Initial Study / Mitigated Negative Declaration
for
1471 E. Main Street
Multiple Family Residential Project

Lead Agency:
City of El Cajon
Planning Department
200 Civic Center Way
El Cajon, CA 92020

Applicant:
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Acronyms and Abbreviations	
AB	Assembly Bill
ADT	average daily traffic
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
CalGreen	California Green Building Standards Code
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of El Cajon
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Value
CO	Carbon monoxide
CRC	California Residential Code
CUP	Conditional Use Permit
CWA	Clean Water Act
db	Decibel
dBA	A-weighted decibels
DPM	Diesel Particulate Matter
EIR/EIS	Environmental Impact Report/Environmental Impact Study
EPA	Environmental Protection Agency
GHG	Greenhouse gas
GPCD	Gallons per capita per day
HRA	Health Risk Assessment
HVAC	Heating, ventilation, and air condition
IS	Initial Study
Leq	Equivalent sound level
LOS	Level of service
MLD	most likely descendent
MND	Mitigated Negative Declaration
MS4	Municipal Separate Storm Sewer System
MSL	mean sea level

Acronyms and Abbreviations	
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	Negative Declaration
NO_2	Nitrogen dioxide
NPDES	National Pollution Discharge Elimination System
O3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	Occupational Safety and Health Administration
PM10	Respirable particulate matter
PM2.5	fine particulate matter
PPM	Parts per million
PPV	Peak particle velocity
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SDCWA	San Diego County Water Authority
SDG&E	San Diego Gas & Electric
SDRWQCB	San Diego Regional Water Quality Control Board
SI	Sustainability Initiative
SLF	Sacred Lands File
SO_2	Sulfur dioxide
SPA	Specific Plan Amendment
SRA	State responsibility area
SSMP	Sewage System Master Plan
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	State Water Resources Control Board
TAC	Toxic air contaminant
USACE	U.S. Army Corps of Engineers
USTs	Underground storage tanks
VHFHSZ	Very High Fire Hazard Severity Zone
VOC	Volatile Organic Compound
ZC	Zone Change

1.0 Introduction

1.1 Purpose of Environmental Review

The California Environmental Quality Act (CEQA) requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. This Initial Study has been prepared to disclose potential environmental impacts associated with the implementation of the Towing Services and Impound Storage project (proposed project).

Pursuant to Section 15367 of the State CEQA guidelines, the City of El Cajon is the Lead Agency and has the principal responsibility of approving and implementing the proposed project. As the Lead Agency, the City is required to ensure that the proposed project complies with CEQA and that the appropriate level of CEQA documentation is prepared. Through preparation of an Initial Study as the Lead Agency, the City would determine whether to prepare an Environmental Impact Report (EIR), Negative Declaration (ND) or Mitigated Negative Declaration (MND). If the Lead Agency finds that there is no evidence that a project activity either as proposed or as modified to include the mitigation measures identified in the Initial Study prior to its public circulation, would not cause a significant effect on the environment, the Lead Agency may prepare a Negative Declaration or Mitigated Negative Declaration. Based on the conclusions of this Initial Study, the City has recommended that the appropriate level of environmental documentation for the proposed project is a Mitigated Negative Declaration.

1.2 Statutory Authority and Requirements

This Initial Study/MND has been prepared in accordance with the CEQA, Public Resources Code Section 21000 et seq. State CEQA Guidelines and City CEQA Environmental Procedures.

1.3 Technical Information and Studies

The following technical studies and information have been incorporated in the environmental impact evaluation prepared for the Towing Services and Impound Storage Project:

Appendix A Noise Impact Analysis, 1541 E. Main Street, City of El Cajon, Roma Environmental, August 3, 2023

2.0 Existing Setting

2.1 Regional Setting

The project site is located in the City of El Cajon, California which is part of the metropolitan San Diego area. Located adjacent to the eastern edges of the cities of La Mesa and San Diego and south of the City of Santee, El Cajon is approximately 15 miles inland from the Pacific Ocean. Interstate 8 provides regional access to the project area. The regional location of the project site is shown in Figure 1 (*Regional Location*).

