

Principal and Project Manager for this large low-income housing project, which included an SCCIC record search, site visit, and Native American consultation on behalf of the City. (September 2020 – October 2020).

Phase I Survey of 730 South Vermont, City of Los Angeles, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC, NAHC, and NHM record searches and a site visit. (June 2020 – October 2020).

Phase I Survey of the Reconstruction of the Brookview Ranch Riding and Event Venue, School of Management Building, County of Los Angeles, California (with Samantha Renta)

Principal and Project Manager for this riding venue rebuild and expansion. Project included a SCCIC/NAHC record search and a site visit. One of the challenges has been integrating a prehistoric cultural resource immediately north of the project development, but on the project property, into the assessment recommendations (July 2019 – September 2020).

Phase I Survey of 715 Del Oro Drive, Ojai, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (June 2020 – August 2020).

Phase I Survey of 604 Gridley Road, Ojai, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (July 2020 – August 2020).

Phase I Survey of the 5041 Lankershim Hotel Property, North Hollywood, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC, NHM, NAHC record searches and a site visit. (May 2020 – July 2020).

Phase II Evaluation of CA-LAN-41 within the Boundary of the Agoura Village project, Agoura Hills, Los Angeles County, California.

Principal and Project Manager for the completion of an Evaluation (Phase II) of a complex prehistoric cultural resource within the boundary of the Agoura Village project. The Phase II involved the excavation of ten test units, dozens of shovel test pits, as well as more detailed mapping of the site. (January 2019 – July 2020).

Phase I Survey of 6544 Wandermere Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (June 2020 – July 2020).

Phase I Survey of 5841 Busch Drive, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (May 2020 – July 2020).

Archaeological and Paleontological Monitoring for the Agoura Landmark Development Project, Agoura, California

Principal and Project Manager for this monitoring project. A positive findings report was also completed and submitted to the City after the discovery of a small lithic scatter within the development footprint (January 2019 – July 2020).

Phase I Survey 505 Centre Street, Los Angeles, Los Angeles County, California (with Samantha Renta

Principal and Project Manager for this project, which included an SCCIC, NAHC, and NHM record searches and a site visit. This complex project had multiple built environment concerns, including the adjacent San Pedro Commercial Historic District (April 2020 – June 2020).

Paleontological Phase I Survey of an Agricultural Development Parcel in Balcom Canyon, Somis, Ventura County, California

Author for this project, which included a detailed geological and paleontological statement for the proposed project. (June 2020).

Cultural Resource Discovery Plan for the Oasis and Point Wind Windmill Farm, Kern County, California

Author of the discovery plan for upgrades to two large windmill farms for Terra Gen. (March – April 2020).

Phase II Evaluation of Six Native American Archaeological Sites for the Terra Gen Oasis Windmill Farm, Kern County, California

Principal and Project Manager for this archaeological evaluation project, which utilized shovel test pits and test units to evaluate six prehistoric Native American cultural resources that would be impacted by future windfarm development. (March 2020 – April 2020).

Phase I Survey of The Emerald Residential Project, Lancaster, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this approximately 5-acre housing project, which included an SCCIC/NAHC/NHM record searches and a site visit. (February 2020 – April 2020).

Phase I Survey of The West Palmdale Residential Complex Project, Palmdale, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this approximately 35-acre housing project, which included an SCCIC/NAHC/NHM record searches and a site visit. (February 2020 – April 2020).

Conrad N. Hilton Foundation Geotech Boring Archaeological and Paleontological Monitoring, Agoura Hills, California

This project involved the monitoring of geotech trench and drilling sites within Foundation and Las Virgenes Water District properties within the City of Agoura Hills. (January 2020 – April 2020).

Phase I Survey of 4510 Via Vienta, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (January 2020 – April 2020).

Phase I Survey of the Proposed California Lutheran University, School of Management Building, Thousand Oaks, California (with Samantha Renta)

Principal and Project Manager for this university project. Project included a SCCIC/NAHC record search and a site visit. (December 2019 – April 2020).

Phase I Survey of the Twin Lakes Water Tank Project, Porter Ranch, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for the Los Virgenes Municipal Water District. (October 2019 – April 2020).

Phase I Survey of the Castaic Apartments Project, Town of Castaic, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this large 105-acre mixed use development project, which included an SCCIC/NAHC record search, an NHM record search, and a site visit. The cultural survey discovered two complex older historic sites, which required extensive recordation and evaluation (July 2019 – April 2020).

Sierra West Assisted Living Project, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this group residential project. Project included NHM/SCCIC/NAHC record searches, and a site visit. A project challenge was addressing historic early 20th Century structures, including an early stagecoach station, which once were located on the property, as well as the proximity of the parcel to a historic (1880s) cemetery. (October 2019 – April 2020).

Phase I Survey of 1175 Camille Drive, Ojai, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC/NAHC record search and a site visit. (January 2020 – February 2020).

Vineland and Cleon Self Storage Project Phase I Cultural Survey, Burbank, California (with Samantha Renta)

Principal and Project Manager for this commercial project. Project included NHM/SCCIC/NAHC record searches, but no site visit due to extensive urbanization. (December 2019 – January 2020).

Phase I Survey of 5617 Busch Drive, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (December 2019 – January 2020).

Cultural Resource Monitoring of the 21110 Oxnard Hotel project, Woodland Hills, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this monitoring project. (August 2019 – January 2020).

Phase I Survey of the Riverwalk II Mixed-Use Project, Santa Clarita, California

Principal and Project Manager for this commercial and Residential Project. Project included a SCCIC/NAHC record search and a site visit. (December 2019 – December 2019).

Phase I Survey of 5814 Philip Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (October 2019 – December 2019).

Phase I Survey of Improvements to the Coronado Golf Course, San Diego, San Diego County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC/NAHC record search only. (October 2019 – November 2019).

Phase I Survey of 6208 Tapia Drive, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (October 2019 – November 2019).

Phase I Survey of 6711 Wandermere Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (September 2019 – October 2019).

Phase I Survey of 5820 Foxview Drive, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for residential project, which included an SCCIC/NAHC record search, an NHM record search, and a site visit. (September 2019 – October 2019).

Phase I Survey of the new Keyes Porsche Auto Dealership, Woodland Hills, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC/NAHC/NHM record search, a site visit, and the production of a separate Ethnographic Assessment Report for the project. Envicom also supported the Lead Agency in AB-52 consultation with the Tataviam and Tongva Tribal Groups. (August 2019 – October 2019).

Cultural Resource Monitoring of the 21121 Van Owen Development Project, Canoga Park, Los Angeles County, California

Principal and Project Manager for this monitoring project. (September 2019).

Phase I Survey of the Avenue 34 Mixed-Use Development Project, Los Angeles, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC/NAHC record search and a site visit. (August 2019 – September 2019).

Phase I Survey of the Faith Lutheran Senior Living Project, Inglewood, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC/NAHC record search and a site visit. (August 2019 – September 2019).

Phase II Evaluation of Cultural Resource CA-LAN-513 within the Boundary of 6282 Sea Star Estates Residential Development, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this Phase II evaluation, which involved surface examination only due to plowed field conditions. No evidence of a cultural resource was found. (September 2019).

Phase I Survey of an Agricultural Development Parcel in Balcom Canyon, Somis, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC/NAHC record search, a site visit, and the recordation of a prehistoric site at the edge of the project boundary. (July 2019 – August 2019).

Phase I Survey of 31215 Bailard Road, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (July 2019 – August 2019).

Phase II Evaluation of the Proposed Location of the Printz Colony House within the Strathearn Historic Park, Simi Hills, Ventura County, California (with Samantha Renta)

Principal and Project Manager for this Phase II evaluation of part of the 1880s Strathearn Farmstead. Evaluation tasks included the excavation of shovel test pits and a single test unit, construction monitoring, and a combined report for the Rancho Simi Recreation and Parks District (June 2019 – July 2019).

Phase I Survey of the Parks LA project, Los Angeles, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC/NAHC/NHM record search, a site visit, and a Natural History Museum paleontological assessment. (June 2019 – July 2019).

Phase I Survey of the Rancho Malibu residential development project, Malibu, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this project, which included an SCCIC/NAHC/NHM record search, a site visit, and a Natural History Museum paleontological assessment. (June 2019 – July 2019).

Phase I Survey of 380 South Rosemead, Los Angeles, Los Angeles County, California (with Samantha Renta)

Principal and Project Manager for this development project, which included an SCCIC/NAHC/NHM record search, a site visit, and a Natural History Museum paleontological assessment. (May 2019 – June 2019).

Phase II Evaluation of CA-LAN-129 and CA-LAN-129a, two prehistoric sites, and CA-LAN-4363H, an early historic site located in Calabasas, California

Principal and Project Manager for the evaluation of these three sites as part of permitting with the Corps of Engineers. The evaluation was written to NRHP/SHPO standards. (May 2019 – June 2019).

Phase I Survey of 1160 Sulphur Mountain Road, Ojai, Ventura County, California

Principal and Project Manager for this residential development project, which included a SCCIC/NAHC record search and a site visit (May 2019 – May 2019).

Phase I Survey of the Cal Grow Farms Project, Perris, Riverside County, California

Principal and Project Manager for this agricultural development project, which included a SCCIC/NAHC/NHM record search and a site visit. (March 2019 – May 2019).

Phase I Survey of the Riverwalk Mixed-Use Project, Santa Clarita, California

Principal and Project Manager for this commercial and Residential Project. Project included a SCCIC/NAHC record search and a site visit. (March 2019 – May 2019).

Phase I Survey of the West Village Project, Calabasas, California

Principal and Project Manager for this Army Corps of Engineers (ACOE) permitting project. Project included a SCCIC/NAHC/NHM record search and a site visit, as well as SHPO review of the final report. (March 2019 – May 2019).

Phase I Survey of the Belvedere Middle School Improvements Project, Los Angeles, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search and NAHC record search request for LAUSD. (November 2018 – April 2019).

Phase I Survey "The Angel" Project, Los Angeles County, California

Principal and Project Manager for this low-income housing project in the San Fernando Valley. Project included a SCCIC/NAHC record search and a site visit. (January 2019 – March 2019).

Fourth and Hewitt, City of Los Angeles, Los Angeles County, California

Principal and Project Manager for a cultural resource record search for the development of a new office building within a commercial urban environment. Project also included a paleontological assessment of the property due to an extensively deep planned parking garage and Native American concerns. Also completed with an Ethnographic Report to meet AB-52 criteria. Another key issue was determining whether a historic built environment assessment was needed. (February 2017 – March 2019).

Phase I Survey of the Deer Lake Water Tank Project, Porter Ranch, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for the Las Virgenes Municipal Water District. (November 2018 – March 2019).

Phase I Survey of the Sherwood Development Corporation, Tract 4409, Ventura County, California

Principal and Project Manager for this Army Corps of Engineers (ACOE) permitting project. Project included a SCCIC/NAHC record search and a site visit, as well as SHPO review. (January 2019 – February 2019).

City of Thousand Oaks Environmental On-Call (Including Cultural Resources), Los Angeles County, California

Envicom was selected as one of a limited number of on-call environmental firms for the City. (June 2015 – December 2018).

Phase II Evaluation of Cultural Resource CA-LAN-513 within the Boundary of 6361 Sea Star Estates Residential Development within the Malibu, Los Angeles County, California

Principal and Project Manager for this Phase II evaluation, which involved limited shovel test pits and surface examination. No evidence of a cultural resource was found. (November 2018 – December 2018).

Phase I Survey for the Massilia Spa Project, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. Project also includes an inventory and initial assessment of over a dozen 1930 through 1990 structures on the property (June 2018 – December 2018).

Phase I Survey of the Conejo Creek Park, Thousand Oaks, Ventura County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (August 2018 – November 2018).

Phase I Survey of the Butler Ranch, in Ventura County near West Simi Valley, California

Principal and Project Manager for the completion of a Phase I record search, NAHC record search request, and a site survey of this 332-acre low density residential development project. (May 2018 – October 2018).

Valencia Travel Village, Valencia, Los Angeles County, California

Principal and Project Manager for the completion of a Phase I for trailer park and recreation center. (August 2018 – October 2018).

Phase I Survey of the JPA Solar Farm, Calabasas, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for the Las Virgenes Municipal Water District. This 20-acre solar project also addressed a large prehistoric Native American site located next to and partially on the property. Project included Native American consultation with the Lead Agency and the Tatatviam and the recordation of two prehistoric petroglyphs (August 2018 – October 2018).

Simi BMX Course Phase I Survey, Simi Valley, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (July 2018 – August 2018).

Phase I Paleontological Survey of the 3467 Camino de la Cumbre Property in Sherman Oaks, Los Angeles County, California

Principal and Project Manager for the completion of a Natural History Museum record search and paleo report. (August 2018).

Phase I Survey of the proposed 113-133 West Plymouth Street multiple unit residential development, Inglewood, Los Angeles County, California (with Samantha Whittington, Debbie Balam, and Charlie Fazzone)

Principal and Project Manager for the completion of a SCCIC/NAHC record search, paleontological record search, NAHC record search request, and a site survey. Additional tasks included writing for the cultural section of the MND document (April 2018 – August 2018).

Phase I Survey for the 17-acre Olivas Park Extension commercial development project in Ventura, Ventura County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey, followed by limited monitoring. (January 2018 – June 2018).

Phase I(b) Survey of the proposed Forrest Club 50-acre private club development, Los Angeles County, California (with Samantha Whittington and Charlie Fazzone)

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. In addition, 24 shovel test pits were excavated across the locations of two 1920s historic cabins. No further work was required. (April 2018 – June 2018).

Phase I Survey for the Ascension Lutheran Church Master Plan and MND, Thousand Oaks, California, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (May 2018 – June 2018).

Cultural, Paleo, and Native American Monitoring for the Agoura Hills Marriott Development Project, Agoura Hills, California

Principal and Project Manager for this monitoring project. During monitoring, a prehistoric Chumash cultural resource was discovered (number not yet assigned), which led to artifact collection, analysis, and a final report of findings that was submitted to the City (January 2018 – June 2018).

Phase I Survey for the Mulholland Senior Living Project, Los Angeles County, *California*

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (May 2018 – May 2018).

Phase I Survey of the proposed Tapo at Alamo EIR for a mixed-use development project, Simi Valley, Ventura County, California (with Samantha Whittington and Debbie Balam)

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (March 2018 – May 2018).

Phase I Survey of the Upper Bailey Road tract, Sylmar, Los Angeles County, California (with Samantha Whittington and Debbie Balam)

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (December 2017 – April 2018).

Phase I Survey of the Lower Bailey Road tract, Sylmar, Los Angeles County, California (with Samantha Whittington and Debbie Balam)

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (December 2017 – April 2018).

Historic Structure Evaluation of Blythe Elementary School for LAUSD

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Historic Structure Evaluation of Robert Hill Lane Elementary School for LAUSD

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Historic Structure Evaluation of James Madison Middle School for LAUSD

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. School was found eligible for the CRHR. (February 2018 – April 2018).

Historic Structure Evaluation of 54th Street Elementary School for LAUSD

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. School was found eligible for the CRHR. (February 2018 – April 2018).

Historic Structure Evaluation of Chapman Elementary School for LAUSD

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Historic Structure Evaluation of Dena Street Elementary School for LAUSD

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Historic Structure Evaluation of Patrick Henry Middle School for LAUSD

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. School was found eligible for the CRHR. (February 2018 – April 2018).

Historic Structure Evaluation of Richland Avenue Elementary School for LAUSD

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Marinette Road Residential Development, Pacific Palisades, Los Angeles County, California

Principal and project manager for this development project, which included a SCCIC/NAHC record search, site survey, Tribal Group scoping letters, and agency consultation. The major challenge was that the project

property was within the Will Rogers State Monument and National Register site boundary. An update for this project was conducted in 2018 to include AB-52 compliance. (February 2015 – May 2015; January 2018 – April 2018).

Phase I Survey for 6956 Dume Drive, Malibu, California, Los Angeles County, California (with Samantha Whittington)

Principal and Project Manager for the completion of an SCCIC record search, and a site survey. (February 2018 – March 2018).

Phase I Survey of roughly 50-acres for Improvements on the Saddlerock Ranch/Malibu Wines Property, Santa Monica Mountains, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a site survey. This project involves upgrades to the winery existing structures and public buildings, as well as road and parking improvements. Part of this project is located near a National Register Chumash rock art site as well as other prehistoric resources (November 2016 – March 2018).

Phase I Survey for 28730 Grayfox, Malibu, Los Angeles County, California (with Samantha Whittington)

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (January 2018 – February 2018).

Phase I Survey for 11681 Foothill Boulevard, a multiple-unit residential project, Sylmar, California, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. This project also included a Native American Tribal Cultural Resource Assessment. (November 2017 – February 2018).

Phase I Survey for a single-family property development along Yerba Buena Road, Ventura County, California

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (December 2017 – January 2018).

Phase I Survey for 34134 Mulholland Highway, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (December 2017 – January 2018).

Faunal, Osteological, Archaeological, and Fossil Consultation for Citadel Environmental and Turner-Hunt for the Hollywood Park Development Project (new Rams NFL Stadium)

Osteological and paleontological consultant for Kiewit, Turner, and Citadel for the construction of the new Rams NFL stadium in Ingelwood. Project included discovery and recordation of modern and fossil mammal bones. We were the official on-call cultural/paleo resources team for the Rams Stadium project, being called in to deal with modern faunal and ancient fossil remains found during excavation. We worked closely with the construction team to get an expert on site within 24-hours of the discovery or quicker, with the goal of getting the discovery assessed and the construction team back to work as soon as possible. (December 2016 – January 2018).

Phase I Survey for 24600 Thousand Peaks Road, Calabasas, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (November 2017 – January 2018).

Phase I Survey for 28929 Grayfox, Malibu, California, Los Angeles County, California

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (November 2017 – January 2018).

Manzanita School Phase Ia Survey for a 20.27-acre private school development, Topanga Canyon, California, Los Angeles County, California

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. This project also assessed built environment resources, which included early 1900s buildings, early 1900s water control features, culverts, and bridges, and 1950s landscaping elements (May 2017 – January 2018).

Phase I Survey for the 181 to 187 Monterrey Road Condominium Project, a small residential development near South Pasadena, California, Los Angeles County, California

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (July 2017 – January 2018).

Phase I Survey for the Agoura Village project, a 7.37-acre Commercial Subdivision, Agoura Hills, Los Angeles County, California.

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a Phase Ia site survey. The Phase Ia survey was followed by a Phase Ib subsurface survey and an updated site form for a previously known prehistoric cultural resource that includes the entire project area. (October 2016 – December 2017).

Phase I survey for 22866 Beckledge Terrace, Malibu, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (September 2017 – November 2017).

Lynn Road Residential Development Project, Construction Monitoring, Newbury Park, California

Principal and Project Manager for the surface collection and construction monitoring for this 10-acre residential construction project. (October 2017 – November 2017.)

Phase II Evaluation of two cultural resources located on the Oakmont project property, Agoura Hills, Los Angeles County, California

Principal and Project Manager for the evaluation of a prehistoric cultural resource and a 1920s-1980s historic homestead cultural resource. Evaluation tasks included shovel test pits, and a test unit for the prehistoric cultural resource, and detailed mapping and documents research for the historic cultural resource. A combined report for both Oakmont projects was produced for the City. (August 2017 – October 2017).

City of Pomona Environmental On-Call (Including Cultural Resources), Los Angeles County, California

Envicom successful won inclusion as one of six on-call environmental firms for the City. (October 2014 – October 2017).

Phase I Survey for the Oakmont commercial project, a 5.75-acre development, Agoura Hills, Los Angeles County, California

Principal and Project Manager for the completion of NAHC record search, and a Phase Ia site survey. The Phase Ia survey identified two (2) cultural resources; a 1920s historic homestead foundation, and a large prehistoric archaeological site. (August 2017 – October 2017).

Phase I Assessment of the West Hills Crest 37-acre Residential Subdivision, West Hills, Los Angeles, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search and project area site survey. A key issue for this project was the record search being positive for a prehistoric cultural resource within the development area. This resource, CA-LAN-1223, was further investigated with 22 shovel test pits, and evaluated as not being a significant cultural resource. (February 2017 – October 2017).

San Bernardino County Cultural, Historic Architecture, and Paleontology On-Call, San Bernardino, California

Envicom successful won inclusion in the limited on-call pool. (October 2014 – October 2017).

Phase I Survey for 15498 LaPeyre Court, a residential development, Moorpark, Ventura County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. Project also included coordination with numerous biology tasks. (August 2017 – September 2017).

Canyon View Estates Paleontological Survey, Santa Clarita, Los Angeles County, California

Principal and Project Manager for this paleontological record search, site survey, and report. (August – September 2017).

North Canyon Ranch 170-acre Residential Subdivision, Simi Valley, Ventura County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search and project area site survey. A key issue for this project was a previously disturbed cultural resource within the project area, the destruction of which needed to be addressed in the final report. (May 2017 – August 2017).

Phase I Survey for the 12300 Valley Boulevard Hotel, a commercial development, El Monte, Los Angeles, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for this small residential development. (June 2017 – August 2017).

Phase Ia Survey for the Holiday Inn Express Hotel, a commercial development, El Monte, Los Angeles, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for this small residential development. (July 2017 – August 2017).

Arcadia Town Homes MND Phase I Cultural Assessment for a multi-unit residential development, Arcadia, Los Angeles, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for this multi-unit residential development. (May 2017 – August 2017).

Phase I Survey for 3800 Figueroa, an apartment complex development, Los Angeles, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for apartment complex development. (June 2017 – August 2017).

Phase I Survey for the Copper Canyon Project, a 5-acre residential development near Santa Clarita, California, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. Also part of the project was the resurvey of two previously recorded cultural resources within the project boundary. (May 2017 – July 2017).

Phase Ia Survey for the Oneonta Hillside Drive, a residential development, South Pasadena, Los Angeles County, California

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (May 2017 – July 2017).

Construction Monitoring for Parcel 2058-003-010, Lobo Canyon, Los Angeles County, California

Principal and Project Manager for the surface collection and construction monitoring for this single-family residential construction project. (July 2017)**.**

Phase I Survey for the 6625 Bradley Road, a residential development, Somis, Ventura County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for this small residential development. (June 2017 – July 2017).

11172 Santa Paula Road Phase Ia Survey for a 5.5-acre Agricultural property, Ojai, California, Ventura County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (May 2017 – June 2017).

Pepperdine University Campus Life Project: Updated Cultural Resources Record Search.

Principal and Project Manager for an updated record search and letter report for the Pepperdine Campus Life housing, facilities, and trail development project. This update was part of an amended campus-wide EIR (December 2017 – June 2017).

Pepperdine University Campus Life Project: Phase I survey of new Baseball Field development.

Principal and Project Manager for the addition of the campus baseball field as part of the larger Pepperdine Campus Life housing, facilities, and trail development project. (February 2017 – June 2017).

6658 Reseda Boulevard, Reseda, Los Angeles County, California

Principal and Project Manager for a Phase 1 record search for this urban mixed-use project. (March 2017 – May 2017).

Paradise Valley Development Project Environmental Impact Report and Impact Statement, Riverside County, California

Author of the cultural section for this EIR for a housing and mixed-use development of over 2200-acres east of Indio, California. Also reviewed original technical documents, and incorporated legal and agency comments. Mitigation measures included the management and monitoring of dozens of cultural resources, sensitive soils, and paleontological resources. (October 2014 – March 2017).

Phase I Cultural Resources Survey for Parcel 2058-003-010, Lobo Canyon, Los Angeles County, California

Principal and Project Manager for completion of a Phase I and Army Corps of Engineers permit for the project (ACOE, Los Angeles District). Extensive communications and consultation with the ACOE and SHPO. (July 2016 – March 2017).

Phase I Survey for a 1.33-acre Mixed-Use development, Northridge at the corner of Nordoff and Darby Streets, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a site survey. This project included a built-environment assessment of existing historic structures (October 2016 – February 2017).

Phase I Survey for a 0.5-acre Residential Subdivision Los Angeles at the end of Crisler Way, Los Angeles County, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (October 2016 – February 2017).

Deer Lake Residential Development Cultural Monitoring, Porter Ranch, Los Angeles, California

Principal and Project Manager for the cultural monitoring of eight cultural resources within the project development boundary. This project includes the writing of a final Monitoring Report. (May 2016 – February 2017).

Phase I Survey for a 0.5-acre Mixed Use Development Project on Camarillo Avenue, North Hollywood, Los Angeles County, California

Principal and Cultural Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a site survey. This project also included a historic built environment assessment (November 2016 – January 2017).

Phase I Survey for a 14-acre Residential Subdivision, Woodland Hills, California

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a site survey. This project involved consultation with the City of Los Angeles on AB-52 (July 2016 – January 2017).

Lynn Road Residential Development Project, Newbury Park, California

Principal and Project Manager for the Phase Ia and Phase Ib survey of this 10-acre parcel. A large prehistoric Middle-Period seasonal settlement was discovered, which required subsurface testing and extensive mapping of surface hearths, yucca roasters, and dwelling features. Project included public testimony before the Thousand Oaks Planning Commission. (September 2015 – December 2016).

Pepperdine University Campus Life Project: Debris Basin Excavation Cultural and Paleontological Resource Monitoring, Los Angeles, California

Principal and Project Manager for cultural resource monitoring of Phase I of the Pepperdine Campus Life housing, facilities, and trail development project. (August – October 2016).

Trail Construction Monitoring, Conrad N. Hilton Foundation.

Principal and Project Manager for the development of a pedestrian foot trail loop between the Foundation and the nearby "Ridge" professional building, including the excavation of dozens of shovel test pits and a major surface collection of prehistoric artifacts, including trail construction monitoring. (August – September 2016).

Conrad N. Hilton Foundation Trail Project Cultural Assessment, Agoura Hills, Los Angeles County, California

Project Manager for the Phase 1b survey of a new pedestrian access trail linking off-site office space with the Foundation campus buildings. Project included the excavation of over 30 shovel test pits and the recording of numerous prehistoric features. (May – August 2016).

32640 PCH Phase I Cultural Resource Survey, Santa Monica, California

Principal and Project Manager for the Phase I cultural resource assessment of a ravine rehabilitation project between the Pacific Coast Highway and the Pacific Ocean. Included a SCCIC/NAHC record search, site survey, and technical report. (May 2015 – June 2016).

CA-LAN-320 Project Compliance Plans, and Native American and Lead Agency Consultation, Agoura Hills, Los Angeles County, California

Tasks included the authoring of a cultural resource Treatment and Data Recovery Plan, a cultural resource Management Plan, and a Curation Plan for all artifacts, as well as the organization of meetings with the Chumash Tribal Groups and the Lead Agency. (April 2015 – June 2016).

Canyon Park Homes, Sylmar, Los Angeles County, California

Native American Tribal Group consultation and pre-construction monitoring for this 80-acre residential property development, as well as EIR section writing. (February 2015 – March 2016).

Oakwood Schools Built Environment and Archaeological Assessment, North Hollywood, Los Angeles County, California

Principal and Project Manager for the Phase I cultural resource assessment of the project property prior to the construction of a new middle and high school campus within the North Hollywood area. Challenging tasks included Native American ghost writing for the lead agency (City of Los Angeles) and addressing a modern human cremation garden in the report (November 2015 – February 2016).

Floral Canyon Residential Development Cultural Resource Survey, North Hollywood, California

Principal and Project Manager for this Phase Ia cultural resource survey of an 8-acrea property. The cultural resource parts of the CEQA checklist were also completed. (September – December 2015).

Hilton Property Phase 3 Construction Site Phase Ib Cultural Resources Survey, Agoura Hills, Los Angeles County, California

Principal and Project manager for this extensive preliminary survey project, including excavation of over 200 shovel test pits and 4 test units to define the boundaries of a prehistoric ceremonial site of over 80-acres in size, used by Chumash Native Americans from 400 A.D. to the late 1700s. Recordation of over 190-features and 11,500 artifacts. Second phase will include data recovery tasks and an amended Environmental Impact Report. (February 2014 – March 2015).

Blessed Theresa Church Construction, City of Winchester, Riverside County, California

Cultural consultation including cultural/paleo monitoring issues. (April 2014 – July 2014).

Village at Los Carneros, City of Goleta, Santa Barbara County, California

Reviewed all previous technical studies and wrote part of the cultural sections of the Environmental Impact Report for this residential house development project. (March 2014 – April 2014).

3121 Old Topanga Canyon Road Phase I Survey and Literature Search, Calabasas, Los Angeles County, California

Principal and Project manager for this residential development project, including NAHC letters, literature review, site survey, paleontological survey and literature search, final technical report, and the writing of the cultural resources section of the Environmental Impact Report. (March 2014 – April 2014).

APPENDIX F

Energy Calculations

1651 Lynn Road

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Ventura (SCC)
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Yea	Vehicle Cate	Model Year	Speed	Fuel	Population	Total VMT	Trips	Fuel Consumption	
Ventura (SCC	2025	HHDT	Aggregate	Aggregate	Gasoline	1.21676945	65.5509345	24.3451231	0.01531249	
Ventura (SCC	2025	LDA	Aggregate	Aggregate	Gasoline	235982.792	9485022.33	1090309.13	307.099189	
Ventura (SCC	2025	LDT1	Aggregate	Aggregate	Gasoline	23554.1894	817043.943	101540.511	32.2126041	
Ventura (SCC	2025	LDT2	Aggregate	Aggregate	Gasoline	108590.591	4512101.35	504994.455	180.216705	
Ventura (SCC	2025	LHDT1	Aggregate	Aggregate	Gasoline	9133.71133	361575.333	136078.69	25.8997971	
Ventura (SCC	2025	LHDT2	Aggregate	Aggregate	Gasoline	1521.75028	57382.2851	22671.8117	4.69356877	
Ventura (SCC	2025	MCY	Aggregate	Aggregate	Gasoline	14577.908	86242.6168	29155.8159	2.08898089	
Ventura (SCC	2025	MDV	Aggregate	Aggregate	Gasoline	77077.123	2851763.26	350602.975	141.25597	
Ventura (SCC	2025	MH	Aggregate	Aggregate	Gasoline	2834.17496	25590.519	283.530863	5.17069978	
Ventura (SCC	2025	MHDT	Aggregate	Aggregate	Gasoline	672.151063	33676.3277	13448.3985	6.27782579	
Ventura (SCC	2025	OBUS	Aggregate	Aggregate	Gasoline	234.120337	8975.78024	4684.27969	1.72958433	
Ventura (SCC	2025	SBUS	Aggregate	Aggregate	Gasoline	119.872792	5195.91259	479.491169	0.5787673	
Ventura (SCC	2025	UBUS	Aggregate	Aggregate	Gasoline	36.9920429	3207.99817	147.968172	0.64489369	
							18247843.2		707.883898	
										25.78 MPG

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Ventura (SCC)
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Yea	Vehicle Cate	Model Year	Speed	Fuel	Population	Total VMT	Trips	Fuel Consumption
Ventura (SCC	2025	HHDT	Aggregate	Aggregate	Diesel	3106.54957	350551.835	42801.4633	57.1612056
Ventura (SCC	2025	LDA	Aggregate	Aggregate	Diesel	1009.97917	30276.4617	4213.2959	0.70780047
Ventura (SCC	2025	LDT1	Aggregate	Aggregate	Diesel	15.7047494	214.46927	44.0799023	0.00890589
Ventura (SCC	2025	LDT2	Aggregate	Aggregate	Diesel	501.485505	21503.6559	2372.96019	0.66509014
Ventura (SCC	2025	LHDT1	Aggregate	Aggregate	Diesel	7781.69581	307074.103	97883.9439	14.7114081
Ventura (SCC	2025	LHDT2	Aggregate	Aggregate	Diesel	3151.70274	127568.843	39644.4556	7.30381832
Ventura (SCC	2025	MDV	Aggregate	Aggregate	Diesel	1366.89942	51362.9592	6294.45653	2.13894033
Ventura (SCC	2025	MH	Aggregate	Aggregate	Diesel	1135.07579	10818.7528	113.507579	1.05201913
Ventura (SCC	2025	MHDT	Aggregate	Aggregate	Diesel	6199.51709	256183.774	74240.953	28.2579426
Ventura (SCC	2025	OBUS	Aggregate	Aggregate	Diesel	119.759294	7476.5062	1223.66413	0.88745636
Ventura (SCC	2025	SBUS	Aggregate	Aggregate	Diesel	380.111524	8677.09241	5504.01487	1.13201982
Ventura (SCC	2025	UBUS	Aggregate	Aggregate	Diesel	36.8859676	6523.00365	147.54387	1.04158751
							1178231.46		115.068194

10.24	MPG	All Diesel
6.13	MPG	Hauling (HHDT)

1651 Lynn Road

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Ventura (SCC)
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Yea	Vehicle Cate	Model Year	Speed	Fuel	Population	Total VMT	Trips	Fuel Consumption	
Ventura (SCC	2026	HHDT	Aggregate	Aggregate	Gasoline	0.82674939	63.8108977	16.5416019	0.01393603	
Ventura (SCC	2026	LDA	Aggregate	Aggregate	Gasoline	233919.932	9436366.35	1080418.39	298.981486	
Ventura (SCC	2026	LDT1	Aggregate	Aggregate	Gasoline	22794.715	793772.699	98170.0124	30.745598	
Ventura (SCC	2026	LDT2	Aggregate	Aggregate	Gasoline	108712.255	4531366.3	505336.225	176.66253	
Ventura (SCC	2026	LHDT1	Aggregate	Aggregate	Gasoline	8929.45331	357463.891	133035.549	24.9775105	
Ventura (SCC	2026	LHDT2	Aggregate	Aggregate	Gasoline	1486.27359	56237.2557	22143.2619	4.50824632	
Ventura (SCC	2026	MCY	Aggregate	Aggregate	Gasoline	14428.1425	85251.5479	28856.2851	2.05618844	
Ventura (SCC	2026	MDV	Aggregate	Aggregate	Gasoline	75651.2163	2810287.98	343889.829	136.050741	
Ventura (SCC	2026	MH	Aggregate	Aggregate	Gasoline	2654.37275	23928.2048	265.54345	4.83413818	
Ventura (SCC	2026	MHDT	Aggregate	Aggregate	Gasoline	660.924126	33665.4823	13223.7699	6.20005663	
Ventura (SCC	2026	OBUS	Aggregate	Aggregate	Gasoline	226.266257	8529.64073	4527.13527	1.62961304	
Ventura (SCC	2026	SBUS	Aggregate	Aggregate	Gasoline	120.835533	5266.62092	483.342131	0.58413352	
Ventura (SCC	2026	UBUS	Aggregate	Aggregate	Gasoline	37.0665582	3214.46023	148.266233	0.6418187	
							18145414.2		687.885997	
									26.38	MPG

1651 Lynn Road: Energy Calculations

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Ventura (SCC)
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Yea	Vehicle Cate	Model Year	Speed	Fuel	Population	Total VMT	Trips	Fuel Consumption
Ventura (SCC	2026	HHDT	Aggregate	Aggregate	Diesel	3166.66448	353459.417	43743.5757	56.7770063
Ventura (SCC	2026	LDA	Aggregate	Aggregate	Diesel	916.266995	27269.9775	3817.6503	0.63162875
Ventura (SCC	2026	LDT1	Aggregate	Aggregate	Diesel	13.0023963	174.626807	35.9482042	0.00721761
Ventura (SCC	2026	LDT2	Aggregate	Aggregate	Diesel	501.984882	21306.8116	2364.02957	0.64803164
Ventura (SCC	2026	LHDT1	Aggregate	Aggregate	Diesel	7665.9722	302720.632	96428.2865	14.4363151
Ventura (SCC	2026	LHDT2	Aggregate	Aggregate	Diesel	3150.36653	127141.82	39627.6478	7.22935953
Ventura (SCC	2026	MDV	Aggregate	Aggregate	Diesel	1325.47902	49058.9752	6066.76772	2.01521627
Ventura (SCC	2026	MH	Aggregate	Aggregate	Diesel	1118.26382	10521.2557	111.826382	1.02313502
Ventura (SCC	2026	MHDT	Aggregate	Aggregate	Diesel	6288.97727	256631.243	75360.8125	28.2052001
Ventura (SCC	2026	OBUS	Aggregate	Aggregate	Diesel	121.953864	7457.2852	1249.82858	0.87801935
Ventura (SCC	2026	SBUS	Aggregate	Aggregate	Diesel	380.667986	8638.54553	5512.07243	1.12322554
Ventura (SCC	2026	UBUS	Aggregate	Aggregate	Diesel	34.9414148	6346.71297	139.765659	1.02809125
							1170727.3		114.002446

10.27	MPG	All Diesel
6.23	MPG	Hauling (HHDT)

1651 Lynn Road: Energy Calculations

Construction Phase	Worker Trips/day	Worker Miles/trip	Days	Worker Miles
Demolition	15	18.5	20	5,550
Site Preparation	5	18.5	10	925
Grading	15.0	18.5	20	5,550
Construction	7.0	18.5	230	29,785
Paving	20.0	18.5	18	6,660
Painting	1.0	18.5	18	333
Total Worker Miles				**48,803**
	EMFAC 2025	Gasoline	Avg. miles/gal	25.78
Worker Fuel Use			Total gallons	**1,893**

Construction Phase	Vendor Trips/day	Vendor Miles/trip	Days	Vendor Miles
Demolition	0	10.2	20	-
Site Preparation	0	10.2	10	-
Grading	0	10.2	20	-
Construction	2	10.2	230	4,692
Paving	0	10.2	18	-
Painting	0	10.2	18	-
Total Vendor Miles				**4,692**
	EMFAC 2025	Diesel	Avg. miles/gal	10.24
Vendor Fuel Use			Total gallons	**458**

Construction Phase	Haul Trips/day	Haul Miles/trip	Days	Haul Miles
Demolition	7	21.0	20	2,940
Site Preparation	14	21.0	10	2,940
Grading	0.0	21.0	20	-
Total Hauling Miles				**5,880**
	EMFAC 2025	Diesel HHDT Only (T7 tractor construction)	Avg. miles/gal	6.13
Hauling Fuel Use			Total gallons	**959**

March 2024

1651 Lynn Road: Energy Calculations

Construction Phase	Equipment	Qty	Hrs/day	HP	Load Factor	#Days	HP hr
Demolition	Concrete/Industrial	1	8	33	0.73	20	3,854
	Excavators	3	8	36	0.38	20	6,566
	Rubber Tired Dozer	2	8	367	0.4	20	46,976
Site Preparation	Rubber Tired Dozer	1	8	367	0.4	10	11,744
	Tractors/Loaders/E	1	8	84	0.37	10	2,486
Grading	Excavators	1	8	36	0.38	20	2,189
	Graders	1	8	148	0.41	20	9,709
	Rubber Tired Dozer	1	8	367	0.4	20	23,488
	Tractors/Loaders/E	3	8	84	0.37	20	14,918
Construction	Cranes	1	7	367	0.29	230	171,352
	Forklifts	3	8	82	0.2	230	90,528
	Generator Sets	1	8	14	0.74	230	19,062
	Tractors/Loaders/E	3	7	84	0.37	230	150,116
	Welders	1	8	46	0.45	230	38,088
Paving	Cement and Morta	2	6	10	0.56	18	1,210
	Pavers	1	8	81	0.42	18	4,899
	Paving Equipment	2	6	89	0.36	18	6,921
	Rollers	2	6	36	0.38	18	2,955
	Tractors/Loaders/E	1	8	84	0.37	18	4,476
Coating	Air Compressors	1	6	37	0.48	18	1,918
						Total HP	**613,456**
	HP = horsepower						
	gallons of diesel fuel per HP----hour= 0.05					**Gallons**	**30,673**

March 2024

1651 Lynn Road: Energy Calculations

Light-duty (up to 8,500 lb GVWR)	% VMT	Heavy-duty (> 8,500 lb GVWR)	% VMT
LDA	49.35311973	LHD1	3.21240388
LDT1	4.39870469	LHD2	0.89693442
LDT2	21.34097219	MH	0.72374470
MDV	15.10216147	MHD	1.35079371
MCY	2.76790317	HHD	0.64863311
		OBUS	0.06760510
		SBUS	0.09923259
		UBUS	0.03779250
% of VMT	93.0%		7.0%

Vehicle Class	% VMT	Annual VMT	EMFAC 2026 M	Gal/year	Fuel
All		545,734			
light duty	93.0%	507,330	26.38	19,233	gasoline
heavy-duty	7.0%	38,404	10.27	3,740	diesel

APPENDIX G

Geotechnical Report

GOLD COAST GEOSERVICES, INC.
Engineering Geologic and Geotechnical Consultants

GEOTECHNICAL REPORT

Tentative Parcel Map #6081
APN 660-0-030-165 and -175
1651 Lynn Road
Thousand Oaks

for:
1651 LYNN ROAD, LLC

January 11, 2024
File No. GC23-123454

5251 Verdugo Way, Suite J · Camarillo, CA 93012 · (805) 484-5070

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INTRODUCTION

This report presents the findings from an engineering geologic and soils engineering investigation for the proposed 19 lot subdivision of the property at 1651 Lynn Road in the City of Thousand Oaks. This report defines the site geologic and soils conditions, presents an evaluation of the engineering properties of the earth materials, and provides findings regarding the suitability of the site for the proposed development from an engineering geologic standpoint. Based on the findings, recommendations are provided for site preparations, grading, mitigation of geologic hazards, and preliminary foundation design recommendations.

SCOPE OF WORK

The scope of work for this investigation included the completion of the following tasks:

1) Geotechnical analysis of Tentative Parcel Map #6081 prepared by the project civil engineer, *Pacific Coast Civil, Inc*.
2) Review and consideration of geologic and seismologic data for the site and vicinity by State and local agencies (see Reference List in Appendix I).
3) Geologic reconnaissance mapping of the site utilizing the Parcel Map by *Pacific Coast Civil, Inc*. as the base map.
4) Excavation of exploratory backhoe-dug test pits for classification and sampling of the earth materials across the site.
5) Testing at our laboratory to determine pertinent engineering properties of the soil obtained from the exploratory excavations.
6) Geotechnical analysis of the assembled data with respect to the proposed development.
7) Preparation of this report to present a discussion of our procedures, findings, and geotechnical recommendations for the proposed development.

Geologic and soils data and the locations of the exploratory excavations are shown on the Geotechnical Map included in this report in Appendix III. Descriptions of the earth materials encountered in the exploratory excavations are provided on the Test Pit Logs in Appendix III. Laboratory test results are presented in Appendix II.

PROPOSED DEVELOPMENT

As shown on the Parcel Map by *Pacific Coast Civil, Inc*., used as the base map for the Geotechnical Map with this report, it is proposed to perform cut and fill grading in conjunction with retaining walls up to 6 feet in height, to create 18 building pads for 18 single family residences. A community pool area and recreation area / barbecue areas is proposed to be constructed at the northwest side of the site, on the 19th proposed parcel. An access road to each proposed lot is proposed to be constructed from Lynn Road through the site, as shown on the Geotechnical Map.

Site preparations will include removal and recompaction earthwork to create suitable soils conditions for support of the proposed structures and street, and fine grading as necessary to establish positive drainage control. Cut and fill slopes are proposed at maximum 2h:1v slope ratio, with maximum slope height of about 20 feet. Retaining walls are proposed, to a maximum height of 6 feet.

FINDINGS

Site Description

The property is located on the north side of Lynn Road, 1/4 of a mile west of Ventu Park Road in the City of Thousand Oaks (see Site Location Map, Figure 1). The property incorporates gentle to moderate sloping alluvial valley bottom terrain, situated at the south side of Conejo Valley, at the north front of the Santa Monica Mountains.

The site contains an existing single family residence at its southeasterly side. The existing residence is to be removed to accommodate the proposed development. The site is bordered by residential developments on its east and west sides. Undeveloped land adjoins the north side of the site. Lynn Road is located along the south side of the site.

Slopes within and adjacent to the site do not exceed 2h:1v slope ratio. The Geologic Cross-Sections in Appendix III show representative profiles of the surface and subsurface conditions determined from this investigation with respect to the proposed development.



BASE MAP: USGS 7.5' NEWBURY PARK QUADRANGLE

NORTH
1" = 2000'

GOLD COAST GEOSERVICES, INC.	**SITE LOCATION MAP** 1651 LYNN ROAD, THOUSAND OAKS	DATE: 12/29/2023 FILE NO.: GC23-123454 FIGURE 1

Drainage

Site drainage is by topographically controlled sheetflow runoff to the north. No drainage courses occur within or adjacent to this site. No groundwater seeps or springs occur within or adjacent to this site. No concentrated flows occur during or following seasonal rainstorms.

EARTH MATERIALS

Descriptions of the earth materials are provided on the Test Pit Logs in Appendix III, and are also summarized as follows:

Native Soils

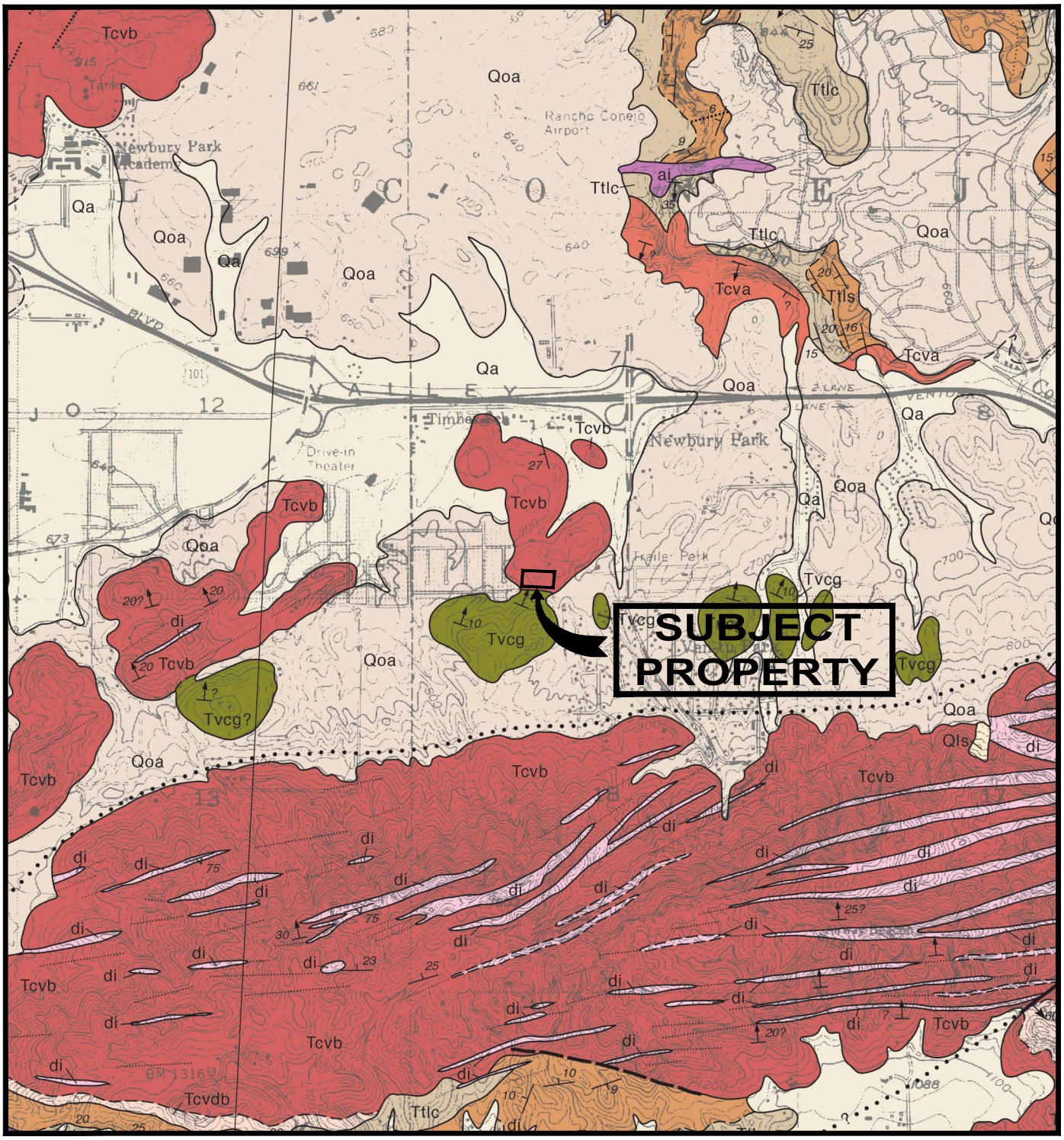
The site is underlain by native soils, classified as residual soil, colluvium (gravity and sheetflow deposits), and Older Alluvium. The soil typically consists of dark brown clayey sand with gravel to sandy clay with gravel that is medium dense to dense. The Older Alluvium, beneath the residual soils and beneath the colluvium becomes very dense / stiff or hard, and is considered to be suitable as foundation bearing material, or as base material for placement of compacted fill.

Bedrock (Conejo Volcanics)

The native soil is underlain by Conejo Volcanics, comprised of grayish brown to light reddish brown basalt and basaltic flow breccia. The Conejo Volcanics are hard to very hard, and will provide good foundation bearing material, and as base material for placement of compacted fill.

Geologic Structure and Landslide Hazards Assessment

The landslide hazard potential at and adjacent to the building site is considered to be low, as evidenced by the lack of previous landslides, and to the lack of adverse geologic conditions at the building site. No adverse geologic conditions and no daylighted bedding plane conditions were encountered during this investigation. The Conejo Volcanics are comprised of massive (unstratified) basalt and basaltic flow breccia. Geologic maps and data for this site do not indicate the presence of daylighted bedding planes or landslides



BASE MAP: THOMAS W. DIBBLEE JR., GEOLOGIC MAP OF THE CAMARILLO & NEWBURY PARK (1990) QUADRANGLE.

NORTH
1" = 2000'

GOLD COAST GEOSERVICES, INC.	**GEOLOGIC SITE LOCATION MAP** 1651 LYNN ROAD, THOUSAND OAKS	DATE: 01/05/2024 FILE NO.:GC23-123454 FIGURE 2

at or adjacent to this site. The proposed building areas are not located within a "seismically-induced landslide hazard area" as designated by the California Geological Survey (CGS) on the Seismic Hazards Zone Map for the Newbury Park Quadrangle.

Groundwater

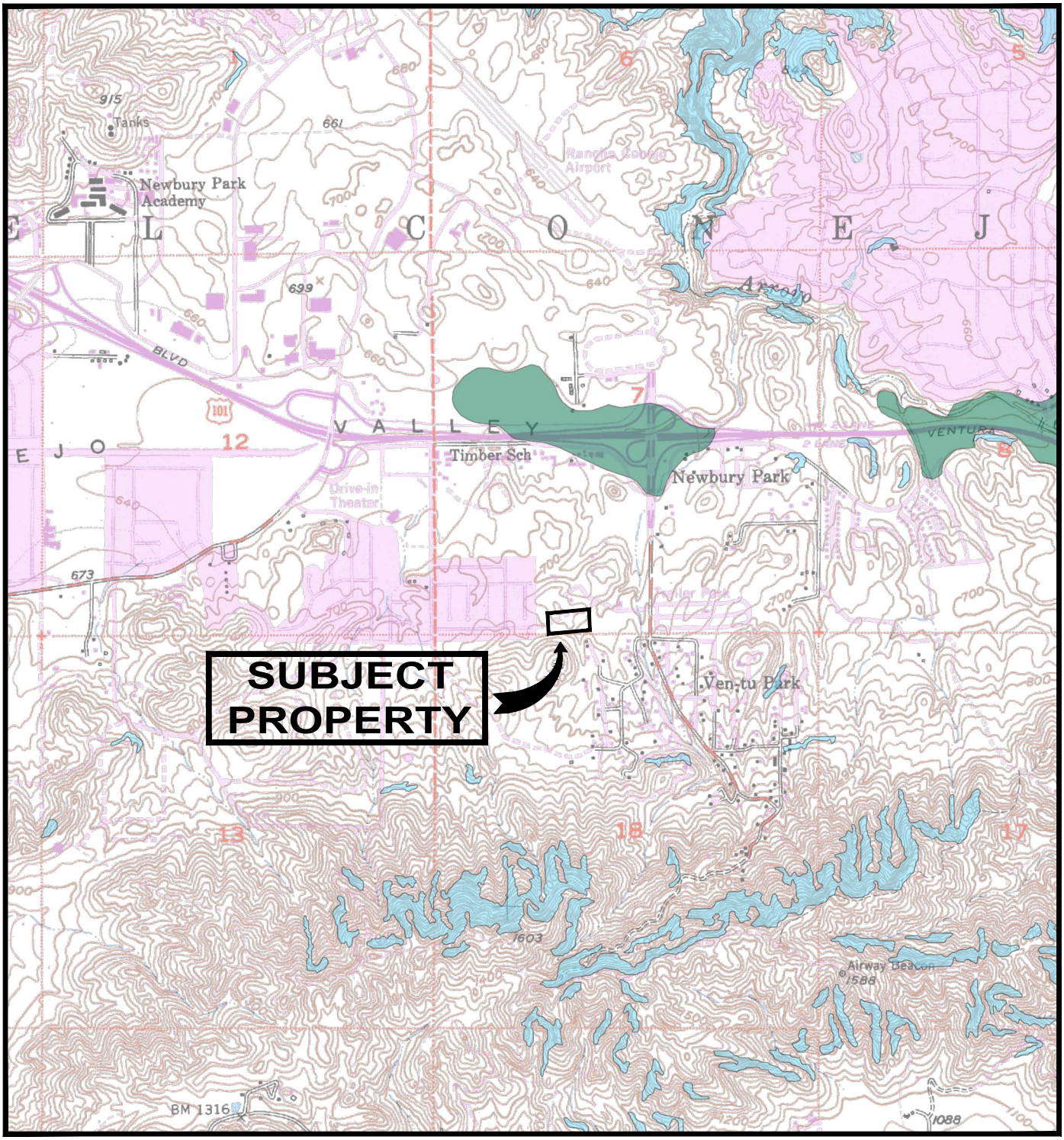
No groundwater was encountered during this investigation. Based on our review of the historical high groundwater map presented in CDMG "Seismic Hazard Zone Report" for the Newbury Park Quadrangle, the highest historical groundwater level in the site vicinity exceeds 50 feet.

Faulting and Seismic Hazards

The site is located in the westerly part of the Transverse Ranges Geomorphic Province, characterized by predominantly east-west trending fault systems, mountain ranges, and valleys. The site is not located within a State of California "Earthquake Fault Area". This site is not known to be underlain by active or potentially active faults. No faults or indications of possible faulting were observed during the field investigations.

The closest significant fault to the site is the east-west trending Simi-Santa Rosa fault, which is mapped about 10 miles north of this property. Several other fault systems that are capable of producing earthquakes, including the Oakridge fault, Malibu fault, and San Andreas fault, are located within 50 miles of the property. Earthquakes along any of the numerous fault systems within the southern California area could cause moderate to strong ground shaking to occur at this property.

Ground failure phenomena due to strong ground shaking, including liquefaction hazards and seismically-induced landslide hazards, were evaluated for the proposed development. It is our finding that the proposed building areas are not located within areas designated by the State of California as having the potential for "seismically-induced liquefaction hazards", or for "seismically-induced landslide hazards". The proposed building sites are adequately and safely removed from any slope areas, so that seismically-induced landslide hazards (including rockfall) are not considered to be potential hazards at this site.



BASE MAP: CGS 7.5-MINUTE, SEISMIC HAZARD ZONE MAP OF THE NEWBURY PARK (02/07/2002) QUADRANGLE.

NORTH
1" = 2000'

GOLD COAST GEOSERVICES, INC.	SITE MAP SHOWING LOCATION OF PROPERTY WITH RESPECT TO SEISMIC HAZARDS ZONES 1651 LYNN ROAD, THOUSAND OAKS	DATE: 01/05/2024 FILE NO.:GC23-123454 FIGURE 3

CONCLUSIONS AND RECOMMENDATIONS

Based upon the findings from this investigation, the site is considered to be suitable from engineering geologic and soils engineering standpoints for the planned tract development. The following geotechnical recommendations are provided for consideration by the design and construction professionals for this project. The geotechnical recommendations in this report shall be considered in plans for development.

SITE PREPARATIONS

The preliminary grading plan by *Pacific Coast Civil, Inc*. calls for engineered grading to create the proposed street and building pads for the proposed single family residences. Areas to receive engineered fill shall be prepared by removing all unsuitable soils, including all existing fill material and all existing loose or unsuitable native soils (residual soils and colluvium), extending down into dense Older Alluvium or dense volcanic bedrock, to establish a suitable firm/dense subbase for placement of engineered fill material.

Site preparations for the proposed residences at each proposed building site shall be adequate in scope to create a compacted fill mass for foundation support within the entire building area, and extending at least 5 feet beyond the building area. This will require overexcavation and recompaction earthwork, as necessary to create a uniformly thick compacted fill mass within each proposed building area. The thickness of compacted fill shall be a minimum of 3 feet, as measured from proposed pad grade, and shall be at least 2 feet in thickness below all proposed foundations. A typical "Cut-Fill Transition" detail is provided as Figure 5. This detail shall be made part of the Grading Plan.

SHRINKAGE, BULKING, AND IMPORT MATERIAL

Removal and recompaction of the on site earth materials will result in volumetric changes (shrinkage and bulking). A shrinkage factor of 10% is estimated for areas where existing soils and Alluvium will be removed and replaced as compacted fill. Additional losses will result from ground subsidence during site preparations and from removal of deleterious

surface debris and vegetation. Losses due to shrinkage and subsidence may result in the need to import earth fill material to achieve the proposed grades. A bulking factor of 5% is estimated for areas where volcanic bedrock will be removed and replaced as compacted fill.

Imported fill material shall be free of debris and rocks greater than 8 inches at the widest point. Imported soils shall be granular, not clayey, and have a low expansion index (E.I. less than 50). The rock-to-soil ratio of the import material shall not exceed 30%. Any earth materials that are to be imported for placement within proposed building areas or within proposed road beds shall be approved by the soils engineer, prior to import to the site.

FILL PLACEMENT

The on site soils may be utilized for placement as engineered fill, provided they are cleansed of unsuitable or deleterious debris and rocks exceeding 8 inches in diameter.

All proposed fill shall be placed at optimum moisture content in layers approximately 6-8 inches in thickness, and compacted by mechanical means to 90% relative compaction. Compaction tests shall be performed by the soils engineer for every 2 vertical feet of fill placed, or as otherwise necessary to verify adequate compaction.

PIPELINES, WATER WELLS, CESSPOOLS, AND SEPTIC TANKS

Pipelines, water wells, cesspools or septic tanks may be encountered during site preparations. If encountered, these structures shall be properly abandoned in accordance with State and local requirements, and in accordance with the recommendations and approval of the engineering geologist and soils engineer.

EXCAVATIONS AND CUT SLOPES

Excavations that will exceed a vertical height of 4 feet shall be made using the sloped excavation method, with the portion of cut exceeding a height of 4 feet sloped at a 1h:1v slope ratio, or as otherwise required for worker safety. Excavations into the underlying

volcanic bedrock may encounter hard rock conditions. The contractor shall consider the possibility that jackhammering may be required to complete excavations extending into the formation materials.

All excavations and cut slopes shall be observed and approved by the engineering geologist, as they are made. Cut slopes that may be found to expose adverse geologic conditions shall be mitigated by corrective grading or other methods approved by the engineering geologist and soils engineer, to provide suitable finished slope surface conditions.