2.2 Project Site Location

The project site is located at 1451 E. Main Street (Assessor Parcel Number 511-013-03-00) in the City of El Cajon, California. Interstate 8 is located approximately 160 feet north of the project site which is bound by E. Main Street to the west, and Oakdale Avenue on the south. The site location and vicinity map is shown on Figure 2 (*Site Vicinity*).

2.3 Existing Site Conditions

The project is located in a built-up urban area and has previously been disturbed. There are remnant concrete pads on the site and no native vegetation or historical buildings. Multiple family residential land uses are adjacent to the project site to the east. There are also multiple family land uses located just south and southeast of the project site, south of Oakdale Avenue. Sharp hospital offices are located west of the project site, west of Main Street. The project site is approximately 180 feet south of Interstate 8 and approximately 24 feet lower in elevation.

The General Plan land use designation for the project site is General Commercial and the existing zoning for the site is Residential, (Single Family, 6,000 square feet). The existing General Plan land use designations and zoning for the project site and nearby properties are presented below.

Table 1. Existing General Plan Designations and Zoning

Parcel Location (direction)	General Plan Designation	Zoning
Project Site	General Commercial	Residential, Single Family (6,000 sf)
East	Low Density Residential	Residential, multiple family (2,200 sf)
West	General Commercial	General Commercial
South	Medium Density Residential	Residential, multiple family (2,200 sf)
Southwest	Low Density Residential	not available
North	n/a[1] (Caltrans right-of-way)	n/a Caltrans right-of-way)

Source: City of El Cajon Arc GIS
https://cityofelcajon.maps.arcgis.com/apps/webappviewer/index.html?id=5fc20ac812ac42799d8c7d33a3db8cac. Accessed 9/26/23.
1. n/a = not applicable