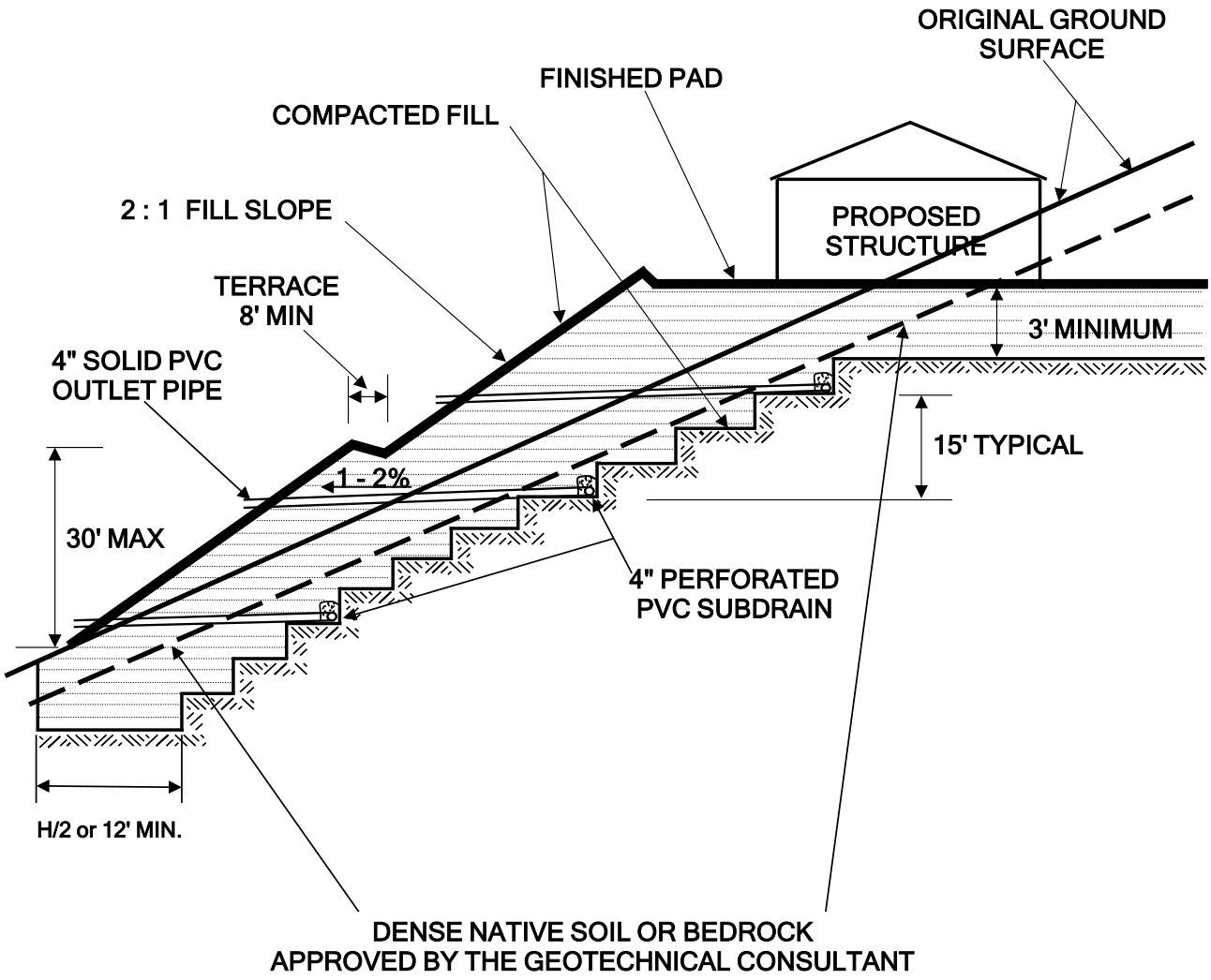
FILL SLOPE CONSTRUCTION

A key shall be provided at the toe of any earth fill to be placed on any slope having a slope ratio of 5h:1v or steeper (see "Fill Slope Detail", Figure 4). The key shall extend a minimum of 12 inches deep into approved formation material or into approved dense alluvium. As the fill is placed, it shall be benched into dense formation materials as work progresses upslope. The resulting fill slopes should be overfilled and trimmed back in order to expose a compacted core at the finished slope surface. Alternatively, the slope faces may be compacted by vibratory sheepsfoot, or other method found acceptable to achieve 90% compaction at the finished slope surface.

CUT-FILL TRANSITIONS

For building pads where a "cut-fill transition" will traverse the proposed building pad, site preparations shall be performed to create a compacted fill mass of sufficient thickness within the entire building area that does not exceed a differential thickness of more than 15% across the entire building area, extending at least 5 feet beyond the building area or equivalent to the depth of removal, whichever is greater. This will require overexcavation and recompaction to create a uniformly thick compacted fill mass within the building area. A typical "Cut-Fill Transition" detail is provided as Figure 5. This detail shall be made part of the Grading Plan.

FILL SLOPE DETAIL



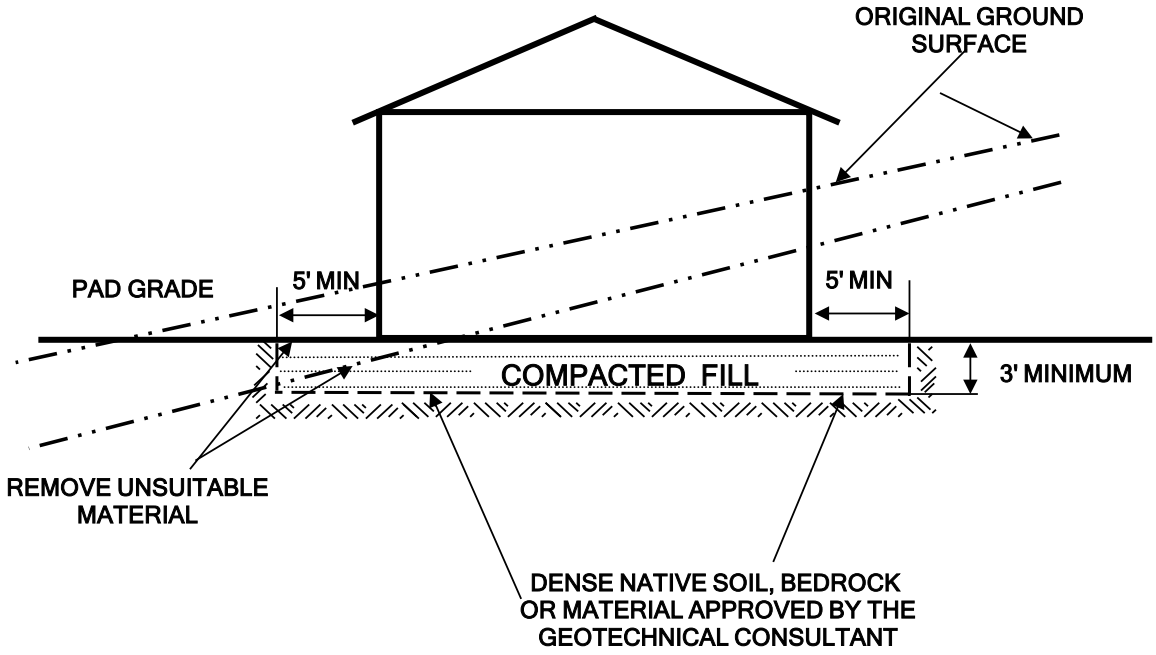
TYPICAL BACKDRAIN/SUBDRAIN

Perforated backdrain shall consist of 4-inch diameter PVC pipe (schedule 40) or approved equivalent surrounded by 3 cu.ft./ft. approved filter material (3/4-inch rock or equivalent) wrapped by approved filter cloth (Mirafi N-series or equivalent)

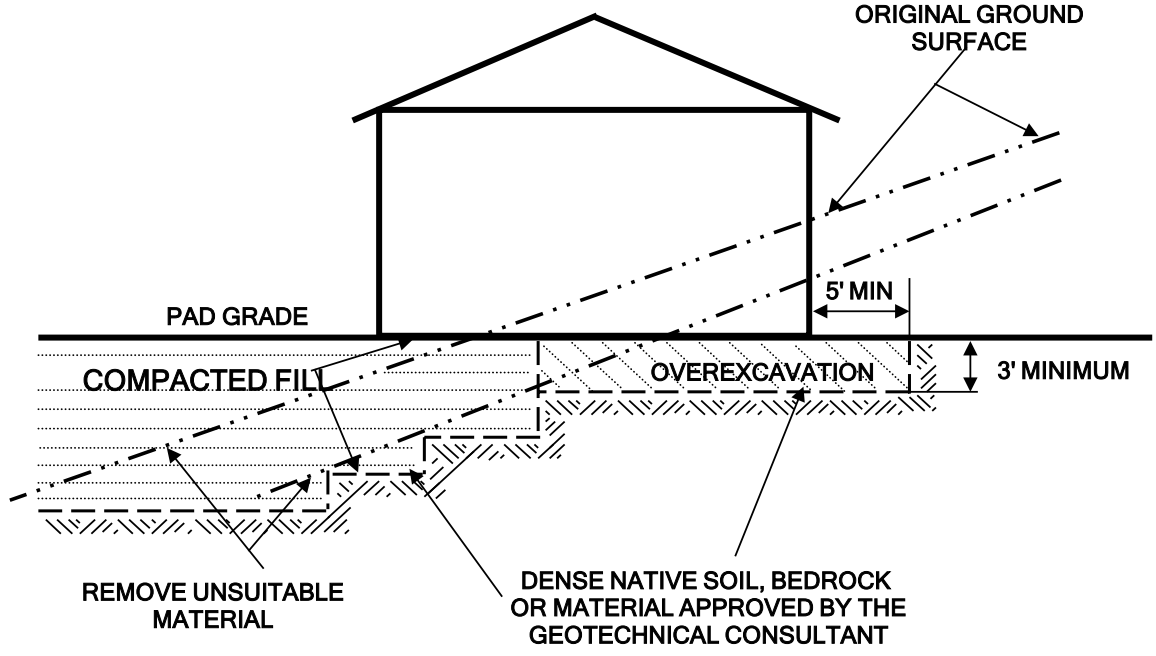
NOT TO SCALE

Gold Coast GeoServices, Inc.	**FILL SLOPE DETAIL**	FIGURE 4

CUT LOT



TRANSITION (CUT - FILL) LOT



NOT TO SCALE

Gold Coast GeoServices, Inc.	**CUT FILL TRANSITION DETAIL**	**FIGURE 5**

AREAS TO RECEIVE PAVEMENT

Proposed street areas to receive pavement shall be prepared by removing unsuitable surficial soil materials, extending down into dense underlying native soil or into dense Conejo Volcanics material, to establish a suitable subbase for placement of subbase material. In proposed street areas underlain by alluvium, it is recommended that the depth of removal of loose alluvium extend to a minimum depth of 3 feet below existing grade, extending down into dense alluvium, prior to the placement of engineered subbase material. Base material shall be compacted to a minimum of 95% relative compaction up to pavement subgrade. Processed miscellaneous base (PMB) may be utilized. Preliminary structural section design for proposed street areas may utilize a pavement structural section consisting of 4 inches of A/C over 8 inches of 95% compacted base. The R-value of the subbase material within the proposed roadway shall be determined with laboratory testing and the actual pavement structural section to be used shall be verified prior to placement of base or pavement. A pavement structural section consisting of 3 inches of A/C over 4 inches of 95% compacted base material may be used for proposed driveways.

SITE DRAINAGE AND INFILTRATION ANALYSIS

Final site grading shall provide positive drainage away from the buildings and from the lots. All pad and roof drainage shall be collected and transferred away from the footings and away from descending slope areas, via non-erosive devices to an approved disposal site. Drainage shall not be released in a concentrated manner that might cause erosion.

The site conditions are not considered conducive to usage of drainage infiltration systems, due to low permeability and poor porosity of the soils and volcanic bedrock underlying this site. On site drainage disposal must utilize rainwater harvesting or bio-infiltration techniques, or other acceptable systems.

FOUNDATION SYSTEMS

Subsequent to site preparations and engineering certification of the building areas, as recommended herein, conventional spread footings or independent footings may be used to support the proposed structures. All footings shall be a minimum of 15 inches wide and embedded a minimum of 24 inches into compacted fill for single-story or two-story construction. Foundation design criteria determined from this investigation are as follows:
EXPANSION INDEX RANGE = 51-90 (medium)

Footings

Allowable Bearing Capacity	2,000 PSF
Allowable Lateral Resistance	300 PSF/FT
Maximum Lateral Resistance	2,000 PSF
Coefficient of Friction	0.3
Minimum Reinforcement	2 #4 bars, one near top and one near bottom

Slabs-On-Grade

Thickness	Nominal 4 ins.
Minimum Reinforcement	#3 bars @ 18 ins. each way, dowel footings to slab
Bedding (including driveways and walkways)	4 ins. of fill sand or 1/2 inch crushed aggregate

Note: at a minimum, place a moisture barrier / waterproof barrier (minimum 10-mil visqueen or Stego Wrap® or equivalent) within bedding layer beneath all slab areas.

ESTIMATED SETTLEMENT

Settlement is not expected or is anticipated to be negligible for foundations prepared as recommended in this report. Total settlement (including seismically-induced settlement) is not expected to exceed 1/2 inch. Differential settlement is not expected to exceed 1/2 inch in a lateral span of 30 feet.

SEISMIC DESIGN PARAMETERS

The following CBC seismic design parameters were determined in accordance with ASCE/SEI 7-16 incorporating USGS Seismic Design Maps. Seismic Design Category D and Seismic Importance Factor I_e = 1.0 are applicable to the project as proposed.

Seismic Use Group	Site Classification	Mapped Spectral Accelerations		Spectral Response Coefficients		Adjusted Maximum Accelerations		Design Spectral Accelerations	
II	C	S_S	S_1	F_a	F_v	S_{MS}	S_{M1}	S_{DS}	S_{D1}
		1.452	0.523	1.2	1.47	1.742	0.773	1.161	0.515

RETAINING WALLS: ACTIVE EARTH PRESSURE

Cantilevered walls retaining the on-site materials may be designed for applicable active pressures given on the following table. The allowable bearing, friction, and passive earth pressure may be found in the preceding sections.

Surface Slope of Retained Material Horizontal to Vertical	Equivalent Fluid Weight (pcf)
Level	35
2 to 1	45

RETAINING WALLS: BACKFILL AND DRAINAGE

All walls shall be effectively waterproofed and effectively drained. A perforated 4-inch diameter Schedule 40 PVC subdrain pipe, or approved equivalent, shall be placed within a 12-inch x 12-inch bed of 3/4 inch rock at the base of the retaining walls, and shall be drained to discharge to an approved drainage disposal site. All walls shall be backfilled with free-draining (granular) 90% compacted soil, or 3/4 inch rock, placed against the wall up to finish grade. Where the cavity to be filled behind a wall is less than 18 inches, the use

of 3/4 inch rock or equivalent is recommended. In order to reduce the migration of water behind retaining walls, the surface of the backfill should be sealed with 18 inch thick 90% compacted clayey fill material or a paved swale.

POOL SHELL DESIGN

Pool walls may be designed for an equivalent fluid pressure of 45 pcf. The pool should be designed utilizing "no-deck detail" for expansive soil. A hydrostatic relief valve may be incorporated into the pool design.

EXPANSIVE SOILS

The soil underlying this site is in the medium expansion index range. Expansive soils are those which contain clay minerals which change in volume (shrink or swell) with changes in soil moisture content. When there is a change in the moisture content there will be movement, with anticipated shrinking or swelling phenomenon that may on the order of about 1 inch or more. Differential shrinking or swelling can cause damage to foundation systems and concrete flatwork, which can cause cracks to develop in concrete and in interior walls. The following recommendations, at a minimum, are recommended for this site due to the presence of expansive soils:

1. The expansion index for each lot shall be determined by the soils engineer at the completion of grading. Updated recommendations for treatment of expansive soils shall be provided, as necessary, based on the actual expansion index for each lot.
2. Positive drainage shall be established and maintained at all times.
3. Leaking water lines and irrigation lines shall be immediately repaired.
4. Trees shall be planted away from the structures or flatwork at an adequate distance, so that roots can not draw moisture from the subgrade soils which may result in shrinkage and settlement.
5. If planters are located adjacent to structures and/or concrete flat work, they shall be constructed so that irrigation water will not saturate the soils underlying the footings and slabs, as excessive saturation of soils beneath the footings and slabs due to poor drainage may result in concrete and structural damage.

CORROSION CONTROL RECOMMENDATIONS

The soils at this site are corrosive to buried metals. The life of buried materials depends on thickness, strength, loads, construction details, soil moisture, etc., in addition to soil corrosivity, and can therefore be difficult to predict. Of more practical value are corrosion control methods that will increase the life of materials that would be subject to significant corrosion. The following methods are considered useful to mitigate potentially adverse effects of corrosive soils:

1. Bond underground steel pipe with rubber gasketed, mechanical, groove end, or other nonconductive type joints for electrical continuity. Electrical continuity is necessary for corrosion monitoring and cathodic protection.
2. As a longer life alternative to dielectric coating, apply a cement mortar coating, or encase in cement-slurry or concrete 3 inches thick, using any type of cement.
3. Encase cast and ductile iron piping in 8-mil thick low-density polyethylene or 4-mil thick high-density, cross-laminated polyethylene plastic tubes or wraps per AWWA Standard C105; or coat using polyurethane, extruded polyethylene, or hot applied coal tar enamel. However, do not use the low density polyethylene wrap on flange joints or any other sharp-edge items. As an alternative, encase iron piping with cement slurry on concrete at least 4 inches thick surrounding the pipe, using and type of cement. Electrically insulate underground iron pipe from dissimilar metals and above ground iron pipe with insulated joints.
4. Copper tubing should be bedded and backfilled in clean sand at least 3 inches thick surrounding the tubing.
5. No special precautions are required for plastic piping placed underground from a corrosion viewpoint. Protect any iron valves and fittings with a 4-mil polyethylene wrap per AWWA C105 or as described below for bare steel appurtenances.
6. On any type of pipe, coat bare steel appurtenances such as bolt, joint harnesses, or flexible couplings with a coal tar or elastomer based mastic, coal tar epoxy, moldable sealant, wax tape, or equivalent after assembly.
7. Where metallic pipelines penetrate concrete structures such as building floors or walls, use plastic sleeves, rubber seals, or other dielectric material to prevent pipe contact with the concrete and reinforcing steel.

PLAN REVIEW

A set of grading plans and building plans shall be submitted to the soils engineer and engineering geologist for review and verification of plan compliance with the geotechnical recommendations in this report.

OBSERVATIONS AND TESTING

All earthwork aspects of the project shall be approved with adequate soil testing and geotechnical observation/analysis during the various planning and construction phases. At a minimum, the following geotechnical observations and soil testing are required during the site preparations, grading, foundation construction, and pavement construction.

1. All removal excavation bottoms shall be observed and approved, prior to placement of engineered fill.
2. Compaction tests shall be performed for every 2 vertical feet of fill placed, at a minimum, or as otherwise necessary to assure adequate compaction.
3. Excavations and cut slopes shall be observed and approved by the engineering geologist.
4. Utility line trench backfill material shall be tested by the soils engineer to verify minimum 90% compaction.
5. Foundation excavations shall be observed and approved, prior to placing steel reinforcement or concrete.

REMARKS

This report is issued with the understanding that it is the responsibility of the owner, or their representative, to assure that the information and recommendations contained herein are called to the attention of the designers and builders for the project. The conclusions and recommendations provided in this report shall be reviewed by us when the construction plans become available, and may need to be revised or modified after our review.

For the purposes of this report, it can only be assumed by us that the subsurface conditions do not deviate significantly in the unexplored areas of the property from those at the exposed locations. If conditions are encountered during grading or construction which are found to be different from those described in this report, we must be notified so that we can consider the need for revisions or modifications to the geotechnical recommendations.

Please call this office at (805) 484-5070 if you have any questions regarding this report. Thank you for the opportunity to be of service on this proposed development.

Respectfully submitted,

GOLD COAST GEOSERVICES, INC.



Scott J. Hogrefe, CEG 1516



Edmond Vardeh, RCE 56992

APPENDIX I

REFERENCE LIST

Association of Engineering Geologists (AEG), 1991 Annual Field Trip Guidebook, "Engineering Geology Along the Simi-Santa Rosa Fault System and Adjacent Areas, Simi Valley to Camarillo, Ventura County, California."

California Division of Mines and Geology, Geologic and Mineral Resources Study of Southern Ventura County, California, Preliminary Report 14, 1973.

California Division of Mines and Geology Open-File Report 76-5-LA, Weber, 1975.

California Division of Mines and Geology "Earthquake Fault Studies Zone Map of the Newbury Park Quadrangle", 2000.

California Division of Mines and Geology, "Seismic Hazards Zone Map of the Newbury Park Quadrangle", 2000.

California Division of Mines and Geology, 1997, Special Report 117, Guidelines for evaluating and mitigating seismic hazards in California.

Geologic Map of the Camarillo-Newbury Park Quadrangle, T. W. Dibblee, Jr., 1992.

APPENDIX II

LABORATORY TEST RESULTS

Laboratory testing was performed on samples of the earth materials obtained at the exploratory excavations to determine pertinent engineering properties for evaluation of proposed earthwork and foundation design. Test procedures and results are as follows:

Maximum Dry Density and Optimum Moisture

Maximum dry density and optimum moisture data were determined on representative soil samples of the on-site soils in conformance with test method ASTM D-1557. Test results are as follows:

Sample Location	Sample Description	Dry Density (lbs/cu.ft.)	Moisture (%)
TP-2 @ 0'-3'	clayey sand	112	15
TP-3 @ 0'-3'	sandy silty clay	109	19

Expansion Index

Expansion index testing was performed on representative samples of soil encountered during our site investigation using the expansion test procedure per ASTM D4829. The expansion index test results are as follows:

Location	Description	Expansion Index
TP-2 @ 1'-3'	clayey sand	56
TP-3 @ 1'-3'	sandy clay	86

The expansion index is in the medium-high range, therefore the soils at this site have the potential for shrink/swell phenomenon that can cause damages to structures. Appropriate treatment is required due to expansive soils (see soils report).

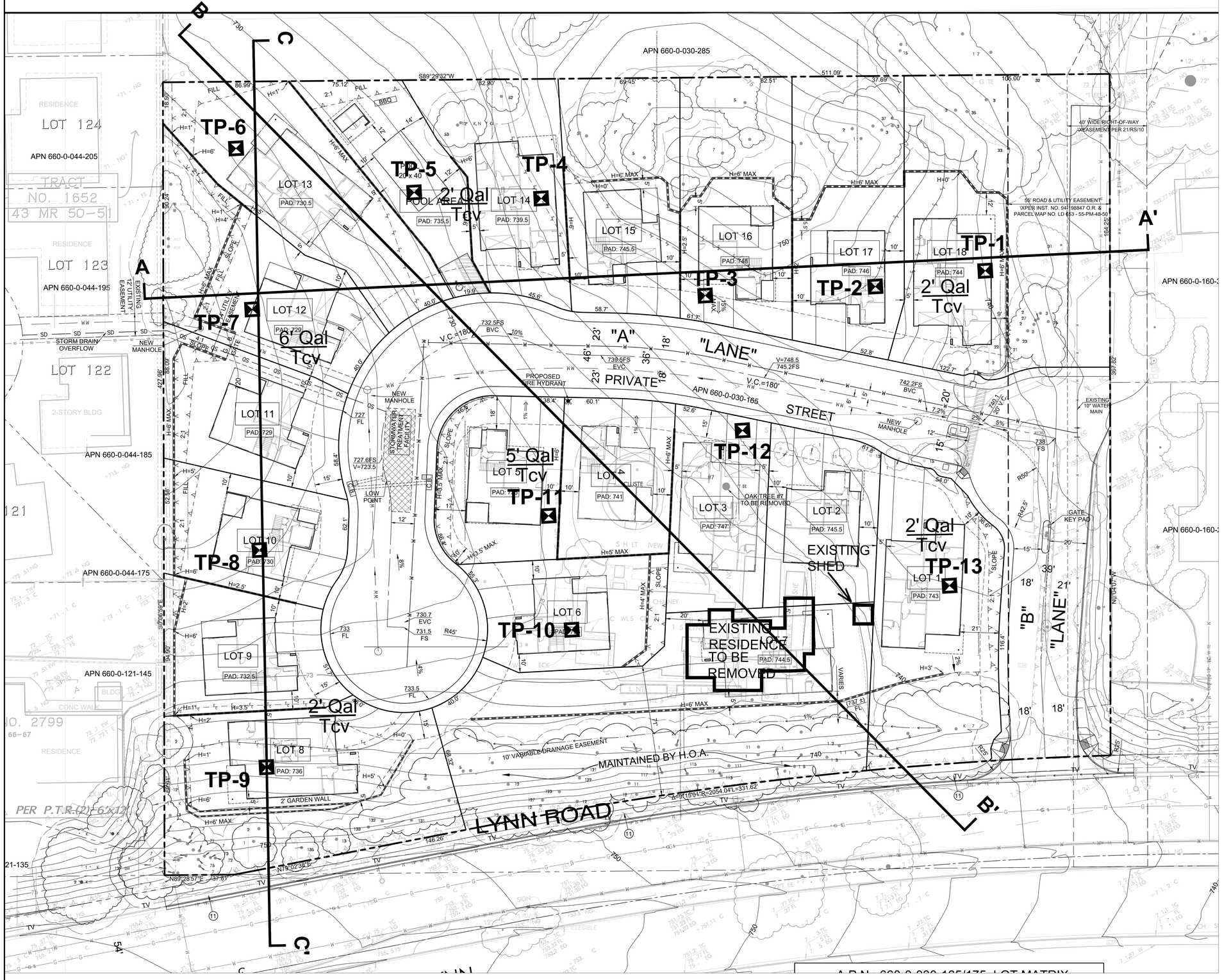
Chemical Testing

Corrosion testing, which includes testing for sulfate, chloride, resistivity and pH, was performed using Caltrans testing methods CT-643, 417, 422 and 532. Test results are summarized as follows:

Sample Location	pH	Chloride Content (PPM)	Sulfate Content (%)	Minimum Resistivity (OHM-CM)
TP-1 @ 4'	8.1	134.9	0.006	1820

The electrical resistivity is low, therefore the corrosivity potential to buried metals is considered to be moderate to high. Appropriate treatment is recommended due to corrosive soils (see soils report).

APPENDIX III
GEOTECHNICAL MAP, GEOLOGIC CROSS-SECTIONS, AND TEST PIT LOGS



LEGEND

Qal	ALLUVIUM
Tcv	CONEJO VOLCANICS
TP-1	APPROXIMATE LOCATION OF EXPLORATORY TEST PITS
A — A'	GEOLOGIC CROSS-SECTION

PLATE 1	**GOLD COAST GEOSERVICES, INC.**		
	GEOTECHNICAL MAP TENTATIVE PARCEL MAP # 6081		
DATE : 01-03-2024	SIZE: E	CLIENT: 1651 LYNN ROAD, LLC	REV:
FILE NO.: GC23-123454	SCALE: 1" = 20'	DRAWN BY: MH	APPROVED BY: SJH

5251 VERDUGO WAY, SUITE J * CAMARILLO, CA 93012 * (805) 484-5070

PREPARED BY:

PACIFIC COAST CIVIL, INC.
30141 AGOURA ROAD, SUITE 200
AGOURA HILLS, CA 91301
PH: (818) 865-4168
FAX: (818) 865-4198

GEOLOGIC CROSS-SECTION A - A'

N 87 E

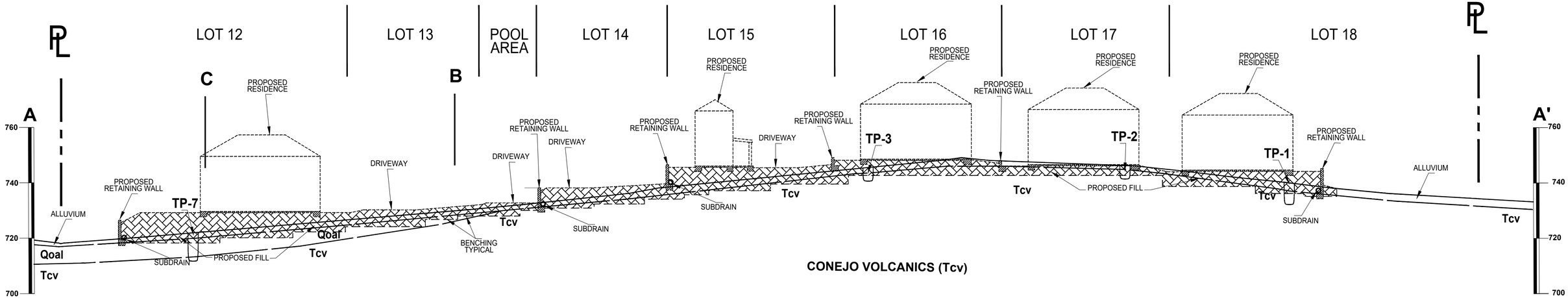
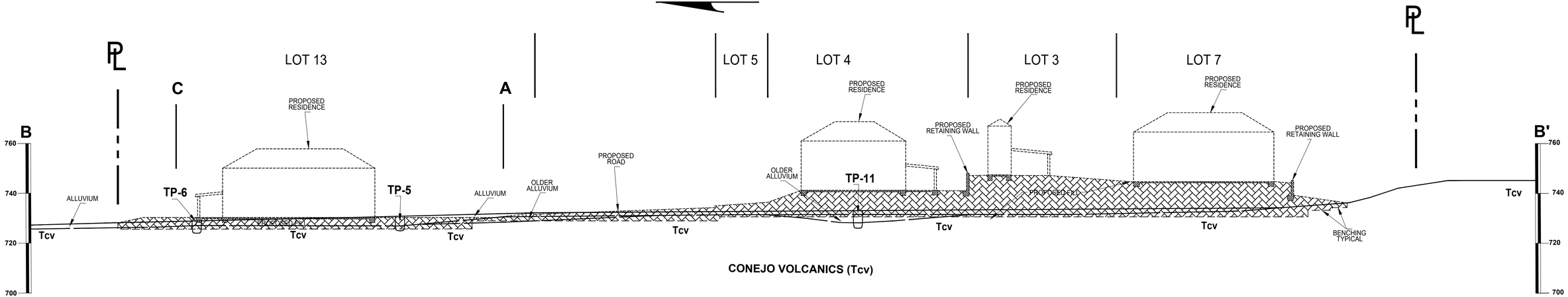


PLATE 2.1	**GOLD COAST GEOSERVICES, INC.**			
	GEOLOGIC CROSS-SECTION A - A' **TENTATIVE PARCEL MAP # 6081**			
DATE : 01-03-2024	SIZE:	CLIENT: 1651 LYNN ROAD, LLC		REV:
FILE NO.: GC23-123454	SCALE: 1" = 20'		DRAWN BY: MH	APPROVED BY: SJH

5251 VERDUGO WAY, SUITE J * CAMARILLO, CA 93012 * (805) 484-5070

GEOLOGIC CROSS-SECTION B - B'

N 45 W



CONEJO VOLCANICS (Tcv)

PLATE 2.2	**GOLD COAST GEOSERVICES, INC.**			
	GEOLOGIC CROSS-SECTION B - B' **TENTATIVE PARCEL MAP # 6081**			
DATE : 01-03-2024	SIZE:	CLIENT: 1651 LYNN ROAD, LLC		REV:
FILE NO.: GC23-123454	SCALE: 1" = 20'		DRAWN BY: MH	APPROVED BY: SJH

5251 VERDUGO WAY, SUITE J * CAMARILLO, CA 93012 * (805) 484-5070

GEOLOGIC CROSS-SECTION C - C'

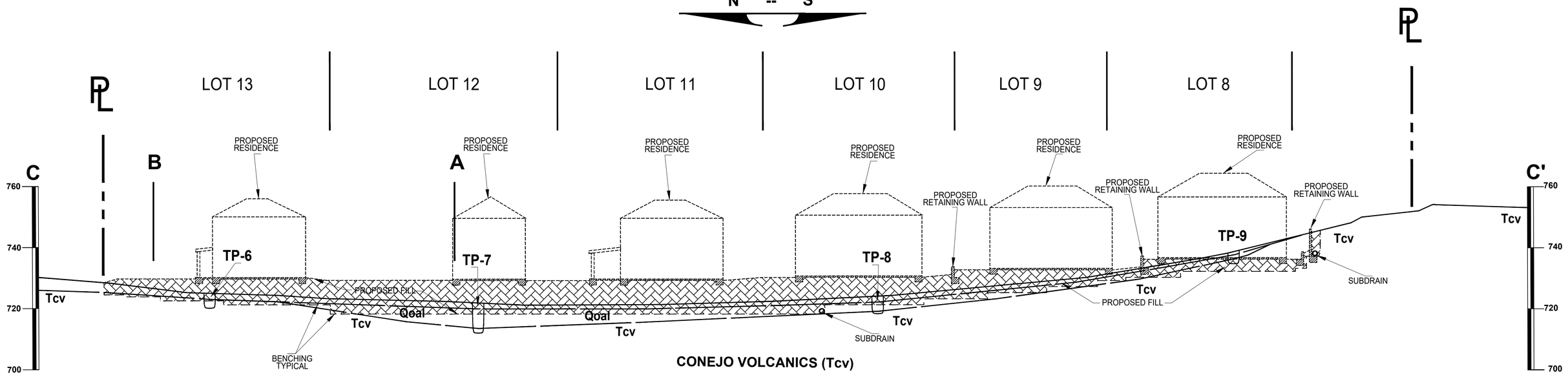


PLATE 2.3	**GOLD COAST GEOSERVICES, INC.**			
	GEOLOGIC CROSS-SECTION C - C' **TENTATIVE PARCEL MAP # 6081**			
DATE : 01-03-2024	SIZE:	CLIENT: 1651 LYNN ROAD, LLC		REV:
FILE NO.: GC23-123454	SCALE: 1" = 20'		DRAWN BY: MH	APPROVED BY: SJH

5251 VERDUGO WAY, SUITE J * CAMARILLO, CA 93012 * (805) 484-5070

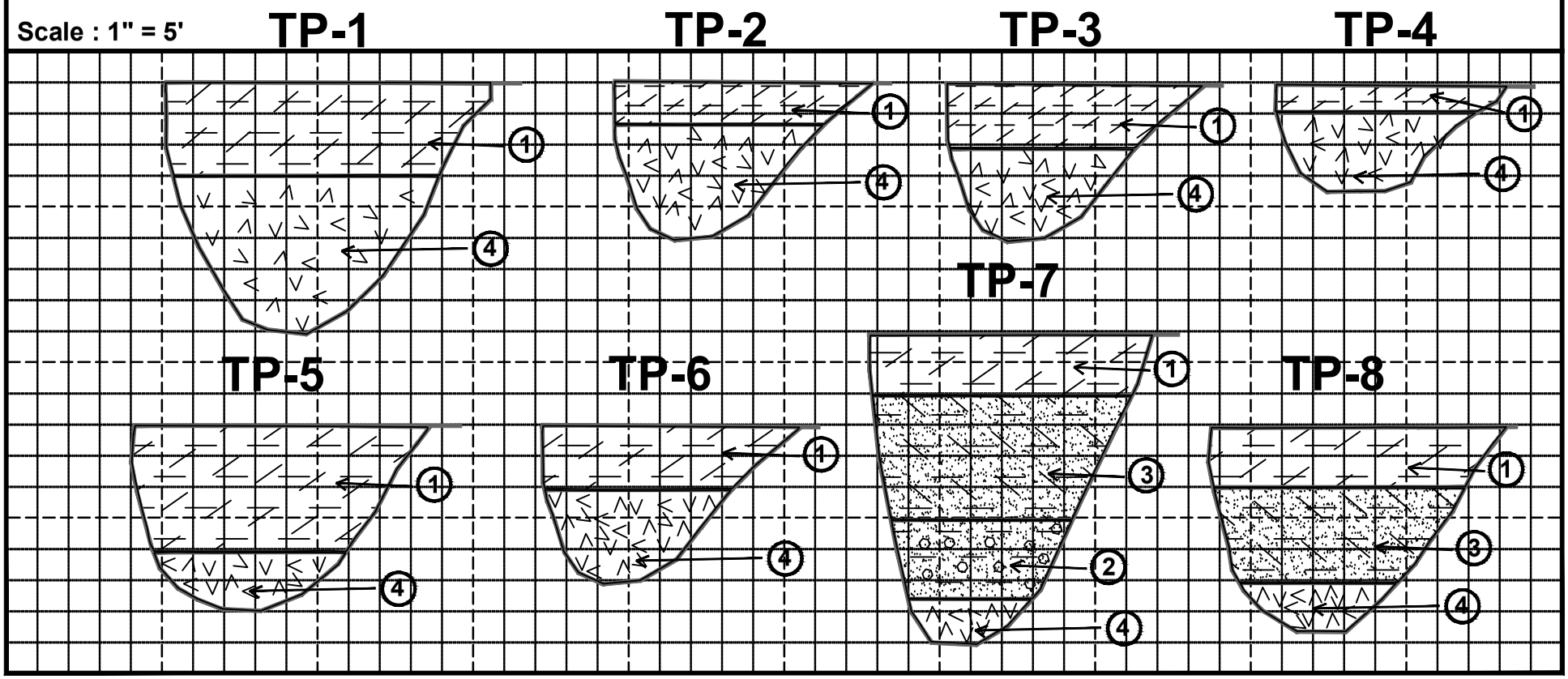
PROJECT: 1651 Lynn Road, Thousand Oaks | TEST PIT LOG: TP-1 to TP-8

FILE NO.: GC23-123454 | DATE: 12-14-2023

LOCATION: SEE PLOT PLAN, PLATE 1 | LOGGED BY: MH

1. ALLUVIUM (Qal) - Dark yellowish brown clayey silt, slightly moist, stiff.
2. OLDER ALLUVIUM (Qoal) - Yellowish brown sandy gravelly clay, slightly moist, stiff to hard.
3. OLDER ALLUVIUM (Qoal) - Dark brown sandy silty clay, slightly moist, stiff to hard.
4. CONEJO VOLCANICS (Tcv) - Dark olive brown basalt massive, weathered top one foot, dry, very dense.

PLATE: 3.1



PROJECT: 1651 Lynn Road, Thousand Oaks | TEST PIT LOG: TP-9 to TP-13

FILE NO.: GC23-123454 | DATE: 12-14-2023

LOCATION: SEE PLOT PLAN, PLATE 1 | LOGGED BY: MH

1. ALLUVIUM (Qal) - Dark yellowish brown clayey silt, slightly moist, stiff.
2. OLDER ALLUVIUM (Qoal) - Yellowish brown sandy gravelly clay, slightly moist, stiff to hard.
3. OLDER ALLUVIUM (Qoal) - Dark brown sandy silty clay, slightly moist, stiff to hard.
4. CONEJO VOLCANICS (Tcv) - Dark olive brown basalt massive, weathered top one foot, dry, very dense.

Scale : 1" = 5'

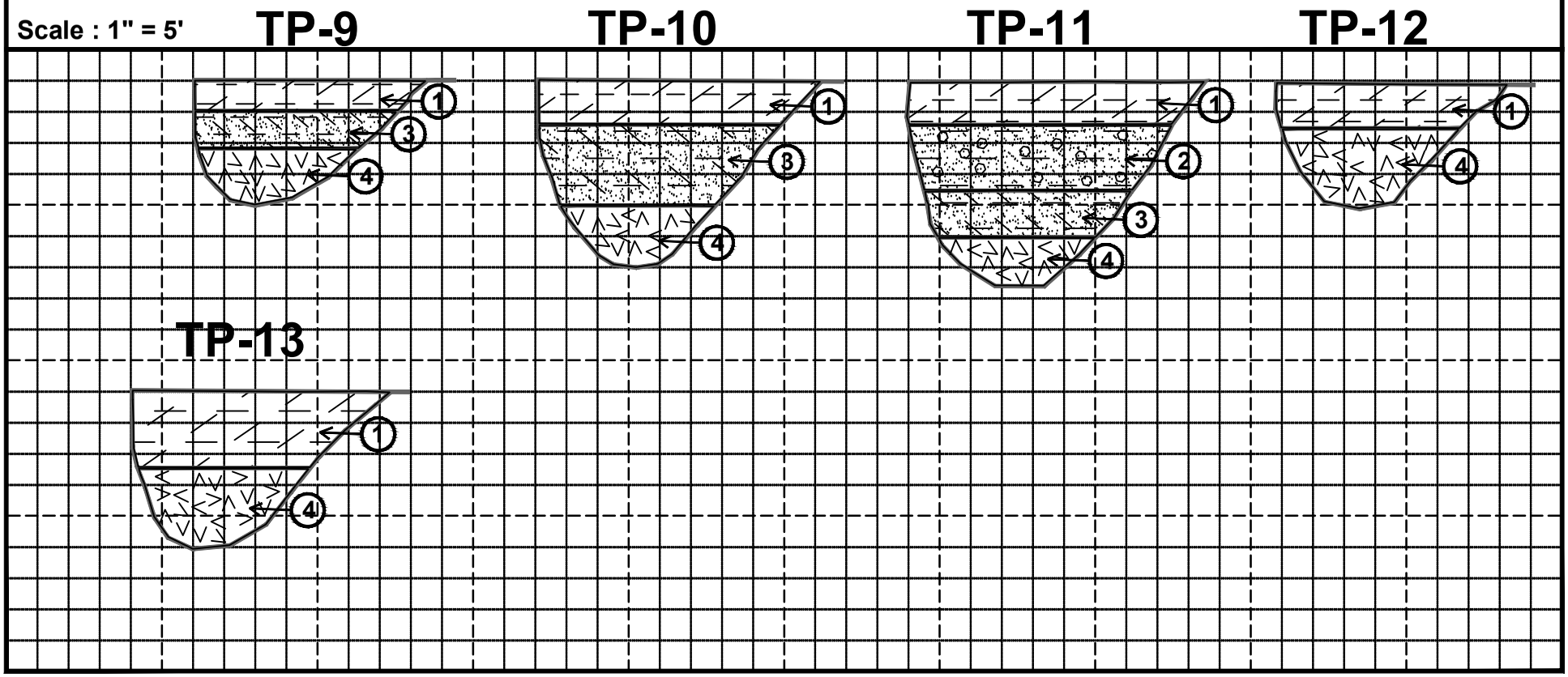


PLATE: 3.2

APPENDIX H

Phase I Environmental Site Assessment

1651 LYNN ROAD PHASE I ENVIRONMENTAL SITE ASSESSMENT

1651 Lynn Road / APN 660-0-030-165 and 660-0-030-175 Thousand Oaks, Ventura County, California

Prepared for

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Prepared by

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January 31, 2024

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SUMMARY

This summary is not intended as a stand-alone document and must be evaluated in context with the entire document.

This summary contains the findings and opinions of the environmental site assessment (ESA) and is intended for use with the supporting text, figures, and attachments of the complete report.

At the request of Jeb Adams (Client), Pax Environmental, Inc. (Pax) conducted a Phase I ESA for the 4.61-acre property off Lynn Road (the Property), Assessor's Parcel Number (APN) 660-0-030-165/175 in Thousand Oaks, Ventura County, CA.

This Phase I ESA was conducted in accordance with the requirements of the ASTM International Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-13 and where more stringent ASTM E1527-21). In addition, the Phase I ESA report was prepared to support the Bona Fide Prospective Purchaser defense (Comprehensive Environmental Response, Compensation and Liability Act [CERCLA] § 101(4)), as amended by the Superfund Amendments and Reauthorization Act of 1986 and Small Business Liability Relief and Brownfields Revitalization Act of 2002, 42 U.S. Code § 9601 et seq. and the innocent purchaser defense (CERCLA § 101(35)(A)(i)), if applicable. The Phase I ESA generally complies with 40 Code of Federal Regulations Part 312, adopted by the U.S. Environmental Protection Agency (EPA) on November 5, 2005, and effective November 1, 2006. These rules identify the standards and practices for all appropriate inquiries under CERCLA § 101(35)(B). The purpose of the Phase I ESA was to identify, to the extent reasonably feasible, "recognized environmental conditions" (RECs).

PROPERTY SUMMARY

The Property includes APNs 660-0-030-165/175 and was obtained by the Client in 2021. The Property is approximately 4.61-acres and is located off Lynn Road in Thousand Oaks, Ventura County, California. The Property is in a portion of section 7, township 1 North, Range 19 West, Rancho El Conejo, in the county of Ventura, California Quadrangle (USGS 7.5-minute Series Topographic Map). It has an elevation range of approximately 750 feet above mean sea level. There is one residential structure located on the subject property that functions as a single-family dwelling that was constructed in 1977.

PURPOSE

This Phase I ESA was conducted to identify possible risks or hazards to the environment encompassing the Property. This evaluation includes a site inspection as well as research on the site and history of land use.

RECOGNIZED ENVIRONMENTAL CONDITIONS

ASTM E1527-13 defines RECs as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

No RECs were identified for the Property.

HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

ASTM E1527-13 defines historical RECs (HRECs) as a past release of any hazardous substances or petroleum products that has occurred in connection with a property and that has been addressed to the satisfaction of the applicable regulatory authority or meets unrestricted-use criteria established by a regulatory authority, without the property being subjected to any required controls.

No HRECs were identified on the Property.

CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

ASTM E1527-13 defines controlled RECs (CRECs) as resulting from a past release of hazardous substances and/or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority.

No RECs were identified for the Property.

DE MINIMIS CONDITIONS

A de minimis condition, as defined by ASTM E1527-13, generally does not present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

No de minimis conditions were identified for the Property.

DATA GAPS

There were no data gaps that affected Pax's ability to identify a RECs at the Property:

CONCLUSIONS

Pax has conducted a Phase I ESA, in conformance with the scope and limitations of ASTM E152713 (and where more stringent ASTM E1527-21), of The Property / APN 660-0-030-165/175, Thousand Oaks, Ventura County, California.

The Phase I ESA revealed no evidence of environmental conditions of concern were found on the Property and insignificant data gaps in connection with the Property.

1. INTRODUCTION

1.1 Purpose

On behalf of the Client, Pax conducted a Phase I environmental site assessment (ESA) of the 4.61-acre property off Lynn Road (the Property), Assessor's Parcel Number (APN) 660-0-030-165/175. The Phase I ESA was conducted in accordance with the requirements of the ASTM International Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-13 and where more stringent ASTM E1527-21). In addition, this Phase I ESA report was prepared to support the Bona Fide Prospective Purchaser defense (Comprehensive Environmental Response, Compensation and Liability Act [CERCLA] § 101(4)), as amended by the Superfund Amendments and Reauthorization Act of 1986 and Small Business Liability Relief and Brownfields Revitalization Act of 2002, 42 U.S. Code § 9601 et seq. and the innocent purchaser defense (CERCLA § 101(35)(A)(i)), if applicable. The Phase I ESA generally complies with 40 Code of Federal Regulations (CFR) Part 312, adopted by the U.S. Environmental Protection Agency (EPA) on November 5, 2005, and effective November 1, 2006. These rules identify the standards and practices for all appropriate inquiries (AAI) under CERCLA § 101(35)(B). The purpose of the Phase I ESA was to identify, to the extent reasonably feasible, "recognized environmental conditions" (RECs). ASTM E1527-13 defines RECs as:

> the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

RECs include the presence of hazardous substances or petroleum products even under conditions that comply with applicable environmental laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.2 Scope of Work

The scope of work included four components, each of which is briefly described below.

1.2.1 Site Reconnaissance

On January 5, 2024, Pax conducted a reconnaissance-level survey of the Property to look for evidence of RECs. The results of this site visit are documented in Section 2.

1.2.2 Records Review

Pax reviewed the following records:

- State and federal agency database records.
- Aerial photographs of the Property.
- Historical city directories for the Property.
- Historical topographic maps related to the Property.

The U.S. Geological Survey 7.5-minute quadrangle map (2021) for Rancho El Conejo was used as the physical setting source.

1.2.3 Interviews

Pax contacted the landowner for information regarding the Property. When asked about environmental impacts on the Property, all those who were interviewed did not identify any possible risks or hazards to the environment encompassing the Property. Pax was unable to interview former managers, owners, and operators of the Property.

1.2.4 Report Preparations

Pax prepared this report in accordance with ASTM E1527-13. The recommended format was adjusted to improve usability and comprehension. Consistent with this ASTM guidance document, the following issues were not evaluated during the Phase I ESA: asbestos-containing building materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality (including vapor intrusion), biological agents, toxic fungus, mold, or microbial growth conditions, naturally-occurring radon, high-voltage power lines, and substances not defined as hazardous substances (including some substances sometimes generally referred to as emerging contaminants). Fluorescent light ballasts, caulk, paint, or other materials that may contain polychlorinated biphenyls (PCBs) and are located inside and or are part of the building or structure, are outside the scope of this ESA.

1.3 Presumed Viability

To qualify for one of the threshold criteria for satisfying the Limited Landowner Liability Protections (LLPs) to CERCLA liability, the AAI components listed below must be conducted or updated within 180 days of and prior to the date of acquisition of the Property, and all other components of AAI must be conducted within one year prior to the date of acquisition of the Property. The date of the report generally does not represent the date the individual components

of AAI were completed and should not be used when evaluating compliance with the 180-day or 1-year AAI requirements. Based on the earliest conducted AAI component noted below, this assessment is presumed to be viable until January 31, 2025.

- Reviews of federal, tribal, state, and local government records – June 6, 2022;
- Visual inspections of the Property and of adjoining properties – January 5, 2024 and
- The declaration by the environmental professional responsible for the assessment – January 18, 2024.

1.4 Significant Assumptions

Significant assumptions include any assumptions made during the Phase I ESA process that have the potential to impact the opinions put forth in this report. No significant assumptions were made in the preparation of this report.

1.5 Limitations and Exceptions

Any opinions and/or recommendations presented in this Phase I ESA report apply to conditions that existed at the Property when the services were performed. No environmental assessment can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of a Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the existence of RECs in connection with a property.

Pax conducted AAI regarding the potential for RECs at the Property. ASTM E1527-13 defines AAI as

> inquiry constituting "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in CERCLA, 42 U.S.C §9601(35)(B), that will qualify a party to a commercial real estate transaction for one of threshold criteria for satisfying the LLPs to CERCLA liability (42 U.S.C §9601(35)(A) & (B), §9607(b)(3), §9607(q); and §9607(r)), assuming compliance with other elements of the defense.

Pax is not responsible for the impacts of any changes in environmental standards, practices, or regulations after performance of services, and does not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

Identification of activity and use limitations or findings based on implementation of required controls do not imply evaluation or confirmation of the adequacy, implementation, or continued effectiveness of the control(s). This report may be relied upon and distributed by the Client and

approved stakeholders. Outside reliance on the data and conclusions in this report is prohibited without a written concession from the ESA Preparer.

1.6 Special Terms and Conditions

No special terms or conditions apply to this Phase I ESA other than those set forth in ASTM E152713, CERCLA 101(35)B(iii), and 40 CFR Part 312.

1.7 Deviations

There were no deviations from ASTM E1527-13, CERCLA 101(35)B(iii), and 40 CFR Part 312.

1.8 Additional Services

No services were performed outside the scope of ASTM E1527-13 for Phase I ESAs.

1.9 Qualifications of Responsible Environmental Professionals

The Phase I ESA of the Property was conducted by environmental professionals experienced in performing ESAs and familiar with ASTM E1527-13 and industrial facility operations. Resumes of the environmental professional(s) involved in the performance of the Phase I ESA are included as Appendix A.

1.10 Reliance

For the purposes of the contractual relationship, the term “Client” refers to Jeb Adams and their affiliates, which have sole permission to rely on this report. ASTM E1527-13 defines the “user” as the party seeking to use the standard to complete an ESA. The Client is the user of this Phase I ESA.

2. SITE DESCRIPTION AND RECONNAISSANCE

2.1 Objective and Methodology

Pax, conducted a site reconnaissance visit on 1/5/2024, to obtain information indicating the presence of RECs in connection with the Property. During the site visit, Pax visually and physically observed the Property for evidence of the presence of RECs, including evidence of underground storage tanks (USTs) and aboveground storage tanks (ASTs), petroleum products, transformers containing PCBs, and use and storage of hazardous material. The Property and adjacent properties were also observed from aerial photograph. Site photographs taken during the site reconnaissance are included as Appendix B.

2.1.1 Exterior

Pax visually and physically observed the periphery of the Property. The Property and adjacent properties were also observed from aerial imagery. There is one permanent, residential, single-family dwelling structure located on the Property (Appendix B).

2.1.2 Limiting Conditions

List if applicable: None applicable.

2.2 General Site Setting

2.2.1 Property Location and Legal Description

The Property is a 4.61-acre parcel obtained by the Client in 2021 from Steve Weber and Freddi Herrmann, Trustees of the Herrmann Weber Trust. The Property is located off Lynn Road in Thousand Oaks, Ventura County, California (Figure 1).



Figure 1. Overview of APN 660-0-030-165/175 (Google Earth Image 2024).

The general location of the Property is:

United States Geological Survey 7.5’ Quadrangles: Newbury Park
Township: 2 North Range: 20 West
Latitude: 34°10'39.17"North Longitude: 118°54'56.00"West
County: Ventura

2.2.2 Site and Vicinity Characteristics

APN 660-0-030-165/175 is zoned as rural exclusive. Currently, one residential structure is located on the subject property that functions as a single-family dwelling that was constructed in 1977. The surrounding parcels to the north, west, and south of the Property are privately owned and developed. The parcel to the east is part of the Escondido Open Space.

2.2.3 Current Uses of Property

The Property is currently vacant.

2.2.4 Past Uses of Property

According to historical aerial photographs, SFIMs, city directories, and topographic maps, the Property has primarily been used as residential and vacant land.

Year	Use
1962 - 2021	Vacant land, single residential dwelling, Fredrick W. Herrmann
2021 - Present	Vacant land, single residential dwelling, Jeb Adams

2.2.5 Current Uses of Adjoining Properties

In general, the Property is surrounded by privately owned and developed properties. The parcel to the east is part of the Escondido Open Space. The surrounding parcels to the north, west, and south of the Property are privately owned and developed.

It is bordered by the following:

- North— Residential
- South— Residential
- East— Open Space
- West— Residential

2.2.6 Past Uses of Adjoining Properties

Past uses of adjoining properties are residential and open space.

2.2.7 Current or Past Uses in Surrounding Area

Current and past uses of the surrounding area are residential and open space.

2.2.8 Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions

In general, the Property and surrounding area are fairly level, with an elevation range of 710 – 765 feet above mean sea level. The Property is located in the Calleguas Creek watershed. Topography and surface water features, groundwater flow direction is inferred to be to the south-southwest. Records from the California Water Resources Department online well log database were reviewed. 243 records were listed for the township, range, and section where the Property is located (Appendix C). The local permitting agencies identified includes the Ventura County Watershed Protection District and the LA County Department of Public Health, Department of Health Services, Drinking Water Program. No wells were identified on the Property.

The soil profile is predominantly Urban land (40%) with the remaining composition comprised of Typic Xerorthents (25%), Topdeck (20%), Hambright (5%), Cibo (5%), and Gilroy (5%).

2.3 Interior and Exterior Observations

Feature	Observed on the Property?		Notes
	Yes	No	
Structures	x		There is one residential structure located on the Property that functions as a single-family dwelling that was constructed in 1977
Roads	X		The Property is accessed from Blair Court to the east.
Potable Water Supply	X		
Sewage-Disposal System	X		
Hazardous Substances and Petroleum Products in Connection with Identified Uses		X	
Storage Tanks		X	
Odors		X	
Pools of Liquid		X	
Drums		X	
Hazardous-Substance and Petroleum-Product Containers		X	
Unidentified-Substance Containers		X	
PCBs		X	
Heating and Cooling		X	
Stains or Corrosion		X	
Drains or Sumps		X	
Pits, Ponds, or Lagoons		X	
Stained Soil or Pavement		X	
Stressed Vegetation		X	
Solid Waste		X	
Wastewater		X	
Stormwater		X	
Wells		X	Calleguas Municipal Water Company
Septic Systems	X		

Table Summary

The subject property is largely vacant with one single-family dwelling that is occupied. No additional property conditions other than natural features described herein were observed. Environmental conditions at the site are mostly urban.

No hazardous materials were detected on the subject property. No drums or containers of regulated substances were detected on the subject property. No generated, disposed, or stored hazardous waste was detected on the subject property. No bio-hazardous waste was detected on the subject property. No petroleum was detected on the subject property. No areas of stained soil were detected on the subject property. No areas of strained vegetation were detected on the subject property.

Polychlorinated Biphenyls (PCBs) have been widely used for many applications, including dielectric fluids in transformers, coolants, and capacitors. Due to their toxicity and classification as a persistent organic pollutant, production of PCBs was banned by the United States Congress in 1979 and by the Stockholm Convention on Persistent Organic Pollutants in 2001. The EPA controls its use through regulation 40 CFR, Part 761, which breaks the contaminant into three categories. Greater than 500 ppm is considered "PCB"; between 50 and 500 ppm is considered "PCB-Contaminated"; less than 50 ppm of PCBs is considered "Non-PCB." The garage attached to the Property contains no electrical equipment, paints, fluorescent light ballasts, or other equipment associated with PCBs. No PCB containing equipment was observed during the site survey.

The use of asbestos-containing materials (ACMs) in construction ceased for the most part in the mid- 1970s. The structure on the Property was built in 1977; therefore, ACMs are unlikely to occur at the subject property. No ACMs were observed during the site survey.

The existence of Aboveground Storage Tanks (ASTs) presents possible contamination problems. Both a visual inspection and past tank registration records were required to fully assess the AST history on the property. There is the possibility that certain records and site conditions are lacking, in which case assessing the number and contents of ASTs on the property may be restricted. No aboveground storage tanks were observed or recorded in Ventura County documents for the subject property.

No sign of underground storage tanks were observed or recorded in Ventura County documents for the subject property.

No landfills were observed or reported on the subject property. No signs of dumping are evident on the subject property. No pits or lagoons were observed on the subject property. No sumps or catch basins were observed on the subject property.

Radon is a colorless, odorless, and tasteless gas considered a health hazard due to its radioactivity. Radon gas from natural sources can gather in buildings, particularly in enclosed areas such as basements and attics. It can be found in some spring waters and hot springs. Specialized equipment is required for detection.

The EPA established safety levels of radon at 4pCi/L. Three distinct Radon Zones have been created by the EPA to create a danger level division. Zone I includes those areas with an average predicted indoor radon concentration exceeding the EPA limit of 4pCi/L. Zone 2 encompasses those regions with levels between 2 and 4 pCi/L. Zone 3 is reserved for those areas containing a level below 2 pCi/L.

The Property falls within Zone I according to the EPA Map of Radon Zones, where predicted radon levels exceed 4.0 pCi/L. The existing structures on the subject property contain no paint or other lead containing materials. No lead containing materials were observed during the site survey or uncovered during records searches.

No significant sources of noise or vibration were identified on the subject property

3. USER-PROVIDED INFORMATION

Pax contacted the current owner for information regarding the Property. When asked about environmental impacts on the Property, the owner did not have information or could not identify any possible risks or hazards to the environment encompassing the Property. Pax was unable to interview former managers, owners, and operators of the Property.

3.1 Title Records

Title records were provided by the Client.

3.2 Environmental Liens or Activity and Use Limitations

To the best of available data, there are no environmental liens or other activity and use limitations on the Property.

3.3 Specialized Knowledge

The Client had no specialized knowledge regarding the Property.

3.4 Commonly Known or Reasonably Ascertainable Information

There is no data indicative of information commonly known or reasonably ascertainable within the local community that is relevant to RECs in connection with the Property.

3.5 Valuation Reduction for Environmental Issues

Not applicable.

3.6 Owner, Property Manager, and Occupant Information

The Property is owned by Jeb Adams.

3.7 Reason for Performing Phase I ESA

The Client reported that the purpose of this Phase I ESA is due diligence in preparation for the parcel to be subdivided into multiple separate residential lots.

4. RECORDS REVIEW

4.1 Standard Environmental Record Sources

Pax searched state and federal agency record sources for information regarding the Property and sites near the Property. All databases were searched using the standard approximate minimum search distances specified in ASTM E1527-13.

4.1.1 Federal Environmental Records

National Priorities List

The federal Environmental Protection Agency (EPA) maintains the National Priorities List (NPL) of uncontrolled or hazardous waste sites identified for priority remedial actions under the Superfund Program. A review of the NPL List indicated there are no NPL sites on the Property. A review of the NPL List indicated there are no NPL sites on the surrounding properties within the EPA standard minimum search radius of one mile.

CERCLIS List

The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list is managed by the EPA and includes current investigations for possible NPL sites. An examination of the CERCLIS List revealed that there are no CERCLIS facilities on the Property. An examination of the CERCLIS List revealed that there are no CERCLIS facilities on the surrounding properties within the minimum search radius of 0.5 miles.

RCRA CORRACTS TSD Facilities List

The Resource Conservation and Recovery Act (RCRA) is an EPA maintained database containing records of the Treatment, Storage, and Disposal (TSD) of hazardous wastes from reporting facilities. The EPA's list of TSD facilities under corrective action is reported in the CORRACTS database. An evaluation of the RCRA CORRACTS TSD List showed that there are no RCRA CORRACTS TSD facilities on the Property. An evaluation of the RCRA CORRACTS TSD List showed that there are no RCRA CORRACTS TSD facilities on the properties adjoining the Property within the minimum search radius of 1.0 miles.

RCRA Non-CORRACTS TSD Facilities List

The RCRA Non-CORRACTS database lists EPA's TSD facilities not currently under corrective action. A review of the RCRA TSD List revealed no RCRA TSD facilities on the Property. A review of the RCRA TSD List revealed no RCRA TSD facilities on the adjoining properties within the minimum search radius of 0.5 miles.

RCRA Generator List

The RCRA Generator List is updated and maintained by the EPA as a source for reported generators of hazardous waste. A study of the RCRA Generator List yielded no RCRA Generator facilities on the Property.

ERNS List

The Emergency Response Notification System (ERNS) is a national database specializing in the collection of information and reports regarding the release of oil or hazardous substances into the environment. An examination of the ERNS List managed by the National Response Center (NRC) indicated that there are no ERNS cases on the Property. An examination of the ERNS List managed by the NRC indicated that there are no ERNS cases on the properties adjoining the Property.

4.2 Regulatory File Review

A regulatory file review, beyond online files, was not conducted because sufficient information was obtained from other sources.

4.3 Historical Use Information on Property and Adjoining Properties

Pax used the following information sources to obtain historical use(s) information.

4.3.1 Historical Aerial Photographs Review

Aerial photographs of the Property from 1947, 1959, 1967, 1980, 1985, 1989, 1994, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2018, and 2020 were obtained from Historic Aerials, and reviewed to identify historical changes to the Property and the Property's historical uses, if any. In sum, one structure is present on the property by 1980. The structure has been identified as the single-family dwelling constructed in 1977 (Appendix B)

4.3.2 Map Review

No historical maps were available upon request.

4.4 Prior Environmental Reports for Property

The Client did not provide any prior ESA reports.

5. INTERVIEWS

Pax contacted the client for information regarding the Property. When asked about environmental impacts on the Property, the client did not identify any possible risks or hazards to the environment encompassing the Property. Pax was unable to interview former managers, owners, and operators of the Property.

6. FINDINGS AND OPINIONS

6.1 Recognized Environmental Conditions

ASTM E1527-13 defines RECs as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

No RECs were identified for the Property.

6.2 Historical Recognized Environmental Conditions

ASTM E1527-13 defines historical RECs (HRECs) as a past release of any hazardous substances or petroleum products that has occurred in connection with a property and that has been addressed to the satisfaction of the applicable regulatory authority, or meets unrestricted-use criteria established by a regulatory authority, without the property being subjected to any required controls.

No HRECs were identified for the Property.

6.3 Controlled Recognized Environmental Conditions

ASTM E1527-13 defines controlled RECS (CRECs) as resulting from a past release of hazardous substances and/or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority.

No CRECs were identified for the Property.

6.4 De Minimis Conditions

No de minimis conditions were identified for the Property.

6.5 Data Gaps

The following data gaps were identified though none were found to affect Pax's ability to identify a RECs at the Property: Lack of previous landowner interviews.

Statement of Environmental Professionals Conducting Phase I Environmental Site Assessment

APN 660-0-030-165/175,Thousand Oaks, Ventura County, California

The material and data in this report were prepared under the supervision and direction of the undersigned.

PAX ENVIRONMENTAL, INC.

Patrice Ringelstein

Patrice Ringelstein, Registered Environmental Property Assessor (REPA # 17514028831231030)
Deputy Project Manager/ Associate Biologist

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in §312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess the natural conditions, history, and setting of the subject property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

7. CONCLUSIONS

Pax has conducted a Phase I ESA, in conformance with the scope and limitations of ASTM E152713 (and where more stringent ASTM E1527-21), of the Property, located at APN 660-0-030-165/175, Thousand Oaks, Ventura County, California. Any exceptions to, or deviations from, this practice are described in Section 1 of this report.

The Phase I ESA revealed no evidence of environmental conditions of concern on the Property and insignificant data gaps in connection with the Property.

8. LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our Client. This report is solely for the use and information of our Client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the Client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not, therefore, be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the constraints of the agreed-upon scope, limitations, and costs.

Environmental conditions that cannot be identified by visual observation may exist at the site. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our Client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

References

American Society for Testing and Materials (ASTM) 2005. *Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process* (ASTM El 527-05). West Conshohoken, PA, USA.

Department of the Interior, Fish and Wildlife Service, *Classification of Wetlands and Deepwater Habitats of the United States*.

Environmental Site Assessment, Phase l : Fundamentals, Guidelines, and Regulations. 3rd ed. Boca Raton: CRC, 2008. Print.

United States Department of Agriculture, Soil Conservation Service, Soil Surveys.

United States Geological Survey, Topographic Maps.

APPENDIX A: RESUME OF ENVIRONMENTAL PROFESSIONAL

Patrice Ringelstein, MS Deputy Project Manager/Associate Biologist

Summary of Qualifications

Patrice Ringelstein is a biologist and researcher with over 8 years of experience in environmental and natural resource projects throughout California. She has extensive experience in marine habitats collecting and analyzing biotic and abiotic data for leading agencies such as the San Francisco Estuary Institute and the California Department of Fish and Wildlife. Her local field experience includes nesting bird surveys, restoration, archeological surveys, environmental site assessments, and riparian habitat monitoring throughout northern and southern California. She has academic and field background in focused special-status species studies, data collection, data analysis, and reporting. In addition to her years of biological field work, her background includes 8 years of teaching in the field.

Education

Master of Science, Environmental Studies San Jose State University (2019)

Bachelor of Arts, Global Politics Mount St. Mary's University (2013)

Experience

Pax Environmental, Inc., Ojai, CA
Deputy Project Manager/ Associate Biologist (2022-Present)

Keller Williams Realty
Real Estate Assistant - Tanya Starcevich (2018 – 2022)

San Jose State University
Teaching Associate, Resource Analysis (2017-2019)

Marine Science Institute
Data collection, Field educator (2017-2019)

National Park Service
Archeological field technician assistant (2017**)**

Selected Projects

Senior Biologist (July 2023 – present) Potrero Mitigation Bank Phase I Environmental Assessment

As a project assistant, she completed site surveys, interviews, and reporting to complete a Phase I ESA for the client. She conducted background research by searching multiple databases for historical information regarding the property in addition to collecting parcel information from the Ventura County Assessor's office. In addition to on-site surveys to assess the environmental condition of the property, she interviewed past and neighboring landowners for information regarding the environmental history of the property. She drafted a report, which was reviewed and approved by a licensed Registered Environmental Site Assessor and will be submitted to the County of Ventura.

Senior Biologist (April 2023 – July 2023) National Environmental Protection Act (NEPA) Technical Reports and Studies for the Senior Canyon Municipal Water Company in Ojai, CA

As a senior biologist, she assisted with site surveys and the preparation of biological assessment and biological evaluation reports in compliance with NEPA for the renewal of a special use permit for the client to continue water extraction operations on United States Forest Service lands. The report included a risk assessment evaluation of the potential to introduce invasive species to the project area and the impact of project operations on terrestrial and aquatic wildlife species within the area.

Senior Biologist (April 2023) Nesting Bird Management Plan for Middle-Mile Broadband Network

As a senior biologist, she supported the Caltrans Office of Biological Studies with preparing a Nesting Bird Management Plan for the Middle-Mile Broadband Network effort. The plan included a thorough management guide for nesting birds, including active nest avoidance and minimization measures for both birds of conservation concern and general migratory birds. The plan also included a field approach including migratory bird survey information, nest relocation and success/failure monitoring, nestling transport to wildlife rehabilitation facilities, and reporting methods.

Senior Biologist (June 2023 – present) CEQA Initial Study Checklist for the City of Thousand Oaks Flood Mitigation Project

As a senior biologist, she drafted an initial study checklist containing a comprehensive listing of potential environmental impacts. This task involved a site visit and intensive background research to identify physical, biological, social, and economic factors that might be affected by the proposed flood mitigation project.

Biologist (April 2023) Southern California Edison's Del Valle Substation

As a biologist, she assisted a permitted wildlife biologist with two separate coastal California gnatcatcher (*Polioptila californica californica*) surveys in Santa Clarita, CA during nesting bird season. She assisted with bird identification and reporting at the conclusion of the project surveys.

Phase I Environmental Site Assessment (ESA) and Report (October 2022 – March 2023) Ojai Valley Land Conservancy – Old Kiwi Farm

As a project assistant, she completed site surveys, interviews, and reporting to complete a Phase I ESA for the Ojai Valley Land Conservancy. She conducted background research by searching multiple databases for historical information regarding the property in addition to collecting parcel information from the Ventura County Assessor's office. In addition to on-site surveys to assess the environmental condition of the property, she interviewed past and neighboring landowners for information regarding the environmental history of the property. She drafted a report, which was reviewed and approved by a licensed

Registered Environmental Site Assessor and submitted to the County of Ventura.

Biologist (December 2022) City of Santa Barbara Creek Inventory Santa Barbara

As a project biologist, she assisted with organizing data collected in the field and writing the final report submitted to the City of Santa Barbara. She worked closely with the project team to interpret present and past data collected on the City's creeks, which she included in the final report to illustrate how they have been managed and maintained over the past 10 years.

Biologist (November 2022 - present) Biological resource assessment and initial study biological assessment (ISBA) at the Ojai Valley School

As a biologist, she conducted a site survey and assisted with drafting a biological assessment and ISBA in preparation for the construction of a gymnasium and wastewater treatment plan on the property. The site survey entailed assessing existing habitat and biological resources, documenting the existing wetlands, and reviewing county records.

Biologist (November 2022 - Present) Sullivan Canyon Tree Replacement and Monitoring and Restoration Assessment Los Angeles, CA

As a biologist, she assisted an ISBA certified arborist with an on-site survey to assess restoration requirements at 18 sub-mar sites, in addition to tree planting locations for 16 coast live oaks (*Quercus agrifolia*) and 8 western sycamores (*Platanus racemose*) to be installed in accordance with mitigation requirements. Following the initial site visit, she wrote and submitted a report to the client outlining the status of the site, restoration recommendations, and tree planting locations. This is an ongoing project that requires three years of watering and maintenance to ensure the longevity of the trees planted in which she is one of the biologists tasked with this job.

Biologist/Scientist (October 2022 – May 2023) Ecological Exposure Pathway Analysis Report

As a biologist and researcher, she completed a screening-level ecological risk assessment work plan that was submitted and approved by the Department of Toxic Substance and Control (DTSC) for the client. The assessment addressed categories of receptors and wildlife most likely affected by operations on site and identified complete, incomplete, and potentially complete exposure pathways. Preparation of the assessment involved identifying appropriate ecological screening levels, identifying methods for screening-levels risk calculations based on maximum site concentrations, addressing risk characterization, and evaluating uncertainties.

Biologist (July 2022) Marine Mammals Monitoring and Reporting for 4th of July Celebration in Cambria, CA

As a biologist, she monitored a section of beach within the boundaries of the Monterey Bay National Marine Sanctuary for Environmentally Sensitive Habitat

Areas (ESHA) and special-status species. Monitoring included a pre and post firework habitat survey, nesting bird surveys, aquatic diversity surveys, and impact surveys following the fireworks show. A beach survey was conducted on the ground by foot walking transects over the entire project site using 10 x 42 binoculars.

Biologist (July 2022) - Foster Park Special-Status Bird Surveys

As a biologist, she assisted with surveys for 2 special-status bird species, the southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*), along the riparian corridor that passes through Foster Park in Ventura County. Surveys for both species were conducted in accordance with *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher* (United States Geological Survey and United States Department of the Interior, 2010) and *Least Bell's Vireo Survey Guidelines* (United States Fish and Wildlife Service, 2001). Surveys for each species were conducted using tape-playback and elicit vocalizations.

Field Crew Lead (June 2022) for Middle Stewart Restoration Project

As a field crew lead, she assisted with the restoration of a segment of Middle Stewart Creek in Ojai, CA. This involved invasive species removal including mustard *(Brassica nigra),* Mexican fan palm (*Washingtonia robusta*), castor bean (*Ricinus communis*), and yellow star thistle (*Centaurea solstitialis)*. Tasks involved monitoring a crew of 4 who were removing the invasive plants listed above. She also analyzed water quality test results from the waterways within the restoration project area and summarized the findings in the annual report submitted to the city of Ojai.

Biologist (April 2022 – July 2022) Park Regent Riparian Restoration Project

As a wildlife biologist, she assisted with overseeing invasive plant removal at a restoration site near Fillmore, CA. Tasks involved conducting an initial nesting bird survey, taking photo monitoring points, and monitoring a crew of 3 tasked with removing tamarisk then discarding it at an off-site location. She also assisted with planting native wetland and riparian plant species specifically meant to support a diversity of fish and wildlife species such as: arroyo willow (*Salix exigua var. hindsiana)*, black willow (*Salix lasiolepis)*, mugwort (*Artemisia douglasiana)*, quailbush (*Atriplex lentiformis)*, elderberry (*Sambucus nigra ssp. Caerulea)*, red willow (*Salix laevigata)*, narrow-leaf willow (*Salix lasiolepis)*, mulefat (*Baccharis salicifolia)*, coyote bush (*Baccharis pilularis)*, Califoria sagebrush (*Artemisia californica)*, and deerweed (*Acmispon glaber)*. This site requires multiple site visits throughout the year to oversee watering events and monitor the success of native planting efforts.

Lead Biologist (January 2018 – March 2019) – Guadalupe River Park Conservancy

As a lead biologist and educator with the park conservancy, she assisted with aquatic data collection, animal rescue, and restoration projects along a portion of the Guadalupe River that flows into the South San Francisco Bay. She monitored

multiple river clean-ups and native plant restoration projects involving school groups and volunteers funded by Santa Clara County grants, San Jose city grants, and individual donors. Restoration activities have improved critical habitat in the city center while providing environmentally oriented opportunities for local youth aged 12-18.

Biologist (May 2019 – September 2019) Contaminant Concentrations in Anchovy

Assisted the San Francisco Estuary Institute with collecting anchovies for toxicity level testing in the South San Fran Bay abord a United States Coast Guard certified research vessel. Anchovies were captured using an otter trawl off the stern of the vessel, then hauled on board and measured to determine age. Size appropriate anchovy were placed on ice and brought to the laboratory for testing. Results from these efforts assisted with water quality management practices in the Bay, particularly with the bioaccumulation of contaminants such as mercury, polychlorinated biphenyls (PCBs), dioxins, selenium, and several other concerning contaminants found in sport fish from the Bay.

Assistant (2018 – 2022) Keller William Realty in Malibu

As an assistant to a licensed real estate agent, she maintained client and property files, communicated with clients, organized, and managed relevant documents and records. She assisted with researching and evaluating properties as well as coordinating inspections to determine the value of properties considering factors such as the current market value, location, and/or replacement costs.

Teaching Associate (2018-2019) Resource Analysis

Assisted with instructing and grading a course designed to teach students to analyze Earth's natural resources using computational methods.

Archeological Technician Assistant (July 2017) – Santa Rosa Island Historic Ranch House Excavation. Worked under Dr. Gary Brown alongside a team of archeologists digging test areas and sifting dirt through ¼-inch and 1/8- inch screens looking for stone tools, shells, bone, points, and other tools. Assisted with organizing and cataloging hundreds of artifacts that were found at the site. Stone tools found during this excavation revealed an undiscovered 8,000 – 13,000-year-old site.

Publications

Frazier, Patrice. "The Relationship Between Habitat Variables and Leopard Shark (*Triakis semifasciata*) Population Trends in the South San Francisco Estuary." Master's Theses, 5062, 2019. https://scholarworks.sjsu.edu/etd_theses/5062.

Certifications

National Registry of Environmental Professionals

Registered Environmental Property Assessor (2023)

Certification #: 17514028831231030

National Association of Underwater Instructors (NAUI) Certification

Rescue SCUBA Certification (2017)

Professional Association of Diving Instructors (PADI) Certification

Open Water SCUBA Certification

Additional Training

Geographic Information Systems Certificate (San Jose State University)

Georeferencing, geocoding, geoprocessing, and model building

United States Coast Guard Trained as a Deckhand (2017-2019)

SPSS Statistics Version 25 (San Jose State University)

Experimental design, hypothesis testing, data analysis, and interpretation

APPENDIX B: SITE PHOTOGRAPHS



Photo 1. View of the single-family dwelling built in 1977 on the Property.



Photo 2. Side view of the single-family dwelling built in 1977 on the Property.



Photo 3. View of the back side of the single-family dwelling built in 1977 on the Property.



Photo 4. View of the Blair Court used to access the Property.



Photo 5. View of the northern portion of the Property.



Photo 6. View of oak trees and property boundary in the northern portion of the Property.



Photo 7. View of northwest portion of the Property and the property boundary.



Photo 8. View of driveway off of Blair Count used to access the Property.



Photo 9. View of the residential structure taken from the southwestern portion on the Property.



Photo 10. View of the Property from the south.



Photo 11. View of the southwest edge of the Property where it meets Lynn Road.



Photo 12. View of oak trees and rock pile near the center of the Property.



Photo 13. View of property boundary in the northeast.



Photo 14. View of the Property boundary from Lynn Road.

APPENDIX C: WELL COMPLETION REPORTS

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
1000 Newbury Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	4/6/2004	
101 W Thousand Oaks Blvd	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	6/7/2007	101 W Thousand Oaks Blvd
101 W Thousand Oaks Blvd	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	5/4/2009	101 W Thousand Oaks Blvd
101 W Thousand Oaks Blvd	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	5/5/2009	
1120 Newbury Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	3/14/2013	
1201 Thousand Oaks Boulevard	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	7/23/1996	25
145 W HILLCREST	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	4/9/1996	
2001 CORPORATE CENTER	Ventura County Watershed Protection District	Monitoring	34.18348	-118.91126	11/29/1996	104
2861 Moorpark Road	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	1/12/1994	65
2861 Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	4/4/1995	44

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
2861 Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	4/5/1995	45
2861 Moorpark Road	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	3/28/1994	68
2861 Moorpark Road	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	4/4/1995	
2861 Moorpark Road	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	4/4/1995	20
2861 Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	11/21/1993	62
293 S Moorpark Road	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	3/11/2003	50
355 E Thousand Oaks Boulevard	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	9/30/2008	
445 Ventu Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	8/31/1998	
50 S Parker Road	Ventura County Watershed Protection District	Test Well	34.18365	-118.87605	12/9/1992	23
550 N Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	11/16/2011	

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
550 N Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	11/17/2011	
550 N Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	3/22/2007	
550 N Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	11/17/2011	
550 N Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	11/17/2011	
550 N Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	11/16/2011	
550 N Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	11/14/2011	
550 N Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	11/15/2011	
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	3/29/1995	31
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	3/29/1995	28
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	3/29/1995	31

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	3/29/1995	28
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	3/14/2005	25
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	3/14/2006	25
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	9/8/2013	
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	9/9/2013	
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	9/9/2013	
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	9/16/2013	
56 E Thousand Oaks Blvd	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	9/16/2013	
575 N Ventu Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	5/18/2014	575 N Ventu Park Road
575 N Ventu Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	5/18/2014	575 N Ventu Park Road

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
575 N Ventu Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	5/18/2014	575 N Ventu Park Road
575 N Ventu Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	5/18/2014	575 N Ventu Park Road
575 N Ventu Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	5/18/2014	575 N Ventu Park Road
575 N Ventura Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	8/3/2014	
575 N Ventura Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	8/5/2014	
575 N Ventura Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	8/4/2014	
575 N Ventura Park Road	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	8/6/2014	
595 N Moorpark Road	LA County Department of Public Health, Department of Health Services, Drinking Water Program	Monitoring	34.18365	-118.87605	2/13/2008	40
600 Moorpark Road	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	10/5/1995	45

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
600 Moorpark Road	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	10/8/1995	
CALLE LAREDO, CALLE ARROYO, PUESTA DEL S	Ventura County Watershed Protection District	Water Supply Domestic	34.18357	-118.89369	10/19/1991	590
CANYON RD, LYNN RD, VENTU PARK, SUSAN DR	Ventura County Watershed Protection District	Test Well	34.18348	-118.91126	6/9/1983	500
CONEJO RANCH, MAIN CAMP, NORTH OF BLACKS	Ventura County Watershed Protection District	Unknown	34.18357	-118.89369	9/6/1931	441
CONEJO RANCH-MOORPARK & WILBUR RDS	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	1/29/1948	600
E OF MOORPARK RD, S OF WILBUR RD, SUBDIV	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605		105
E THOUSAND OAKS BLVD	LA County Department of Public Health, Department of Health Services, Drinking Water Program	Monitoring	34.18365	-118.87605	1/14/1992	20
E THOUSAND OAKS BLVD	LA County Department of Public Health, Department of Health Services, Drinking Water Program	Monitoring	34.18365	-118.87605	1/14/1992	30

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
E THOUSAND OAKS BLVD	LA County Department of Public Health, Department of Health Services, Drinking Water Program	Monitoring	34.18365	-118.87605	1/14/1992	20
EAST OF MOORPARK RD, NORTHWEST OF HWY 10	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	7/13/1947	110
Highway 101	Ventura County Watershed Protection District	Test Well	34.18357	-118.89369	8/16/1950	270
HWY 101, VENTU PARK RD	Ventura County Watershed Protection District	Water Supply Domestic	34.18348	-118.91126	9/29/1956	125
HWY 101, VENTURA BLVD, E OF VENTU PARK R	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	6/24/1947	110
MOOREPARK RD	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	2/4/1992	45
LAWRENCE DR	LA County Department of Public Health, Department of Health Services, Drinking Water Program	Monitoring	34.18365	-118.87605	7/22/1998	45

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
MOOREPARK RD	Ventura County Watershed Protection District	Monitoring	34.18365	-118.87605	2/6/1992	40
LAWRENCE DR	LA County Department of Public Health, Department of Health Services, Drinking Water Program	Monitoring	34.18365	-118.87605	7/22/1998	25
NEWBURY PARK, VENTU PARK RD, HAIGH RD, H	Ventura County Watershed Protection District	Water Supply Domestic	34.18348	-118.91126	8/19/1954	100
NEW 101, OLD 101, MOORPARK RD	Ventura County Watershed Protection District	Water Supply Irrigation - Agriculture	34.18357	-118.89369	5/9/1951	210
MOORPARK RD	Ventura County Watershed Protection District	Unknown	34.18365	-118.87605	11/21/1993	62
SOUTH OF HWY 101, EAST OF VEN-TU PARK RD	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126		135
TIMBER SCHOOL-NEWBURY PK NW CORNER SCHOO	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126		91
OLD VENTURA RD, NEWBERRY PK RD, HAIGH RD	Ventura County Watershed Protection District	Water Supply Domestic	34.18348	-118.91126		175
VENTU PARK RD, VENTURA BLVD	Ventura County Watershed Protection District	Water Supply Domestic	34.18348	-118.91126	10/11/1950	100

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
VENTU PARK RD, VENTURA BLVD	Ventura County Watershed Protection District	Water Supply Domestic	34.18348	-118.91126	2/8/1951	109
VENTU PARK RD	Ventura County Watershed Protection District	Water Supply Domestic	34.18348	-118.91126	5/17/1951	175
US 101, MOORPARK RD	Ventura County Watershed Protection District	Water Supply Domestic	34.18365	-118.87605	6/12/1950	150
US 101, MOORPARK RD, WILBUR RD	Ventura County Watershed Protection District	Water Supply Domestic	34.18365	-118.87605	9/19/1954	
US 101, MOORPARK RD, WILBUR RD	Ventura County Watershed Protection District	Water Supply Irrigation - Agriculture	34.18365	-118.87605		711
US 101, MOORPARK RD, WILBUR RD	Ventura County Watershed Protection District	Water Supply Domestic	34.18365	-118.87605	9/2/1954	
Ventu Park Road & Romona Drive	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	9/29/2008	
VENTU PK RD, VENTURA BLVD	Ventura County Watershed Protection District	Water Supply Irrigation - Agriculture	34.18357	-118.89369	10/6/1950	134
VENTURA BLVD, MOOR PARK RD, WILBUR RD	Ventura County Watershed Protection District	Water Supply Domestic	34.18365	-118.87605	2/26/1948	168
VENTURA BLVD, MOORPARK RD, WILBUR RD	Ventura County Watershed Protection District	Water Supply Domestic	34.18365	-118.87605	9/2/1954	

Well Location	Permit Agency	Planned/Former Use	Lat	Long	Date Work Ended	Total Depth (ft)
VENTURA BLVD, RUNNING SPRING RANCH	Ventura County Watershed Protection District	Water Supply Irrigation - Agriculture	34.18348	-118.91126		250
VENTURA PARK RD, 101 VENTURA FRWY	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126	5/18/2000	
WEST OF VEN-TU PARK RD, SOUTH OF HWY 101	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126		70
VENTURA FRWY, VENTURA BLVD, MOORPARK RD	Ventura County Watershed Protection District	Water Supply Domestic	34.18365	-118.87605	7/6/1953	279
	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126		
	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126		
	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126		
	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126		
	Ventura County Watershed Protection District	Unknown	34.18348	-118.91126		

APPENDIX I

Infiltration Feasibility Report

GOLD COAST GEOSERVICES, INC.
Engineering Geologic and Geotechnical Consultants

May 9, 2024
File No. GC23-123454

JEB ADAMS
1651 LYNN ROAD, LLC

SUBJECT: Geotechnical analysis and infiltration feasibility report for Tentative Parcel Map #6081, 1651 Lynn Road, Thousand Oaks.

REF.: Gold Coast GeoServices, Inc., Geotechnical Report, Tentative Parcel Map #6081, APN 660-0-030-165 and -175, 1651 Lynn Road, Thousand Oaks; dated 01/11/24.

Dear Mr. Adams:

This report presents my findings regarding the suitability of the subject site for stormwater infiltration system using dry wells. This analysis was performed in conformance with the definitive County of Los Angeles Administrative Manual GS200.1: "Guidelines for Design, Investigation, and Reporting Low Impact Development Stormwater Infiltration".

Based on the findings from the geotechnical investigation as discussed in the referenced geotechnical report prepared by this office, it is our finding that the geotechnical conditions at this site are not suitable for Low Impact Development (LID) stormwater infiltration method, for the following reasons:

1. As discussed in the referenced geotechnical report, this site is underlain at shallow depth by very dense volcanic bedrock. The underlying volcanic bedrock is the medium into which infiltration would necessarily be introduced. The volcanic bedrock underlying this site was found from test pit excavations across the site to be essentially impermeable and non-porous, so that infiltration would be prohibited by the lack of suitable subsurface geologic conditions.
2. Stormwater infiltration would cause a potential negative impact to proposed developments within the property, and to offsite properties, as a result of groundwater

"mounding" that could cause ground saturation and settlement. Lateral migration of infiltrated stormwater to adjacent properties could occur, that could cause damages to offsite properties.

RECOMMENDATIONS

Due to the finding of unsuitable geotechnical conditions for Low Impact Development (LID) stormwater infiltration, it is recommended that bio-infiltration and rainwater harvesting methods be used for Low Impact Development (LID) stormwater management.

Please call this office at (805) 484-5070 if you have any questions regarding this information.

Respectfully submitted,
GOLD COAST GEOSERVICES, INC.





Scott J. Hogrefe, CEG 1516

APPENDIX J

Noise and Vibration Technical Study

NOISE AND VIBRATION TECHNICAL STUDY

1651 Lynn Road Residential Subdivision Project
Thousand Oaks, California

Prepared for:

CITY OF THOUSAND OAKS
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April 2024

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APPENDIX

Appendix A	Noise and Modeling Worksheets

1.0 INTRODUCTION

Envicom Corporation (Envicom) has completed a noise study for the 1651 Lynn Road Residential Subdivision Project, herein referred to as "Project" or "proposed Project" located in the City of Thousand Oaks (City). This Noise and Vibration Technical Study discusses the fundamentals of noise and vibration, establishes existing conditions in the Project area, and evaluates the potential noise and vibration impacts on nearby sensitive receptors that may result from the implementation of the proposed Project. This study discusses the fundamentals of noise and vibration and establishes existing conditions in the Project area. All noise and vibration modeling worksheets are attached as **Appendix A**.

1.1 Noise and Vibration Fundamentals

Noise Glossary

Sound: Sound is a vibratory disturbance created by a moving or vibrating source in the pressure and density of a gaseous or liquid medium or in the elastic strain of a solid that is capable of being detected by the hearing organs.

Noise: Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and that causes a disturbance to humans.

Decibel (dB): The decibel is a unit used to measure the intensity of a sound or the power level of an electrical signal by comparing it with a given level on a logarithmic scale.

A-weighting (dBA): A-weighted sound levels represent the overall noise at a receiver that is adjusted in frequency to approximate typical human hearing sensitivity.

Equivalent continuous sound level (L_{eq}): L_{eq} is the equivalent continuous sound level and represents the total sound energy average over a period of interest.

Maximum sound level (L_{max}): The maximum level describes the maximum noise level reached during a single noise event.

Minimum sound level (L_{min}): The minimum sound level measured with 'A' frequency weighting and fast time weighting during the measurement period.

Statistical noise descriptors (L_n): Statistical analysis of noise levels. The 'n' denotes the percentage exceedance, for example the value of L90 shows the noise level that was exceeded for 90% of the measurement duration.

Root mean square (rms): The square root of the arithmetic average of the squared amplitude of a vibration signal.

Sound pressure level (SPL): A logarithmic measurement of the rms sound pressure of a sound relative to a reference value. It is measured in dB.

Day-night level (L_{dn}): L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.

Community noise equivalent level (CNEL): Similar to L_{dn}, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m., and a 5 dB penalty applied to the A-weighted sound levels occurring during evening hours between 7:00 p.m. and 10:00 p.m.

Peak particle velocity (PPV): The peak signal value of an oscillating vibration velocity waveform. Usually expressed in inches/second in the United States.

Vibration decibel (VdB): The root mean square vibration velocity in a dB scale used to convey the magnitude of the vibration signal felt by the human body, in inches per second.

Sensitive receptor: Noise and vibration sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

1.2 Noise Fundamentals

Noise is defined as any unwanted or undesirable sound that disrupts or interferes with the normal auditory environment. It is often characterized by its loudness, pitch, frequency, and duration. Noise can be subjective, as what one person considers noise may not be perceived the same way by another. In various contexts, noise can refer to any sound that is considered disturbing, irritating, or harmful to human health and well-being. Noise pollution, for example, is the presence of excessive or intrusive noise in the environment that can have negative effects on individuals, communities, and ecosystems.

Sound perceived by humans is a vibration that propagates longitudinally through an elastic medium, such as air, which is also known as an acoustic wave or pressure wave. This longitudinal wave is comprised of an amplitude, frequency, and wavelength. The amplitude of a sound wave can be defined as the loudness or the amount of maximum displacement of vibrating particles of the medium from their mean position when the sound is produced. Sound pressure level is the most common descriptor used to describe the perceived "loudness" of an ambient sound level. The standard measurement unit of sound pressure is called a decibel (dB). The frequency of sound is the number of oscillations per second and is measured in hertz (Hz). Frequency and pitch are often used synonymously – the higher the frequency, the higher the pitch. Lastly, the wavelength is simply the size of a wave measured from one peak to the next. The wavelength of a sound is inversely proportional to its frequency, and therefore, the higher the frequency, the shorter the wavelength.

A healthy and typical audible range for adult humans is between 20 Hz and 20,000 Hz. However, the human response to frequencies within the audible range are not all the same and tends to drop below 20,000 Hz with aging. To address this, the A-weighted scale is applied (dBA). The scale assigns a weight to the decibel value of sound based on the sensitivity of the ear at a particular frequency. Generally, the human ear naturally deemphasizes frequencies below 1,000 Hz and emphasizes frequencies between 1,000 Hz and 5,000 Hz. The human ear therefore has a natural "pick-up" in the frequencies that make consonant sounds in human speech.

Because the decibel is based on a logarithmic scale, a doubling of a sound source is perceived as a 3 dBA increase which is often referred to as the just noticeable difference threshold in an outdoor or uncontrolled environment. A change in 1 to 3 dBA is detectable under quiet, controlled, laboratory conditions. A change of 5 dBA is readily perceptible to most people, and a change in 10 dBA is perceived as a doubling (or halving) of the sound. Another example is to consider that a 10 dBA increase is 10 times more intense than 1 dBA, a 20 dBA increase is 100 times more intense, a 30 dBA increase is 1,000 times more intense, and

so on. **Table 1**, **Common Noise Levels**, shows a range of urban noise sources, their noise levels, and subjective human impression.

Table 1
Common Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban daytime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
Threshold of hearing	0	Threshold of hearing
Source: Caltrans 2013.		

1.3 Health Effects of Noise to Humans

Loud noise can create physical and psychological stress, reduce productivity, and interfere with communication and concentration. Short term exposure to loud noise can also cause a temporary change in hearing (your ears may feel stuffed up) or a ringing in your ears (tinnitus). These short-term problems may go away within a few minutes or hours after leaving the noise. However, repeated exposures to loud noise can lead to permanent tinnitus and/or hearing loss. The effects of noise induced hearing loss can be profound, limiting your ability to hear high frequency sounds, understand speech, and seriously impairing your ability to communicate.

1.4 Sound Propagation

In an exterior environment when a noise event occurs, the noise level diminishes with distance to the inverse square law which states that for every doubling of distance from the noise source to receiver, sound attenuates 6 dBA for point sources (most stationary noise sources such as mechanical equipment, loudspeakers, and people talking) and 3 dBA for line sources (e.g., roadways and rail lines). This is the minimum attenuation achieved and does not account for additional ground absorption and acoustical shielding from other buildings, walls, trees, or other physical barriers.

1.5 Vibration Fundamentals

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. Because the motion is oscillatory, there is no net movement of the vibration element and the average of any of the motion metrics is zero. Displacement is the most intuitive metric. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed. Although displacement is easier to understand than velocity or acceleration, it is rarely used for describing ground-borne vibration. Most transducers used for measuring ground-borne vibration use either velocity or acceleration. Furthermore, the response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration.

The typical frequency range of most ground-borne vibrations that can be felt by humans is less than 1 Hz to a high of 200 Hz. Common vibration metrics used to assess vibration are the root mean square (rms vibration decibel in VdB) and peak particle velocity (PPV). PPV is often used in monitoring of construction vibration (such as blasting) and to assess potential architectural damage since it is related to the stresses that are experienced by buildings. The units for PPV in the United States are normally inches per second (in/sec). VdB is commonly used when assessing the human response (also referred to human annoyance) to vibration as it uses the arithmetic average of the squared amplitude of the signal. Like noise, groundborne vibration attenuates with distance. Vibration attenuation varies depending on the soil type, compaction, and vibration frequency.

Traffic, including heavy trucks traveling on a highway, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. However, there have been cases in which heavy trucks traveling over potholes or other discontinuities in the pavement have caused vibration high enough to result in complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface. In describing vibration in the ground and in structures, the motion of a particle (i.e., a point in or on the ground or structure) is used.

2.0 PROJECT SUMMARY

2.1 Project Location

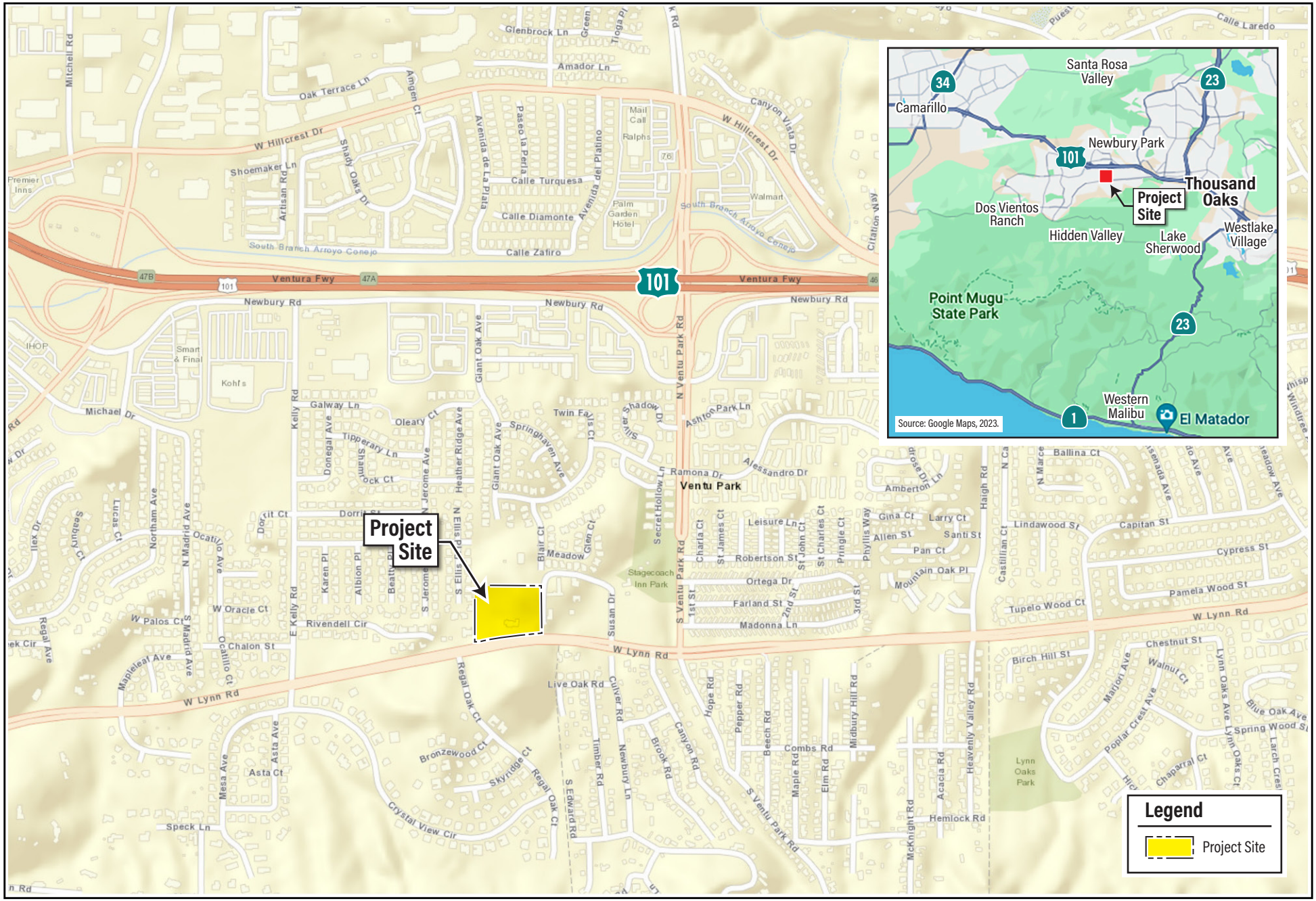
The Project site is located at 1651 Lynn Road in Newbury Park, occupying a 4.28-acre residential lot at the northwest corner of the Lynn Road and Blair Court intersection. This property falls under County of Ventura Assessor's Parcel Numbers (APNs) 660-0-030-165 and 660-0-030-175. The City General Plan designates the Project site land use as Neighborhood Low 2 (Residential) with a zoning classification of Rural-Exclusive (R-E). The Project site consists of a vacant single-family residence with a paved driveway, hardscaping, and landscaping, while the remaining portion of the site remains undeveloped. Surrounding the Project site are residential communities to the north, east, and west; Lynn Road borders the Project site to the south; and open space and residential uses are located further south of Lynn Road. For a visual representation, please refer to **Figure 1, Regional Location Map** and **Figure 2, Vicinity Aerial Map**.

2.2 Project Description

The Project Applicant (Applicant) proposes to subdivide the 4.28-acre lot into 19 residential sublots. This subdivision will accommodate the construction of 18 single-family residences and a pool amenity (refer to **Figure 3, Project Site Plan)**. Construction is expected to begin January of 2025 and be completed by March of 2026. Before commencing construction, the Project will involve the demolition of the existing vacant single-family residence and associated driveway and hardscape, as well as result in the removal of 21 oak trees and the encroachment of 82 oak trees.[1] Once the demolition activities are concluded, the construction phase will include grading activities; rough grade quantities are estimated at approximately 15,000 cubic yards (cy) of cut and 15,000 cy of fill, which would be balanced on the Project site. While soil materials would be balanced on-site, there is a potential need to export unsuitable rock material, which is estimated at 1,000 cy and which would be exported from the Project site.[2] Development of the new private road within the subdivision and the installation of utilities and service systems would accompany construction of the 18 residences and pool amenity.

[1] According to the Oak Tree Report prepared by Jan C. Scow Consulting Arborists, LLC (September 12, 2023), the City has required that an access easement be granted through the northeast corner of the Project site for access to the property to the north. If this area is cleared for an access road and utilities, an additional 10 protected oak trees would be removed (Nos. 23-30, 32, and 33), and 2 will be substantially impacted (Nos. 34 and 35). That is not a part of the Project.

[2] This is estimated to require 70 truck trips using a 14-cy truck.



Source: ESRI World Street View Background, 2024.

Regional Location Map

FEET 0 500 1,000

FIGURE 1



Source: Google Earth Pro, February, 2022.

envicom

Vicinity Aerial Map

FEET 0 150 300

FIGURE 2



Source: Pacific Coast Civil, Inc., Sept. 12, 2023.

Project Site Plan

FEET 0 40 80

FIGURE 3

3.0 REGULATORY SETTING

3.1 State

The Governor's Office of Planning and Research (OPR) provides guidelines for noise and land use compatibility. These guidelines provide a range of acceptable noise levels for specific land use categories measured in CNEL or L_{dn}. The guidelines categorize noise exposures as "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable." The City has established its own criteria for land use and noise compatibility, which are detailed below in **Table 2, Land Use Compatibility Guidelines with Urban Noise Environments**.

California Building Code

Title 24 of the California Code of Regulations, known as the California Building Code, includes specifications for interior noise levels in Part 2, Volume 1, Chapter 12, Section 1206.4, titled "Allowable Interior Noise Levels." According to this section, interior noise levels resulting from external sources must not exceed 45 dB in any habitable room. The metric used to measure this noise level should be either the L_{dn} or the CNEL, in alignment with the noise element of the local general plan.

3.2 City of Thousand Oaks

General Plan Noise Element

The City adopted its updated General Plan 2045 in December 2023. The Noise Element of the General Plan details the noise conditions in the City, provides noise and land use compatibility guidelines, and establishes goals and policies for addressing noise issues. The City's guidelines for land use compatibility are summarized below in Table 2, Land Use Compatibility Guidelines with Urban Noise Environments. Additionally, the proposed Project is subject to the following noise-related objectives and policies.

Goal N-1: Promote a pattern of land uses that is compatible with current and future noise levels.

> **Policy N-1.1 Acoustical Studies**. Require an acoustical study and, as necessary, noise attenuation for proposed developments that may be exposed to noise exceeding the normally acceptable range identified in Table 11.2 (refer to Table 2 in this study) or where a project has the potential to result in a significant increase in noise, as defined in Table 11.3 (referred below in **Table 3, Thresholds of Significance for Long-term Noise Increases** on this study).
>
> **Policy N-1.2 Noise-reducing design features.** Incorporate design features into land use projects that can be used to shield residents from noise exceeding the normally acceptable ranges included in Table 11.2 (refer to Table 2 in this study). Design features may include, but are not limited to berms, walls, and sound attenuating building configuration, architectural design, and construction method and materials.
>
> **Policy N-1.4. Sensitive noise receptors.** Maintain acceptable noise levels near sensitive receptors such as residences, hospitals, schools, and places of worship through review of new development in accordance with Policy N-1.1 and enforcement of the Municipal Code.
>
> **Policy N-1.5 Noise studies.** Require noise studies for new development located in areas where the contour maps on figures Figure 11.2 and Figure 11.3 indicate the potential for exposure to noise exceeding the normally acceptable range for the proposed use and/or where the proposed use would have the potential to expose existing uses to significant operational noise impacts per the thresholds

included in policies N-1.1 and N-3.2. If the proposed project would or could be exposed to noise exceeding the normally acceptable range, require appropriate noise reduction techniques to minimize noise exposure. Depending on the noise source, such techniques may include but are not limited to building construction standards to reduce interior noise, building orientation that blocks noise, increased setbacks from noise source(s), and use of sound barriers. If the project would or could generate significant operational noise impacts to existing uses, require mitigation to minimize impacts.

Goal N-2: Minimize adverse noise impacts associated with transportation.

Policy N 2.1 Noise sensitive receptors and roadway noise. Protect sensitive receptors from freeway and roadway noise through minimization techniques, including building configuration and design, sound walls, traffic calming, traffic diversion, or rubberized asphalt.

Goal N-3: Minimize excessive intermittent noise.

Policy N-3.1 Construction Noise. Use the noise levels shown in Table 11.4, (**Table 4, Construction Noise Thresholds of Significance** of this study) adopted from the Federal Transit Administration (FTA) standards, as thresholds of significance for construction noise and, as necessary, require mitigation for construction activities that would result in significant impacts.

Policy N 3.2 Noise reduction for construction. Require the following noise reduction techniques for all construction activity in the City:

- Require power construction equipment with noise shielding and silencing devices consistent with manufacturer's standards or the Best Available Control Technology.
- Prohibit use of driven (impact), sonic, or vibratory pile drivers, except in locations where the underlying geology renders alternative methods infeasible, as determined by a soils or geotechnical engineer and documented in a soils report.
- Utilize noise attenuating measures or screening for all outdoor mechanical equipment from off-site noise-sensitive uses.
- Locate construction staging areas as far from noise-sensitive uses as reasonably possible and feasible in consideration of site boundaries, topography, intervening roads and uses, and operational constraints.
- For construction activity that even with the above requirements would or may still generate noise exceeding the significance thresholds in Policy N-3.2, investigate the use of additional feasible noise reduction techniques, including but not limited to the use of temporary sound barriers between the noise-generating activity and affected sensitive uses.

Policy N 3.3 Noise compliant response. Track and respond to noise complaints and, as necessary, take action to address violations of noise restrictions. For repeat violators, investigate the potential to require systemic changes to the activity generating the Municipal Code violation.

Table 2
Land Use Compatibility Guidelines with Urban Noise Environments

Land Use Category	Community Noise Equivalent Level (CNEL), dB				
	Clearly Acceptable	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low density, single-family, duplex, mobile homes	< 55	55-60	60-65	65-75	< 75
Residential – Multifamily (including residential components of mixed-use developments)	< 55	55-60	60-65	65-75	< 75
Commercial – Motels, Hotels, Transient Lodging	< 60	60-65	65-70	70-80	< 80
Schools, libraries, churches, hospitals, nursing homes	-	<60	60-70	70-80	< 80
Amphitheaters, concert halls, auditoriums, meeting halls	-	-	< 65	65-70	< 70
Sports arenas, outdoor spectator sports	-	-	< 70	70-75	> 75
Playgrounds, neighborhood parks	< 55	55—67	67-75	-	> 75
Golf courses, riding stables, water recreation, cemeteries	< 55	55-75	75-80	-	> 80
Office buildings, business, commercial and professional	< 60	60-65	65-75	< 75	-
Industrial, manufacturing, utilities, agriculture	< 65	65-70	70-80	< 80	-

Notes:
Clearly Acceptable = The noise environment is suitable for this use.
Normally Acceptable = Noise may be considered a problem by some people, but normal building construction will usually provide adequate protection of interior spaces.
Conditionally Acceptable = New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply or air conditioning, will normally suffice.
Normally Unacceptable = New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.
Clearly Unacceptable = New construction or development should generally not be undertaken.

Table 3
Thresholds of Significance for Long-term Noise Increases

If the CNEL for existing + proposed project + cumulative conditions at a noise-sensitive land use is projected to be:	A project or cumulative noise impact would be significant if the CNEL would increase by the following amounts at a noise-sensitive land use:	The project alone would make a substantial contribution to a significant cumulative impact if the CNEL would increase by the following amounts at a noise-sensitive land use:
Less than 55 dBA	Not significant for any change in noise level	Not significant for any change in noise level
55-60 dBA	Equal to or greater than 3.0 dBA	Equal to or greater than 1.0 dBA
60-70 dBA	Equal to or greater than 1.5 dBA	Equal to or greater than 0.5 dBA
Notes: A noise-sensitive use is a use for which the upper limit for the "normally acceptable" noise level range shown in Table 11.2 is 65 CNEL or lower.		

Table 4
Construction Noise Thresholds of Significance

Land Use Type	$L_{eq(8hr)}$		CNEL
	Day	Night	
Residential	80 dBA	70 dBA	75
Commercial	85 dBA	85 dBA	80
Industrial	90 dBA	90 dBA	85
Source: City of Thousand Oaks General Plan Table 11.4, Construction Noise Thresholds of Significance. Notes: A noise-sensitive use is a use for which the upper limit for the "normally acceptable" noise level range shown in Table 11.2 is 65 CNEL or lower.			

Municipal Code

The City of Thousand Oaks regulates excessive community noise through its Municipal Code under Title 5, Chapter 21, *Noise*. While this chapter of the City's noise ordinance does not specify quantitative acceptable noise standards, it does state the following:

Chapter 21, Section 5-21.02, Powered equipment in residential areas. Between the hours of 9:00 p.m. and 7:00 a.m. of the following day, no person shall operate any lawn mower, backpack blower, lawn edger, riding tractor, or any other machinery, equipment, or other mechanical or electrical device, or any hand tool which creates a loud, raucous or impulsive sound, within any residential zone or within any commercial zone which can be heard from any inhabited real property in a residential zone.

Chapter 11, Section 8-11.01, Construction activities restricted to certain hours. It shall be unlawful for any person to engage in or conduct any activity in the construction of any building or structure, the moving of earth, or the laying of any pavement, including, but not limited to, the making of any excavation, clearing or grading of surface land, and loading or unloading material, equipment, or supplies, except between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday, unless a permit for each work at different hours or days has first been issued by the Public Works Director. Applications for such permits shall be made in writing to the Public Works Director and shall state the name of the applicant, his business address, the location of the proposed work, the reason for seeking a permit to do such work on Sunday or between 7:00 p.m. and 7:00 a.m., and the estimated time of the proposed operation. No such special permit shall be issued except where the public peace, health, or welfare will not be adversely affected by such issuance or will be harmed by failure to perform the work at the times indicated.

Chapter 11, Section 8-11.02, Exceptions. The provisions of Section 8-11.01 of this chapter shall not be applicable to:

- Construction or other enumerated activity involving a total labor and material value of one thousand and no/100ths ($1,000.00) dollars or less; or
- Construction or other enumerated activity taking place more than one mile from any dwelling in which persons reside.

4.0 EXISTING CONDITIONS

The Project site is bounded by Lynn Road to the south and residential uses to the north, east, and west. The primary noise source in the Project vicinity is traffic along Lynn Road. To establish existing conditions, the analysis references existing traffic noise contours from the General Plan 2045 Draft EIR, which were derived from average daily traffic (ADT) data provided by Iteris in 2023. **Table 5, Existing Traffic Noise Contours,** presents the modeled CNEL noise level at 50 feet and the distances to the 60, 65, and 70 CNEL noise contours. According to these contours, part of the Project site falls within the 65 and 60 CNEL noise contours, while the northern section of the site lies outside the 60 CNEL contour.

Table 5
Existing Traffic Noise Contours

SR-101	ADT Volumes	dBA CNEL at 50 Feet	Distance in Feet to CNEL Contours		
			70 dBA	65 dBA	60 dBA
Lynn Road between Ventu Park Road and Wendy Drive	17,693	71.1	59	172	273
Ventu Park Road - SR-101 and Lynn Road	5,480	62.9	17	36	78
Source: Thousand Oaks 2045 General Plan Update DEIR.					

4.1 Sensitive Receptors

As identified in Policy N-1.4, certain land uses, such as residences, hospitals schools, and places of worship, are particularly sensitive to noise. These uses are regarded as sensitive to the effects of noise, because they are where people most frequently engage in tranquil activities, which are likely to be disturbed by noise, such as reading, studying, sleeping, resting, and/or prayer.

The nearest sensitive receptors within 500 feet of the Project site boundary include single-family homes to the north, east, and west, along with additional homes to the southeast across Lynn Road. Furthermore, a place of worship is situated on a lot adjacent to the western Project site boundary (illustrated in Figure 2). It is important to note that in the impact analysis, the measured distances to noise sources may differ based on their exact locations within the Project site. The potential for noise impacts is directly related to the distance between a noise source, such as heating, ventilation, and air conditioning (HVAC) units or construction equipment, and a sensitive receptor. Beyond the mentioned receptors, no other sensitive establishments, such as hospitals, schools, or churches/places of worship, are located within 500 feet of the Project site.

5.0 SIGNIFICANCE THRESHOLDS

In accordance with Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a significant noise impact would occur if the Project would:

1. 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.
2. Generate excessive groundborne vibration or groundborne noise levels.
3. 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, expose people residing or working in the Project area to excessive noise levels.

Construction Noise

Construction activities for the Project are anticipated to occur between 7:00 a.m. and 7:00 p.m., Monday through Friday, within the allowable daytime hours specified in Chapter 11, Section 8-11.01 of the Thousand Oaks Municipal Code. A significant construction noise impact would occur if Project construction activities would exceed the daytime construction noise limit of 80 dBA L_{eq} and a CNEL of 75 dBA at the nearest residential receptors, as reflected in the Noise Element's Table 11.4.

Operational Noise

The Noise Element of the General Plan sets specific thresholds for determining the significance of long-term noise increases. Hence, to assess the significance of traffic noise impacts, the criteria outlined in Table 3 of this study are utilized.

Vibration

The City has not adopted a quantitative significance threshold for vibration impacts. Therefore, the FTA's vibration criterion of 0.2 in/sec PPV for non-engineered timber and masonry buildings (applicable to the surrounding residential structures) is used to evaluate potential construction-related vibration impacts at nearby residential structures.

5.1 Methodology

Construction Noise and Vibration

This study employs the Roadway Construction Noise Model (RCNM) to predict noise levels during construction. It specifically models the three loudest pieces of equipment for each phase of construction activity, such as grading, building construction, and paving. To estimate construction vibration levels at nearby residential structures, the analysis refers to the FTA-recommended PPV values for construction equipment, as detailed in their Transit Noise and Vibration Assessment Manual, measuring in inches per second (in/sec).

Operational Noise

The analysis evaluates the stationary noise impacts during operation from common residential development equipment, particularly HVAC units. Moreover, it estimates off-site operational traffic noise impacts, utilizing the Institute of Transportation Engineers (ITE) trip generation rates for Single-Family Detached Housing under Land Use Code 210. The analysis also incorporates ADT volumes for both existing and

projected future conditions, as outlined in the Thousand Oaks 2045 General Plan Update Draft Environmental Impact Report (DEIR).

6.0 PROJECT IMPACT ANALYSIS

6.1 Construction Noise

Project-related construction noise is generated from off-site mobile sources used to transport workers and materials and from on-site noise sources from construction equipment. Construction would occur during the days and times permitted by the Municipal Code.

6.2 Construction Vehicles

The transport of workers and materials to and from the construction site would incrementally increase noise levels along access roadways in the Project vicinity. Individual construction vehicle pass-bys and haul trucks may create momentary noise levels of up to 85 dBA (L_{max}) at 50 feet. According to the Project plans, the grading activities for cut and fill are designed to balance soil quantities. Nonetheless, there might be a need to remove approximately 70 truckloads of unsuitable rock material. Beyond the haul truck movements, the Project will temporarily increase the number of trips made by construction workers and vendors. It is estimated, using the defaults from the California Emissions Estimator Model (CalEEMod), that there will be up to 20 additional trips per day during the paving phase.

To evaluate the temporary rise in traffic noise on the main access roads, Lynn Road and Ventu Park Road, the daily construction-related trips have been logarithmically compared to the existing ADT. Table 5 shows the current ADT on Lynn Road and Ventu Park Road to be 17,693 and 5,480, respectively. The addition of either 20 daily trips from workers and vendors or 70 haul truck trips is anticipated to cause a minimal traffic noise increase of less than 0.1 dBA CNEL. Noise increases of less than 3 dB are indiscernible to the human ear in outdoor settings. Moreover, these construction-related trips will end once construction of the Project is completed. Therefore, noise from temporary construction trips would be **less than significant**.

6.3 Construction Equipment

Construction occurs in discrete activity phases, and construction noise generated from Project activities varies based on the type of equipment used, the location of the equipment relative to sensitive receptors, and acoustical usage factor.[3] Each construction activity (e.g., demolition, grading, building construction) can involve the use of different construction equipment (equipment mix), and therefore each activity can emit distinct noise characteristics. Construction noise is often dominated by the loudest piece of construction equipment, and the dominant noise source for non-impact equipment is typically the engine. Impact noise sources such as hammering work-piece noise can also be noticeable.

Construction L_{eq} Noise Levels

The CalEEMod default construction equipment mix was used to model construction noise by activity phase. The equipment mix was modeled using the RCNM. Average construction noise levels for each activity phase were modeled using the top three loudest pieces of equipment. To calculate average (L_{eq}) noise level at sensitive receptors, the distance from the nearest receptors were measured from the Project site's acoustical center. **Table 6, L_{eq} Construction Equipment Noise Level at Adjacent Residences**, shows the construction noise levels per activity phase at a distance of 50 feet and at the nearest sensitive receptors. Modeling details and spreadsheets are provided in **Appendix A**.

[3] Usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.

Table 6
L_{eq} Construction Equipment Noise Level at Adjacent Residences

Modeled Equipment per Construction Activity	Construction Noise Levels in dBA L_{eq}[1]			
	RCNM reference Noise Levels[1]	Receptor to North	Receptor to East	Receptor to West
Distance	***50 feet***	***200 feet***	***275 feet***	***260 feet***
Demolition	85	73	70	70
Grading	85	73	70	70
Site Preparation	82	70	67	68
Building Construction	83	71	68	68
Architectural Coating	74	62	59	59
Paving	83	70	68	68
Maximum Noise Level at Receptors		**73**	**70**	**70**
Exceeds Residential Construction Daytime Noise Threshold of 80 dBA L_{eq}?		**No**	**No**	**No**

Source: RCNM and CalEEMod construction defaults.
Notes: See Appendix A for distances and calculations.
[1] dBA L_{eq} is rounded to the nearest whole number.

Construction CNEL Levels

The General Plan states that construction noise should not exceed 75 dBA CNEL at residential receptors. As shown in Table 5, the Project site and surrounding receptors are within the 60 and 65 dBA CNEL noise contour. To calculate the CNEL attributable to daytime construction noise, the loudest phase in Table 6 was assumed to occur between the allowable construction hours of 7:00 a.m. to 7:00 p.m. **Table 7, CNEL Construction Noise Levels at Adjacent Residences**, shows the CNEL due to construction during the loudest phase at each adjacent residential home. As shown in Table 7, Project-related construction would not exceed the 75 dBA CNEL threshold. Individual CNEL calculations for each receptor shown in Table 7 are attached to Appendix A.

Table 7
CNEL Construction Noise Level at Adjacent Residences

Noise Source	dBA		
	Receptor to North	Receptor to East	Receptor to West
Existing CNEL	60	65	65
Demolition/Grading L_{eq}	73	70	70
Cumulative CNEL	71	73	73
Exceeds Residential Construction Daytime Noise Threshold of 75 dBA CNEL?	**No**	**No**	**No**

Notes: See Appendix A for distances and calculations.
CNEL = Community noise equivalent level.

In summary, construction noise levels at the nearest sensitive receptors would not exceed the 80 dBA L_{eq} threshold or the 24-hour limit of 75 dBA CNEL. Therefore, construction noise impacts would be **less than significant**.

6.4 Operational Noise

The proposed Project would generate on-site and off-site operational noise. Off-site operational noise would arise from Project trip generation, contributing to incremental increases in traffic noise along Lynn Road. On-site operational noise sources encompass noise generated by HVAC and pool equipment.

Off-Site Operational Traffic Noise

Access to the Project site is primarily through Lynn Road and Ventu Park Road. The daily trips generated by the Project were estimated using the trip generation rate of 9.43 from the ITE Land Use Code 210 for Single-Family Detached Housing, resulting in an average of 170 daily trips.

To assess traffic noise increases due to the Project, the *existing plus Project* traffic volumes were logarithmically compared to the *existing no Project* traffic volumes. This same methodology was used in determining the Project's contribution to the cumulative increase (*cumulative plus Project* traffic volumes compared to *cumulative no Project*). Traffic noise volumes for existing and future conditions are shown in Table 7, Traffic Noise Volumes for Existing and Future Scenarios, and traffic noise increases are detailed in **Table 8, Existing and Future Traffic ADT Volumes** and **Table 9, Traffic Noise Increases.**

Table 8
Existing and Future Traffic ADT Volumes

Roadway Segment	ADT			
	Existing No Project	Existing Plus Project	Cumulative	Cumulative Plus Project
Lynn Road - Ventu Park Road and South Wendy Drive	17,693	17,863	19,300	19,470
Ventu Park Road - SR-101 and Lynn Road	5,480	5,650	7,100	7,270
Source: ITE Trip Generation 11th Edition; Thousand Oaks 2045 General Plan Update DEIR.				

Table 9
Traffic Noise Increases

Roadway Segment		dBA CNEL			Exceeds Significant Threshold?
	Existing Ambient at 50 feet	Project Noise Increase	Cumulative Noise Increase	Applicable Threshold	
Lynn Road - Ventu Park Road and South Wendy Drive	71.1	0.04	0.4	1.5	No
Ventu Park Road - SR-101 and Lynn Road	62.9	0.12	1.2	1.5	No

As shown in Table 9, Project Traffic Noise Increases**,** the Project would result in a traffic noise increase of up to 0.12 dBA CNEL on roadways in the Project vicinity and the cumulative traffic noise increase would be up to 1.2 dBA CNEL. Therefore, Project-related and cumulative traffic noise impacts would not exceed the applicable threshold of 1.5 dBA CNEL for existing environments between 60 to 70 dBA CNEL or greater. Therefore, traffic noise impacts would be **less than significant.**

On-Site Operational Stationary Noise

Outdoor Mechanical Equipment

The proposed Project is anticipated to have HVAC equipment on the ground next to each home. For a conservative analysis, it is assumed that HVAC equipment would be installed in the rear of each single-family home, closest to the nearest adjacent residential property lines. Though specific HVAC equipment models and sound specifications are not available, based on similar residential projects, this analysis references Carrier's GH5S size 36 and size 42 models. These units generate noise levels between 66 and 61 dBA at a distance of 5 feet.

The nearest residential receptor property line to the proposed single-family homes is approximately 25 feet to the west. Point noise sources such as stationary equipment attenuate at minimum rate of 6 dB per doubling of distance. Therefore, HVAC noise levels would be reduced to 52 dBA or less at 25 feet. As detailed in Chapter 4, Existing Conditions, the Project site is situated partially within the 65 and 60 dBA CNEL noise contour and the remaining northern portion of the Project site is outside the 60 dBA CNEL noise contour. Assuming continuous operation of the HVAC units (24 hours), the CNEL associated with HVAC at the nearest residential receptor would be 59 dBA or less. The CNEL would not exceed the existing ambient noise levels of 60 to 65 dBA CNEL. Therefore, noise impacts from HVAC equipment would be **less than significant**.

While the exact make and model of the pool pump are yet to be determined, inground pools typically employ pumps with horsepower ranging from 0.75 to 3. For the purposes of a conservative noise analysis, the IntelliFlo 3 VSF 3 HP pool pump by Pentair Pool is used as a reference. According to its sound specifications, this particular pump can produce noise levels of up to 45 dBA at 70 percent capacity.

The pool is approximately 30 feet from the nearest residential property line to the north, leading to potential noise levels of up to 45 dBA during pump operation. As outlined in Chapter 4, Existing Conditions, the northern portion of the Project site is outside of the 60 dBA CNEL contour. Consequently, noise from the pool pump would not exceed the existing noise conditions, or substantially contribute to the existing CNEL. Therefore, noise impacts from the pool pump would be **less than significant**.

6.5 Vibration

Construction Vibration

Groundborne vibration generated by construction activities can exhibit varying intensities depending on the type of equipment being used. These vibrations emanate from the operation of construction machinery and travel through the ground, resulting in a spectrum of effects that range from imperceptible to humans to potentially causing physical impacts on nearby structures. The attenuation of groundborne vibration is influenced by several factors, including the distance from the vibration source, soil properties, the frequencies of the vibrations, the structural characteristics of buildings, and the depth of the vibration sources.

Vibration Damage

To assess potential vibration impacts, the FTA criterion of 0.2 in/sec PPV is applied, specifically for non-engineered timber and masonry buildings, which is relevant to the surrounding residential structures. This criterion is used to evaluate the potential vibration-related impacts resulting from construction activities on nearby residential structures. To estimate the vibration levels experienced by the nearest residential structures, reference vibration levels provided by the FTA for various construction equipment are used.

Due to the proximity of construction equipment operations, such as grading, to the Project site's perimeter, vibration levels at nearby buildings are estimated by measuring from the site's edge to these structures. For vibratory rollers, however, the relevant distance is from the proposed private road to the residential buildings. As indicated in **Table 10, Vibration Damage Levels at Nearby Residential Structures**, vibration levels would not exceed the 0.2 in/sec PPV threshold at the nearest residential structures. Therefore, construction period vibration impacts would be **less than significant.**

Table 10
Vibration Damage Levels at Nearby Residential Structures

Vibratory Construction Equipment	Vibration Levels, PPV (in/sec)				
	FTA Reference Level	Residential Buildings			
		North	East	South	West
Distance in feet	*25 feet*	*300 feet*	*100 feet*	*NA*	*125 feet*
Vibratory Roller	0.210	0.005	0.026	NA	0.019
Distance in feet	*25 feet*	*165 feet*	*65 feet*	*NA*	*15 feet*
Large Bulldozer	0.089	0.005	0.021	NA	0.191
Loaded Trucks	0.079	0.004	0.018	NA	0.164
Jackhammer	0.035	0.002	0.008	NA	0.075
Small Bulldozer	0.003	0.000	0.001	NA	0.006

Source: FTA 2018.
Notes: in/sec = inches per second; PPV = peak particle velocity

Vibration Annoyance

The City does not have a quantifiable vibration annoyance threshold; therefore, the FTA vibration annoyance criterion of 80 VdB for infrequent events is used in this analysis. When measuring VdBs for assessing annoyance from construction activities, it's appropriate to take measurements from the center of the construction site rather than the edge, as is typically done for PPV. Unlike PPV, which focuses on instant damage potential, VdB is more concerned with long-term annoyance and discomfort experienced by nearby residents. Measuring from the center accounts for the movement of construction equipment and activities, providing a more accurate representation of the overall vibration levels experienced in the surrounding area over time.

The nearest residential receptors from the center of the site include the adjacent single-family home to the north (scheduled for redevelopment into new residential units) and the single-family homes to the west. The distance from the center of the site to these receptors is approximately 200 feet. As shown in **Table 11, Vibration Annoyance Levels at Nearby Residential Receptors**, VdB levels at this distance would be reduced to 67 VdB or less. Therefore, vibration annoyance impacts during construction would be **less than significant.**

Operational Vibration

The proposed Project would not include significant sources of operational vibration, such as rail systems or railroad tracks. Therefore, the Project would result in no impacts related to vibration during operations.

Table 11
Vibration Annoyance Levels at Nearby Residential Receptors

Vibratory Construction Equipment	VdB Levels		
	FTA Reference Level	Residential Buildings	
		North	West
Distance in feet	*25 feet*	*200 feet*	*200 feet*
Vibratory Roller	94	67	67
Large Bulldozer	87	60	60
Loaded Trucks	86	59	59
Jackhammer	79	52	52
Small Bulldozer	58	31	31

Source: FTA 2018.
Notes: VdB = Vibration Decibel

6.6 Cumulative Impacts

Construction Noise

The primary sources of construction noise include the operation of heavy machinery and equipment typically used in residential construction, such as graders, excavators, bulldozers, loaders, and tractors, which are necessary for tasks like grading, excavation, and building construction. Because construction noise attenuates at a minimum rate of 6 dBA per doubling of the distance from the noise source, planned and approved projects within 500 feet of the Project site boundary are considered for assessing cumulative construction noise impacts. Construction noise from projects located beyond 500 feet from the Project site would not significantly contribute to cumulative construction noise impacts. Within 500 feet of the Project site boundary, there is only one planned and/or approved project, located on the northern adjacent property at 1617 Susan Drive. This property is anticipated to be subdivided into four lots, with each lot designated for the construction of a single-family home. Should construction activities for the Project and cumulative project overlap, the overall increase in construction noise is expected to be minimal, given the relatively small scale of the cumulative project involving just four single-family homes. Compared to the proposed Project of 18 single-family homes, the adjacent project would be expected to utilize fewer pieces of equipment, thus minimally contributing to the overall construction noise. Therefore, the Project's cumulative construction noise impact would be **less than significant**.

Construction Vibration

Construction vibration damage could lead to a cumulative impact if equipment from the nearby approved project at 1617 Susan Drive and the proposed Project were to operate within 25 feet of each other and an off-site structure—potentially exceeding the FTA's vibration impact threshold of 0.2 in/sec PPV. The two nearest structures to the Project site and planned and approved project are approximately 15 to 20 feet to the west. As discussed in Section 6.5, Vibration, no vibratory rollers are proposed to operate within 25 feet, and all other equipment would not exceed the 0.2 in/sec PPV at 15 to 20 feet (refer to Table 10). Therefore, cumulative vibration impacts would be less than significant.

Given that the Project's VdB levels are well below the FTA criterion of 80 VdB, it is presumed that the adjacent planned and approved residential project at 1617 Susan Drive, which is similar in scale, would produce comparable vibration levels during construction. Considering the smaller scale of both projects and the distance to the nearest residential receptors, cumulative vibration annoyance impacts are expected to be less than significant.

Operational Noise

As shown in Table 7 and Table 8 in Chapter 6.4, Operational Noise, the Project would result in a traffic noise increase or 0.4 dBA CNEL along Lynn Road from Ventu Park Road to Wendy Drive and 1.2 dBA CNEL along Ventu Park Road from SR-101 to Lynn Road. Additionally, the Project's contribution to the cumulative traffic noise increase would be 0.04 dBA CNEL along Lynn Road between Ventu Park Road and Wendy Drive, and 0.1 dBA CNEL along Ventu Park Road between SR-101 and Lynn Road. These incremental increases fall below the established significance thresholds of 1.5 dBA CNEL and 0.5 dBA CNEL, respectively. As discussed, stationary noise such as HVAC and pool pump noise would be below existing noise conditions and thus would not significantly contribute to the cumulative noise. Therefore, cumulative operational noise impacts of the Project would be **less than significant**.

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APPENDIX A
Noise and Modeling Worksheets

CONSTRUCTION

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/10/2024
Case Description: 1651 Lynn Rd

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Demolition	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	50.0	0.0
Excavator	No	40		80.7	50.0	0.0
Dozer	No	40		81.7	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Calculated (dBA) Leq	Noise Limits (dBA) Day Lmax	Noise Limits (dBA) Day Leq	Noise Limits (dBA) Evening Lmax	Noise Limits (dBA) Evening Leq	Noise Limits (dBA) Night Lmax	Noise Limits (dBA) Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Noise Limit Exceedance (dBA) Day Leq	Noise Limit Exceedance (dBA) Evening Lmax	Noise Limit Exceedance (dBA) Evening Leq	Noise Limit Exceedance (dBA) Night Lmax	Noise Limit Exceedance (dBA) Night Leq
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	84.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/10/2024
Case Description: 1651 Lynn Rd

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Grading	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Tractor	No	40	84.0		50.0	0.0

Results

	Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	Calculated (dBA)		Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	84.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/10/2024
Case Description: 1651 Lynn Rd

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site Preparation	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Dozer	No	40	81.7	50.0		0.0
Tractor	No	40	84.0	50.0		0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.0	82.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/10/2024
Case Description: 1651 Lynn Rd

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Building Construction	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Generator	No	50	80.6	50.0	0.0	
Tractor	No	40	84.0	50.0	0.0	
Front End Loader	No	40	79.1	50.0	0.0	

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.0	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/10/2024
Case Description: 1651 Lynn Rd

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Architectural Coating	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Noise Limit Exceedance (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 02/10/2024
Case Description: 1651 Lynn Rd

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Paving	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Drum Mixer	No	50	80.0	50.0		0.0
Paver	No	50	77.2	50.0		0.0
Tractor	No	40	84.0	50.0		0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drum Mixer	80.0	77.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.0	82.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Construction Noise CNEL for Worst Case - Demolition & Grading (70 dBA)
Eastern Receptors Existing CNEL = 65 dBA
Existing CNEL - 65 dBA

Time	Leq	Energy+Penalty
00:00:00	65	31622776.6
01:00:00	65	31622776.6
02:00:00	65	31622776.6
03:00:00	65	31622776.6
04:00:00	65	31622776.6
05:00:00	65	31622776.6
06:00:00	65	31622776.6
07:00:00	70	9549925.86
08:00:00	70	9549925.86
09:00:00	70	9549925.86
10:00:00	70	9549925.86
11:00:00	70	9549925.86
12:00:00	70	9549925.86
13:00:00	70	9549925.86
14:00:00	70	9549925.86
15:00:00	70	9549925.86
16:00:00	70	9549925.86
17:00:00	70	9549925.86
18:00:00	70	9549925.86
19:00:00	65	10000000
20:00:00	65	10000000
21:00:00	65	10000000
22:00:00	65	31622776.6
23:00:00	65	31622776.6
Construction CNEL	**73**	

Construction Noise CNEL for Worst Case - Demolition & Grading (73 dBA)
Northern Receptors
Northern Receptors Existing CNEL - 60 dBA

Time	Leq	Energy+Penalty
00:00:00	60	10000000
01:00:00	60	10000000
02:00:00	60	10000000
03:00:00	60	10000000
04:00:00	60	10000000
05:00:00	60	10000000
06:00:00	60	10000000
07:00:00	73	18197008.59
08:00:00	73	18197008.59
09:00:00	73	18197008.59
10:00:00	73	18197008.59
11:00:00	73	18197008.59
12:00:00	73	18197008.59
13:00:00	73	18197008.59
14:00:00	73	18197008.59
15:00:00	73	18197008.59
16:00:00	73	18197008.59
17:00:00	73	18197008.59
18:00:00	73	18197008.59
19:00:00	60	3162277.66
20:00:00	60	3162277.66
21:00:00	60	3162277.66
22:00:00	60	10000000
23:00:00	60	10000000
Construction CNEL	**71**	

Construction Noise CNEL for Worst Case - Demolition & Grading (71 dBA)
Western Receptors
Existing CNEL - 65 dBA

Time	Leq	Energy+Penalty
00:00:00	65	31622776.6
01:00:00	65	31622776.6
02:00:00	65	31622776.6
03:00:00	65	31622776.6
04:00:00	65	31622776.6
05:00:00	65	31622776.6
06:00:00	65	31622776.6
07:00:00	71	11220184.54
08:00:00	71	11220184.54
09:00:00	71	11220184.54
10:00:00	71	11220184.54
11:00:00	71	11220184.54
12:00:00	71	11220184.54
13:00:00	71	11220184.54
14:00:00	71	11220184.54
15:00:00	71	11220184.54
16:00:00	71	11220184.54
17:00:00	71	11220184.54
18:00:00	71	11220184.54
19:00:00	65	10000000
20:00:00	65	10000000
21:00:00	65	10000000
22:00:00	65	31622776.6
23:00:00	65	31622776.6
Construction CNEL	**73**	

1651 Lynn Road - Vibration Damage Attenuation Calculations

Levels, PPV (in/sec)

	FTA Reference Level	Receptor to North	Receptor to East	Receptor to South	Receptor to West
Distance in feet	25	*300*	*100*	*NA*	*125*
Vibratory Roller	0.21	0.005	0.026	NA	0.019
Distance in feet	25	*165*	*65*	*NA*	*15*
Large Bulldozer	0.089	0.005	0.021	NA	0.191
Loaded Trucks	0.076	0.004	0.018	NA	0.164
Jackhammer	0.035	0.002	0.008	NA	0.075
Small Bulldozer	0.003	0.000	0.001	NA	0.006

1651 Lynn Road - Vibration Annoyance Attenuation Calculations

Levels in VdB

Equipment	Vibration @ 25 ft	Receptor to North	Receptor to West
Distance in feet		*200*	*200*
Vibratory Roller	94.0	67	67
Hoe Ram	87.0	60	60
Large Bulldozer	87.0	60	60
Caisson Drilling	87.0	60	60
Loaded Trucks	86.0	59	59
Jackhammer	79.0	52	52
Small Bulldozer	58.0	31	31

5.3. Construction Vehicles

5.3.1 Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Worker and Ven	Haul Trips
Site Preparation				
Site Preparation	Worker	5		
Site Preparation	Vendor	0	5	
Site Preparation	Hauling	0		0
Site Preparation	Onsite truck			
Grading				
Grading	Worker	15		
Grading	Vendor	0	15	
Grading	Hauling	0		0
Grading	Onsite truck			
Building Construction				
Building Construction	Worker	6		
Building Construction	Vendor	2	8	
Building Construction	Hauling	0		0
Building Construction	Onsite truck			
Paving				
Paving	Worker	20		
Paving	Vendor	0	20	
Paving	Hauling	0		0
Paving	Onsite truck			
Architectural Coating				
Architectural Coating	Worker	1		
Architectural Coating	Vendor	0	1	
Architectural Coating	Hauling	0		0
Architectural Coating	Onsite truck			

STATIONARY

HVAC Noise Attenuation Calculations

Levels in dBA Leq

HVAC Equipment	Carrier Reference HVAC Noise Level	Adjacnet Receptor to South
Distance in feet	*5*	*25*
Min	61.0	47.0
Max	66.0	52.0

Leq to CNEL

Operational Hours	dBA Leq	Energy+Penalty
00:00:00	52	1584893.192
01:00:00	52	1584893.192
02:00:00	52	1584893.192
03:00:00	52	1584893.192
04:00:00	52	1584893.192
05:00:00	52	1584893.192
06:00:00	52	1584893.192
07:00:00	52	158489.3192
08:00:00	52	158489.3192
09:00:00	52	158489.3192
10:00:00	52	158489.3192
11:00:00	52	158489.3192
12:00:00	52	158489.3192
13:00:00	52	158489.3192
14:00:00	52	158489.3192
15:00:00	52	158489.3192
16:00:00	52	158489.3192
17:00:00	52	158489.3192
18:00:00	52	158489.3192
19:00:00	52	501187.2336
20:00:00	52	501187.2336
21:00:00	52	501187.2336
22:00:00	52	1584893.192
23:00:00	52	1584893.192
		58.67012337

Pool Pump Noise CNEL

Time	Leq	Energy+Penalty
00:00:00	45	316227.766
01:00:00	45	316227.766
02:00:00	45	316227.766
03:00:00	45	316227.766
04:00:00	45	316227.766
05:00:00	45	316227.766
06:00:00	45	316227.766
07:00:00	45	31622.7766
08:00:00	45	31622.7766
09:00:00	45	31622.7766
10:00:00	45	31622.7766
11:00:00	45	31622.7766
12:00:00	45	31622.7766
13:00:00	45	31622.7766
14:00:00	45	31622.7766
15:00:00	45	31622.7766
16:00:00	45	31622.7766
17:00:00	45	31622.7766
18:00:00	45	31622.7766
19:00:00	45	100000
20:00:00	45	100000
21:00:00	45	100000
22:00:00	45	316227.766
23:00:00	45	316227.766
Construction CNEL	**52**	

TRAFFIC

1651 Lynn Road Traffic Noise Worksheet

ITE Trip Rate Information
ITE Land Use Code 210 (Single-Family Detached Housing) trip generation average rates: Weekly Daily Trip Rate - 9.43 trips/dwelling unit

Number of SF Homes	Daily Trip Rate	Daily Trips Generated
18	9.43	170

,

	ADT				Nois Increse, dBA CNEL		
Roadway Segment	Existing[1]	Existing Plus Project[2]	Cumulative No Project[1]	Cumulative Plus Project[1,2]	Project Increase	Cumulative Increase	Projects Contribution to Cumulative Noise Incerase
Lynn Road between Ventu Park Road and South Wendy Drive	17,693	17,863	19,300	19,470	0.04	0.4	0.04
Ventu Park Road between SR-101 and Lynn Road	5,480	5,650	7,100	7,270	0.13	1.2	0.10

Sources

[1] *Existing and cumulative ADT obtained from the Thousand Oaks General Plan 2045 Upate, Noise Appendix C.*

[2] *Project daily trips were estimated using ITE trip rate for SF detached housing, Code 210.*

APPENDIX K

Tribal Consultation

City of Thousand Oaks
Community Development Department
2100 Thousand Oaks Boulevard • Thousand Oaks, CA 91362
Phone 805/449.2500 • Fax 805/449.2575 • www.toaks.org

February 28, 2024

Barbareno/Ventureno Band of Mission Indians
Cultural Resource Department
c/o BVBMI Chair Vestuto
PO Box 364
Ojai, CA, 93024
Via email: cr@bvbmi.com

RE: Assembly Bill 52 Tribal Consultation – 1651 Lynn Road, Proposed 19 Residential Lot Subdivision

Dear Chair Vestuto:

This letter is to inform you that the City of Thousand Oaks (City) has determined that a project application has been submitted for a proposed residential development (Project) and is preparing a Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed Project. The Project site is located in the southwestern portion of the City of Thousand Oaks in Ventura County and south of U.S. 101, more specifically east of South Ventu Park Road and north of Lynn Road (see Figures 1 and 2). The Project site surrounding land uses include Lynn Road to the south and open space beyond, and existing single-family residences to the north, east, and west.

The Project consists of the construction new single family residential development on a vacant 4.28-acre site. The proposed project would include the subdivision of one (1) residential lot into nineteen (19) residential lots to accommodate the construction of eighteen (18) single-family residences, the construction of a pool amenity, a private road, removal and encroachment into the protected zone of various oak trees, including new walls, hardscape, landscape, and grading.

Pursuant to Public Resources Code (PRC) Section 21080.3.1(b), you have 30 days from the receipt of this letter to request Assembly Bill 52 consultation, in writing, with the City of Thousand Oaks Community Development Department. The goal of the AB 52 Consultation is for lead agencies to consult with California Native American Tribes to identify Tribal Cultural Resources, as defined in PRC Section 21074, and if such resources are identified, to work with tribes to identify mitigation measures capable of avoiding or substantially lessening potential significant impacts to those identified resources, in accordance with PRC Section 21080.3.2.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. Please note that under the provisions of SB 18, you have 90 days from the date of receipt of this notice to advise the City if you are interested in further consultation.

If you require any additional information or have any questions, please contact me at 805-449-2317 or via e-mail at ccontreras@toaks.org. Thank you for your assistance.

Sincerely,



Carlos Contreras
Senior Planner
City of Thousand Oaks Community Development Department

Enclosure: Project Location Map

Figure 1 - Project Location Map

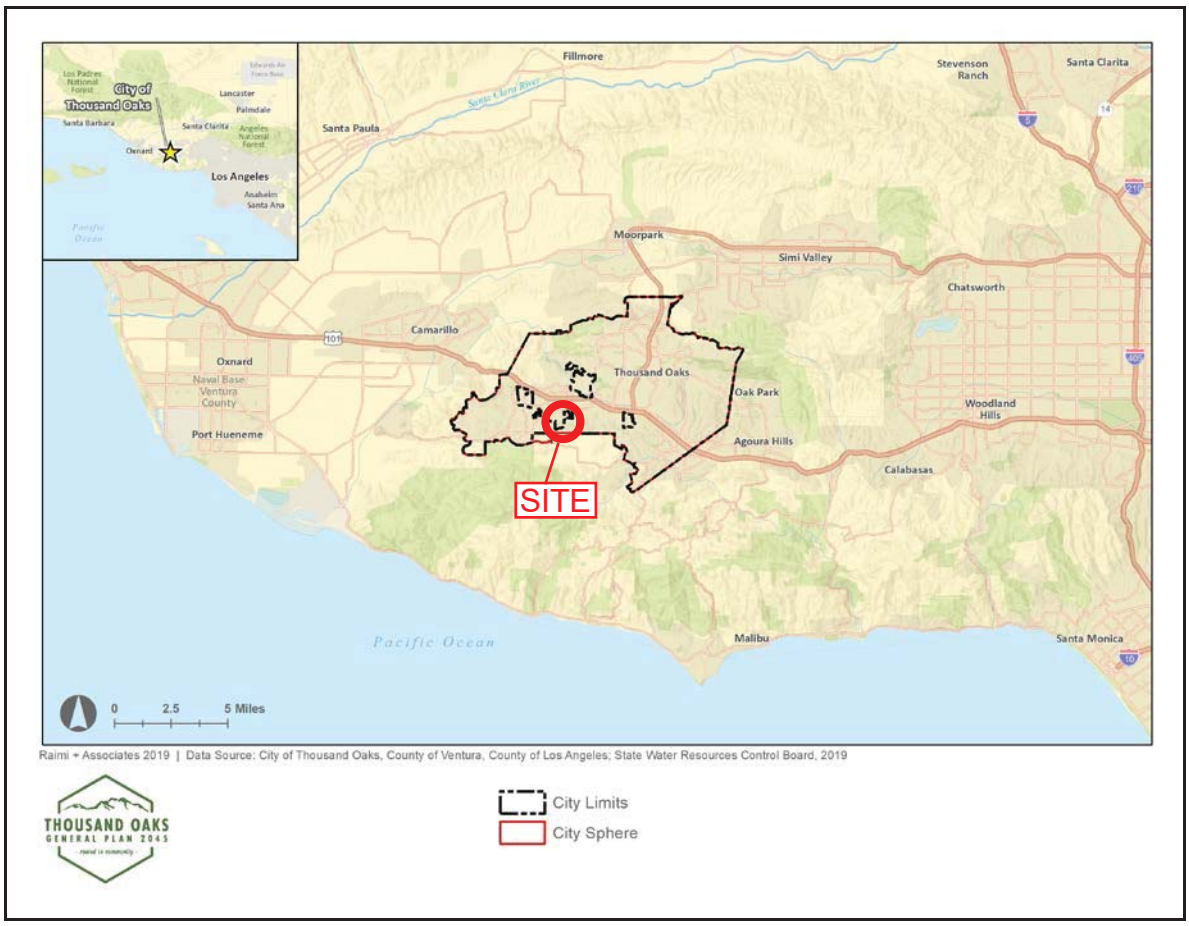
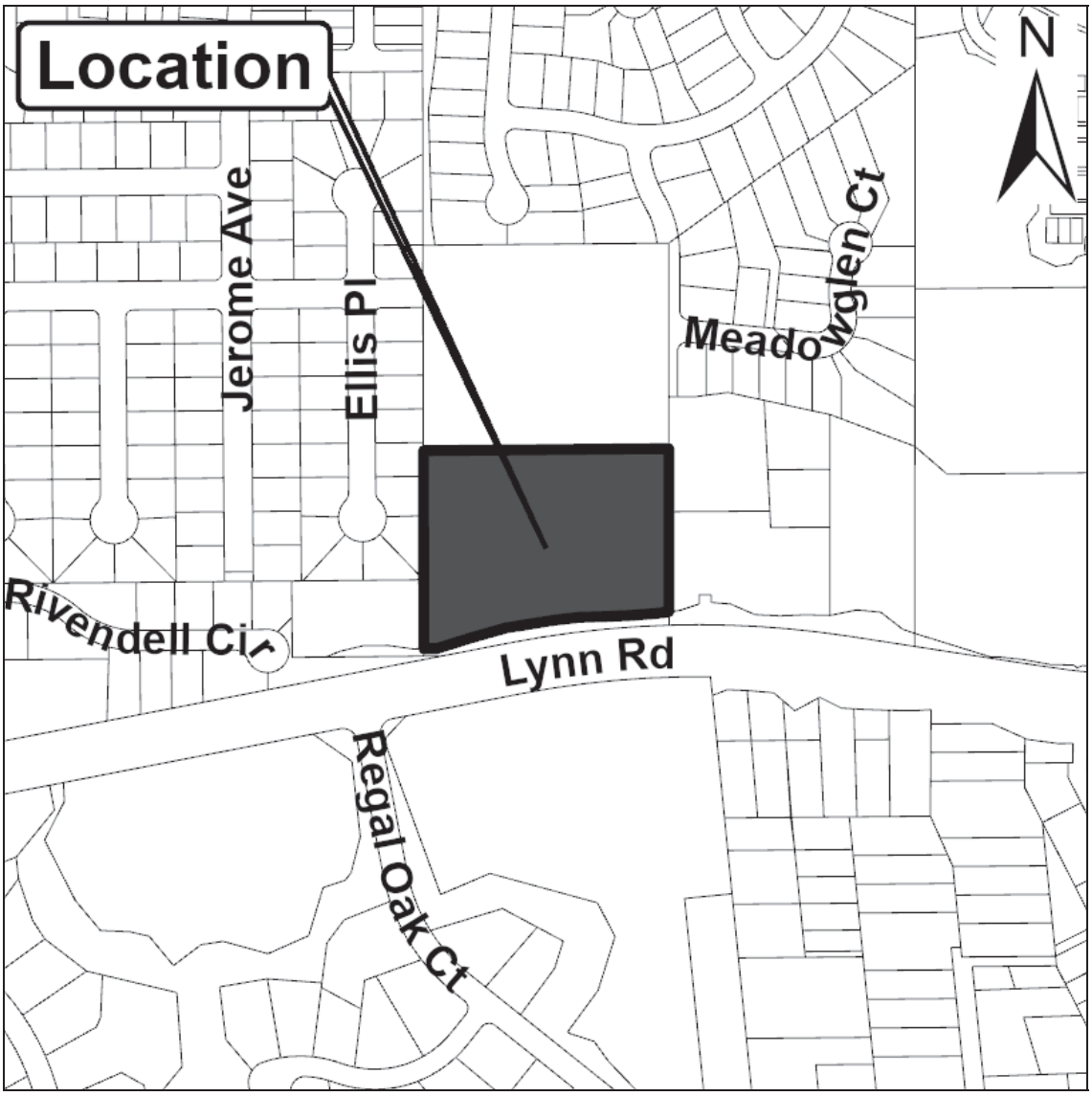


Figure 2 – Project Site Map



City of Thousand Oaks
Community Development Department
2100 Thousand Oaks Boulevard • Thousand Oaks, CA 91362
Phone 805/449.2500 • Fax 805/449.2575 • www.toaks.org

May 9, 2024

Barbareno/Ventureno Band of Mission Indians
Cultural Resource Department
c/o BVBMI Chair Vestuto
PO Box 364
Ojai, CA, 93024
Via email: cr@bvbmi.com

RE: Assembly Bill 52 Tribal Consultation – 1651 Lynn Road, Proposed 19 Residential Lot Subdivision

Dear Chair Vestuto:

On February 28, 2024, the City sent your tribe, and other tribes traditionally and culturally affiliated with the Thousand Oaks geographical area, a letter inviting comment and offering the opportunity to request consultation related to the above referenced project. A copy of this letter is attached. Pursuant to Public Resources Code Section 21080.3.1(b), interested tribes had 30 days from the receipt of the City's letter to request AB 52 consultation. This letter is to inform you that the 30 day period to request consultation has passed, the City did not receive any requests for consultation, and that the consultation period required by AB 52 has concluded.

Your tribe's input is important to the City's planning review and entitlement process. We hope that your tribe will continue to work with the City on future development projects.

If you require any additional information or have any questions, please contact me at 805-449-2317 or via e-mail at ccontreras@toaks.org. Thank you for your assistance.

Sincerely,

Carlos Contreras
Senior Planner
City of Thousand Oaks Community Development Department

Attachment:
City's AB 52 letter, dated February 28, 2024

City of Thousand Oaks
Community Development Department
2100 Thousand Oaks Boulevard • Thousand Oaks, CA 91362
Phone 805/449.2500 • Fax 805/449.2575 • www.toaks.org

February 28, 2024

Barbareno/Ventureno Band of Mission Indians
Cultural Resource Department
c/o BVBMI Chair Vestuto
PO Box 364
Ojai, CA, 93024
Via email: cr@bvbmi.com

RE: Assembly Bill 52 Tribal Consultation – 1651 Lynn Road, Proposed 19 Residential Lot Subdivision

Dear Chair Vestuto:

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Pursuant to Public Resources Code (PRC) Section 21080.3.1(b), you have 30 days from the receipt of this letter to request Assembly Bill 52 consultation, in writing, with the City of Thousand Oaks Community Development Department. The goal of the AB 52 Consultation is for lead agencies to consult with California Native American Tribes to identify Tribal Cultural Resources, as defined in PRC Section 21074, and if such resources are identified, to work with tribes to identify mitigation measures capable of avoiding or substantially lessening potential significant impacts to those identified resources, in accordance with PRC Section 21080.3.2.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. Please note that under the provisions of SB 18, you have 90 days from the date of receipt of this notice to advise the City if you are interested in further consultation.

If you require any additional information or have any questions, please contact me at 805-449-2317 or via e-mail at ccontreras@toaks.org. Thank you for your assistance.

Sincerely,



Carlos Contreras
Senior Planner
City of Thousand Oaks Community Development Department

Enclosure: Project Location Map

Figure 1 - Project Location Map

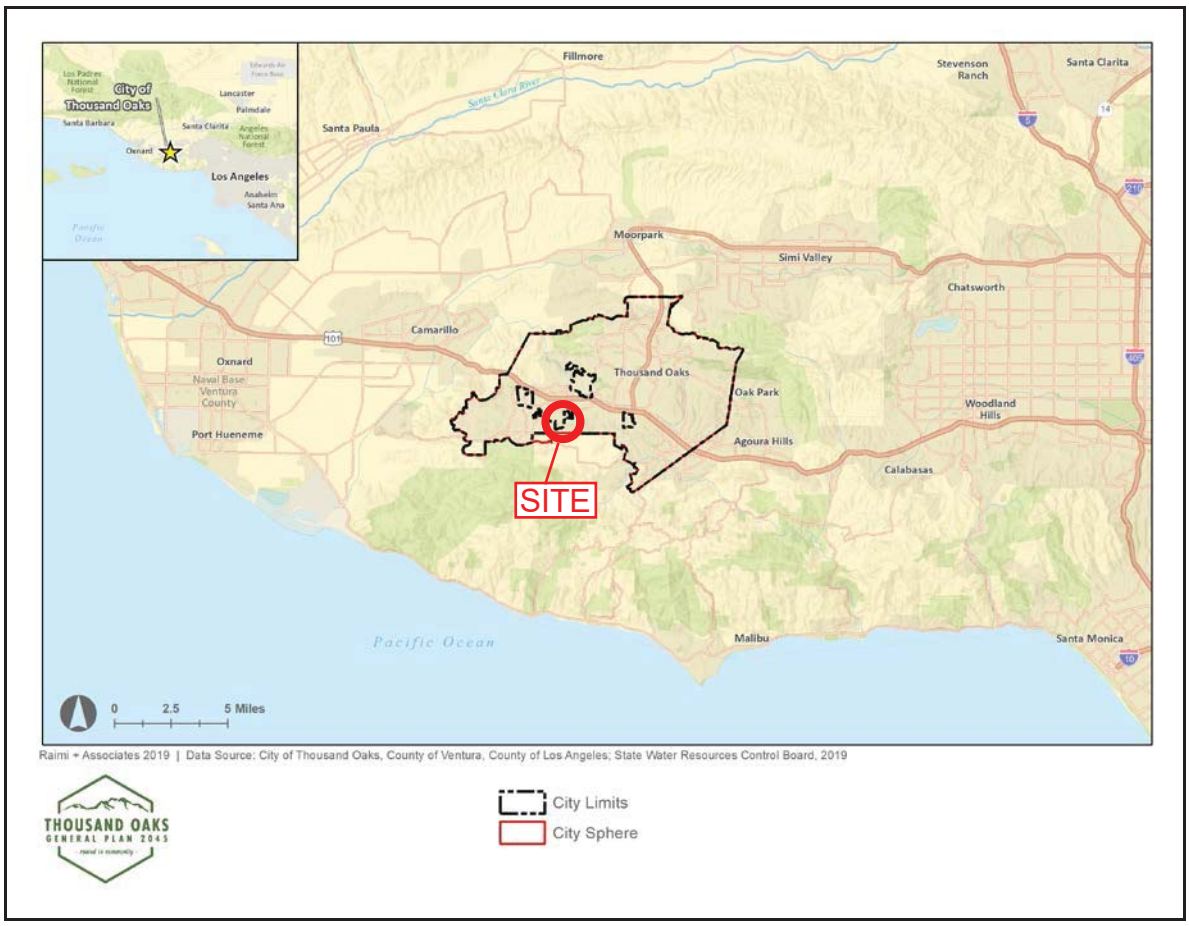
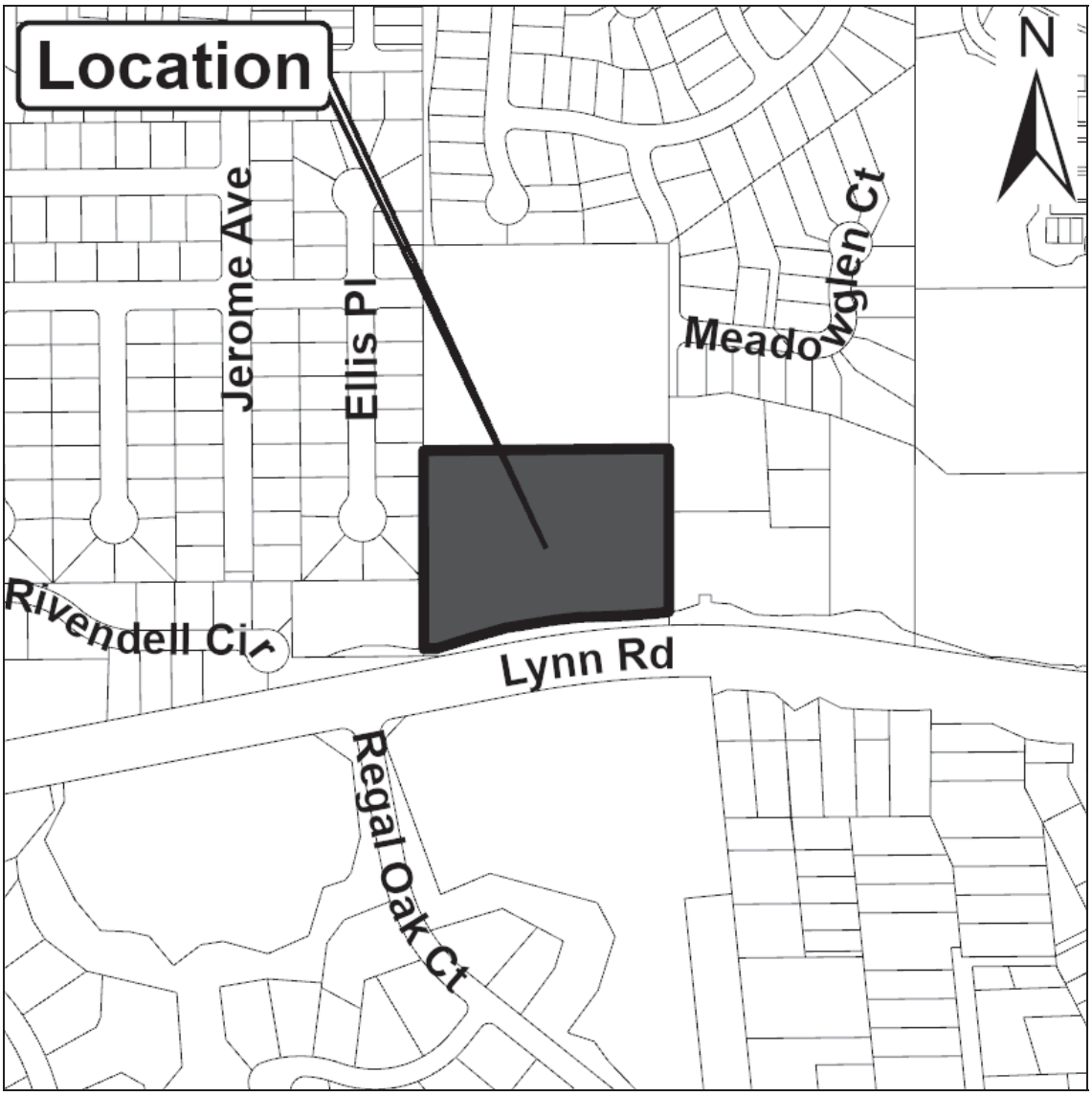


Figure 2 – Project Site Map



APPENDIX L

Utilities Correspondence

City of Thousand Oaks

Public Works Department

2100 Thousand Oaks Boulevard • Thousand Oaks, CA 91362
Phone 805/449.2400 • Fax 805/449.2475 • www.toaks.org

Clifford G. Finley
Public Works Director

February 15, 2024

Jeb Adams
Remax/One
30699 Russell Ranch Road, Suite 100
Westlake Village, CA 91362

Subject: Water/Wastewater Availability 1651 W Lynn Road, APN 660-0-030-165

Dear Mr. Adams:

The subject property is in the City of Thousand Oaks, and the following information is provided relative to the water and wastewater service:

Water Service
There is a 12-inch City water main located approximately 164 feet east of the existing single-family residence located at 1651 W Lynn and inside the subject property's parcel boundary (see enclosed drawing # 95-15A Sht.14). The existing 12-inch mainline currently is within Blair Court which is a privately owned road inside a 20-foot easement for water purposes dedicated to the City of Thousand Oaks. An 8-inch water main is located approximately 200 feet to the west of the single-family residence within the subject property (see enclosed drawing # 20079 Sht.3). The entrances to Blair Court are located on W Lynn Road and Ramona Drive.

Wastewater Service
There is an existing 8-inch City wastewater main located in the private road of Blair Court, NE of the subject property (see enclosed drawing # 95-15A Sht.11). The wastewater mainline placed in Blair Court is also located within a 20ft and 40ft easement designated for road and utility purposes. Entrances to Blair Court are located on W Lynn Road and Ramona Drive.

The 8-inch mainline connects from manhole's numbered W24-28.18, W24-28.17 W24-28.16, to W24-28.7 located on Ramona Drive (see enclosed GIS aerial).

Connection to the water and wastewater mains is permitted subject to a City encroachment (right-of-way) permit that includes payment of permit fees, an approved traffic control plan and approved water and wastewater service-lateral plan and profile construction drawings. Please be advised Blair Court may contain several utilities (e.g., gas, communication, etc.) that could affect the profile of the gravity service lateral, so you may wish to inquire with USA-DigAlert of Southern California to confirm and locate such utilities prior to finalizing the water service and wastewater lateral designs.

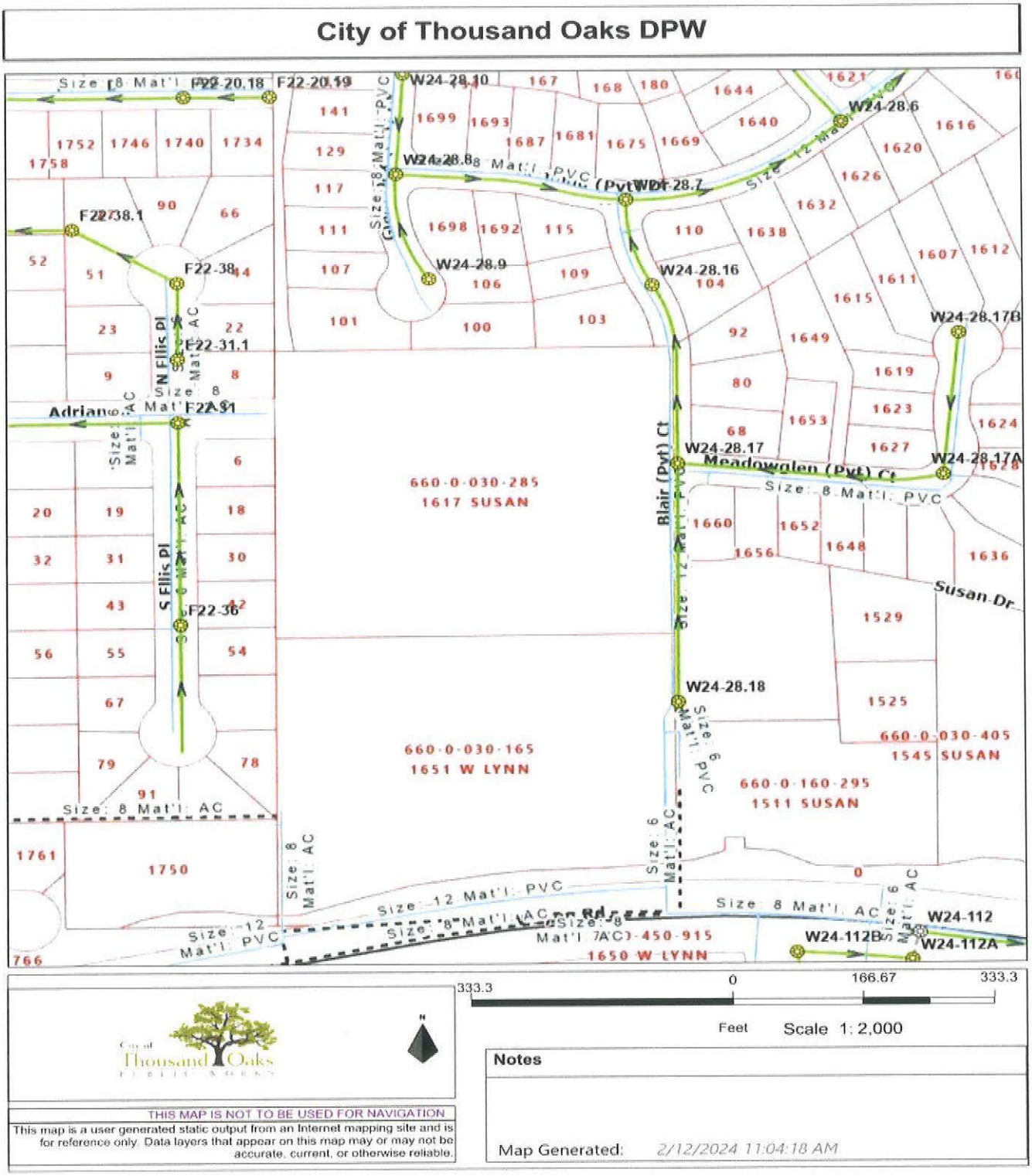
If you have any questions, please call me at 805-449-2429.

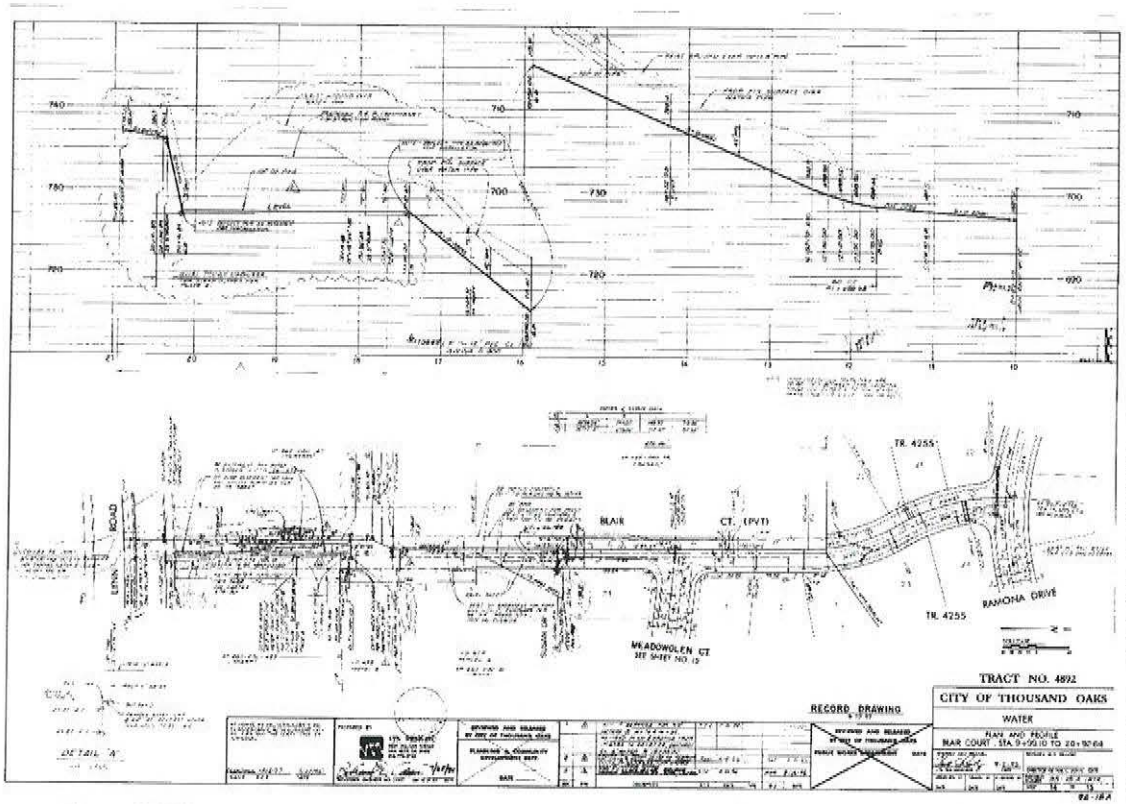
Sincerely,

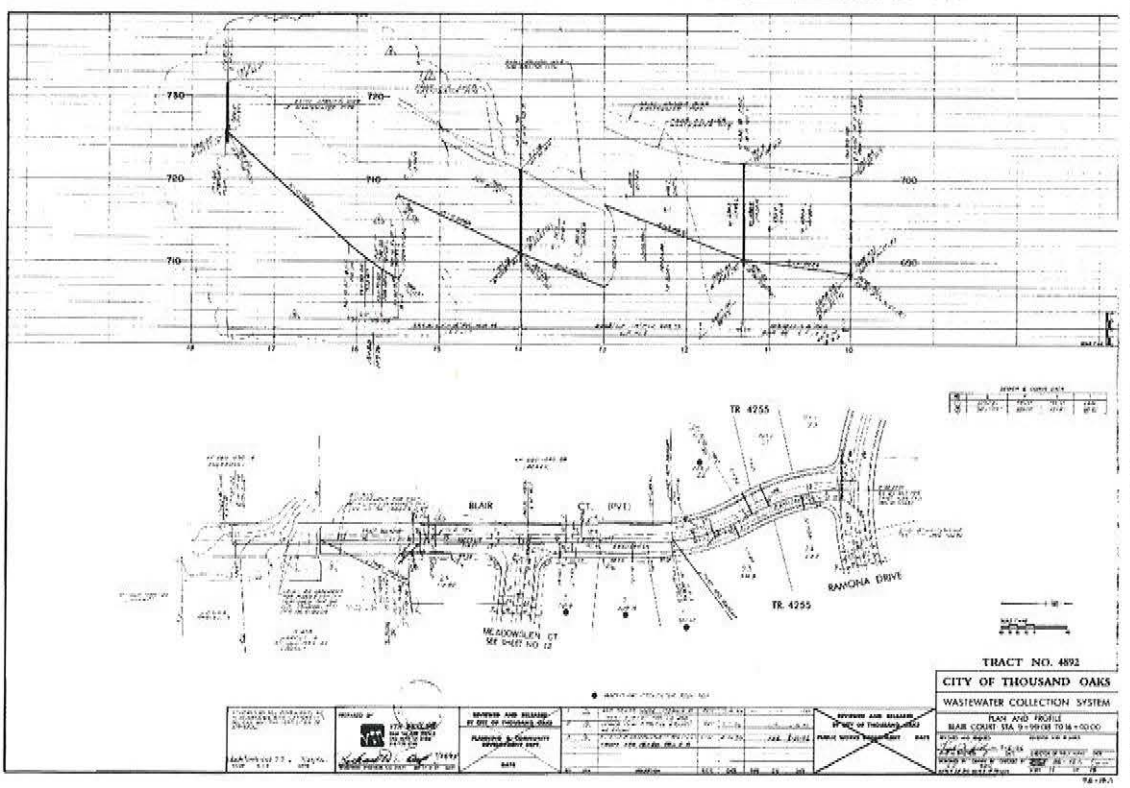
Edgar Gonzalez
Engineering Assistant

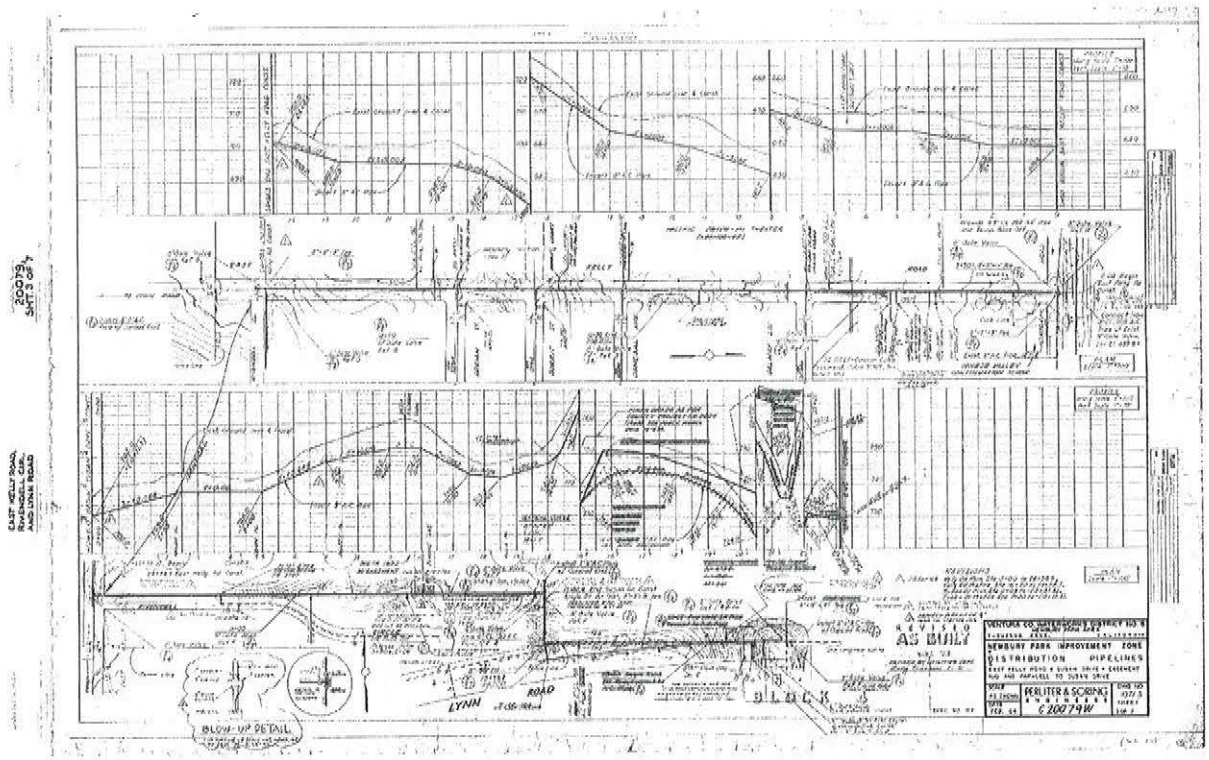
Enclosures

DPW:840-10\jul\H:\FINAL\Gonzalez\2024\1651 W Lynn Rd W WW Availability Letter.docx


City of Thousand Oaks DPW
660-0-030-285
1617 SUSAN
660-0-030-165
1651 W LYNN
660-0-160-295
1511 SUSAN
660-0-030-405
1545 SUSAN
660-0-450-915
1650 W LYNN
Blair (Pyt) Ct
Meadowglen (Pyt) Ct
Susan Dr
S Ellis Pl
N Ellis Pl
Adrian Ct
W24-28.10
W24-28.8
W24-28.7
W24-28.6
W24-28.9
W24-28.16
W24-28.17B
W24-28.17
W24-28.17A
W24-28.18
W24-112
W24-112B
W24-112A
F22-20.18
F22-20.19
F22-38.1
F22-38
F22-31.1
F22-31
F22-36
Size: 8 Mat'l: PVC
Size: 8 Mat'l: AC
Size: 12 Mat'l: PVC
Size: 6 Mat'l: PVC
Size: 6 Mat'l: AC
333.3
0
166.67
333.3
Feet
Scale 1: 2,000
N
Notes
THIS MAP IS NOT TO BE USED FOR NAVIGATION
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
Map Generated: 2/12/2024 11:04:18 AM


BLAIR CT. (PVT)
TR. 4255
RAMONA DRIVE
MEADOWGLEN CT
SEE SHEET NO. 12
TRACT NO. 4892
CITY OF THOUSAND OAKS
WATER
PLAN AND PROFILE
RECORD DRAWING


BLAIR CT. (PVT)
TR. 4255
RAMONA DRIVE
MEADOWGLEN CT
SEE SHEET NO. 12
TRACT NO. 4892
CITY OF THOUSAND OAKS
WASTEWATER COLLECTION SYSTEM
PLAN AND PROFILE


20079
SHT 3 OF 4
EAST KELLY ROAD,
RIVENDELL CIR.,
AND LYNN ROAD
LYNN ROAD
BLOW-UP DETAIL
BLOCK
AS BUILT
VENTURA CO. WATERWORKS DISTRICT NO. 8
NEWBURY PARK IMPROVEMENT ZONE
DISTRIBUTION PIPELINES
PERLITTER & SCRIPPS
C 20079W