Figure 1

Regional Location

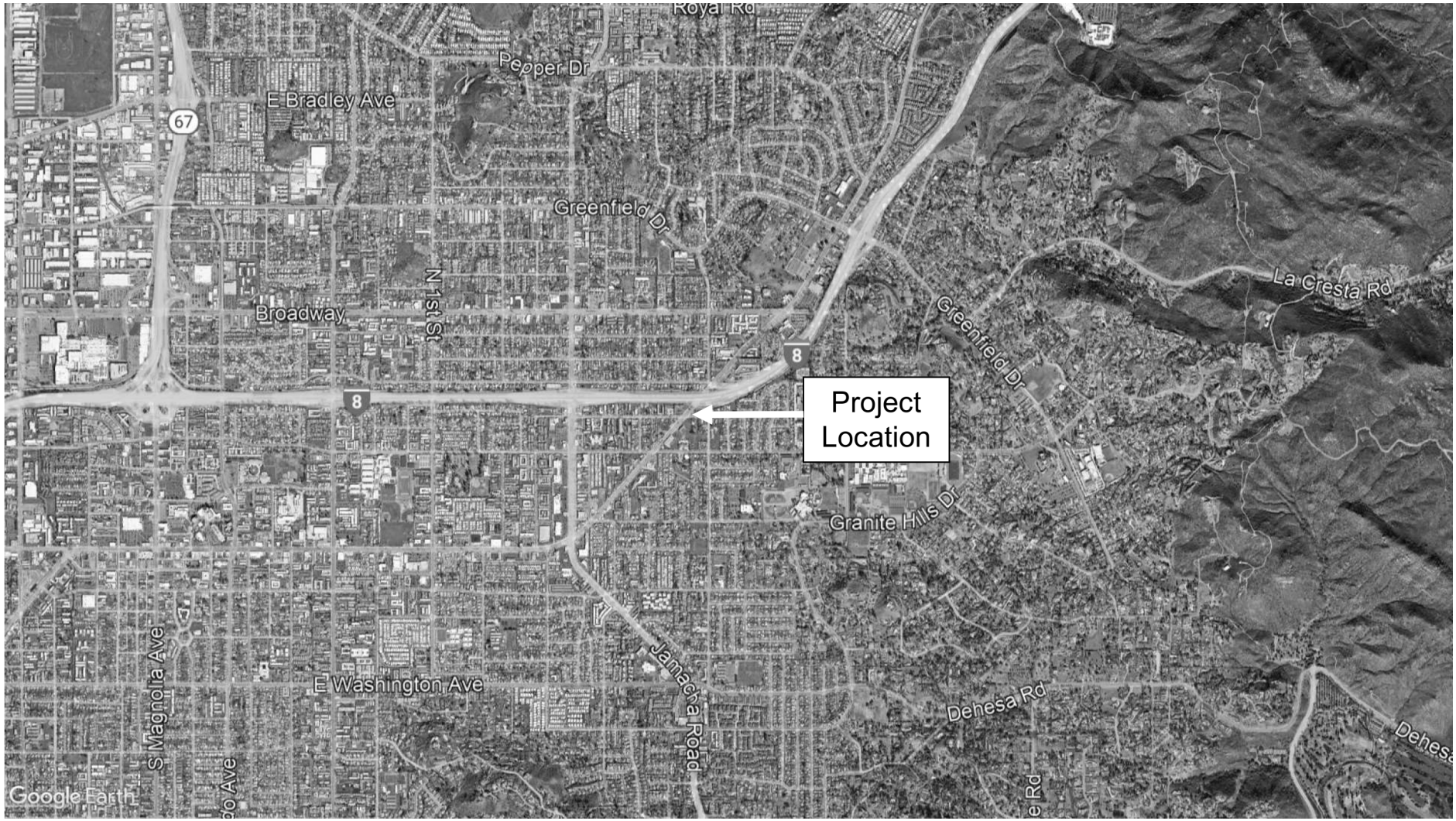


Figure 2

Site Vicinity

3.0 Project Description

3.1 Project Description

The project is a proposal to construct a 10,989 square foot, three-story, nine-unit multiple family residential building on an approximately 0.37-acre lot. The proposed lot coverage is 3,663 square feet (27%) with 4,952.81 square feet of landscaped area (32%). Individual unit patios and an 1,132 square foot common recreation area is also proposed. Eighteen (18) parking spots are proposed. Figure 3 *(Proposed Site Plan)* illustrates the project site plan. The proposed landscaping plan is shown in Figure 4 *(Proposed Landscape Plan)*.

The project includes a General Plan Amendment to change the existing General Plan Designation of the project site from General Commercial to Medium Density Residential and a request for a rezone from Single-Family Residential (6,000 square feet) to Multiple Family Residential (2,200 square feet). This zoning allows for the development of 6.97 units (7 units). A density bonus is being requested per California Government Code Section 65915(f)(4) and City of El Cajon Code Section 17.220.010 which awards two (2) units for making 28 percent of the units affordable for "moderate-income" families. The Housing and Urban Development Department (HUD) defines moderate-income as 80% to 120% of the average median income (AMI) of the local area. HUD data shows that the 2023 AMI for San Diego County is an annual household income of $116,800[1]. The two second-story two-bedroom units will be made affordable to moderate-income households.

3.2 Discretionary Actions

The Applicant is requesting approval of the following entitlements for the proposed project:

- Adopt a Mitigated Negative Declaration, Mitigation Monitoring and Reporting Program, and Mandatory Findings of Significance;
- General Plan Amendment from General Commercial to Medium Density Residential; and
- Re-Zone from Single Family Residential (6,000 square feet) to Multiple Family Residential (2,200 square feet).

3.3 Other Public Agencies Whose Approval is Required

Pursuant to Section 15367 of the State CEQA Guidelines, the City of El Cajon is the Lead Agency and has the principal responsibility of approving and implementing the proposed project. There are no other Responsible or Trustee Agencies.

3.4 AB 52 – Native American Tribal Consultation

The Native American Heritage Commission (NAHC) per Senate Bill 18 (SB 18), Government Codes §65352.3 and §65352.4, as well as Assembly Bill 52 (AB52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2, 1471 regarding the proposed project in a letter dated December 21, 2023.

The City received responses from the La Posta Band of Diegueno Mission Indians (Grey Wolf) and the the Viejas Band of Kumeyaay Indians (Viejas). The Grey Wolf requested that a cultural monitor be

[1] https://www.huduser.gov/portal/datasets/home-income-limits.html

present during ground-disturbing activities and the Viejas requested to be informed of any inadvertent discoveries.

Figure 3

Site Plan

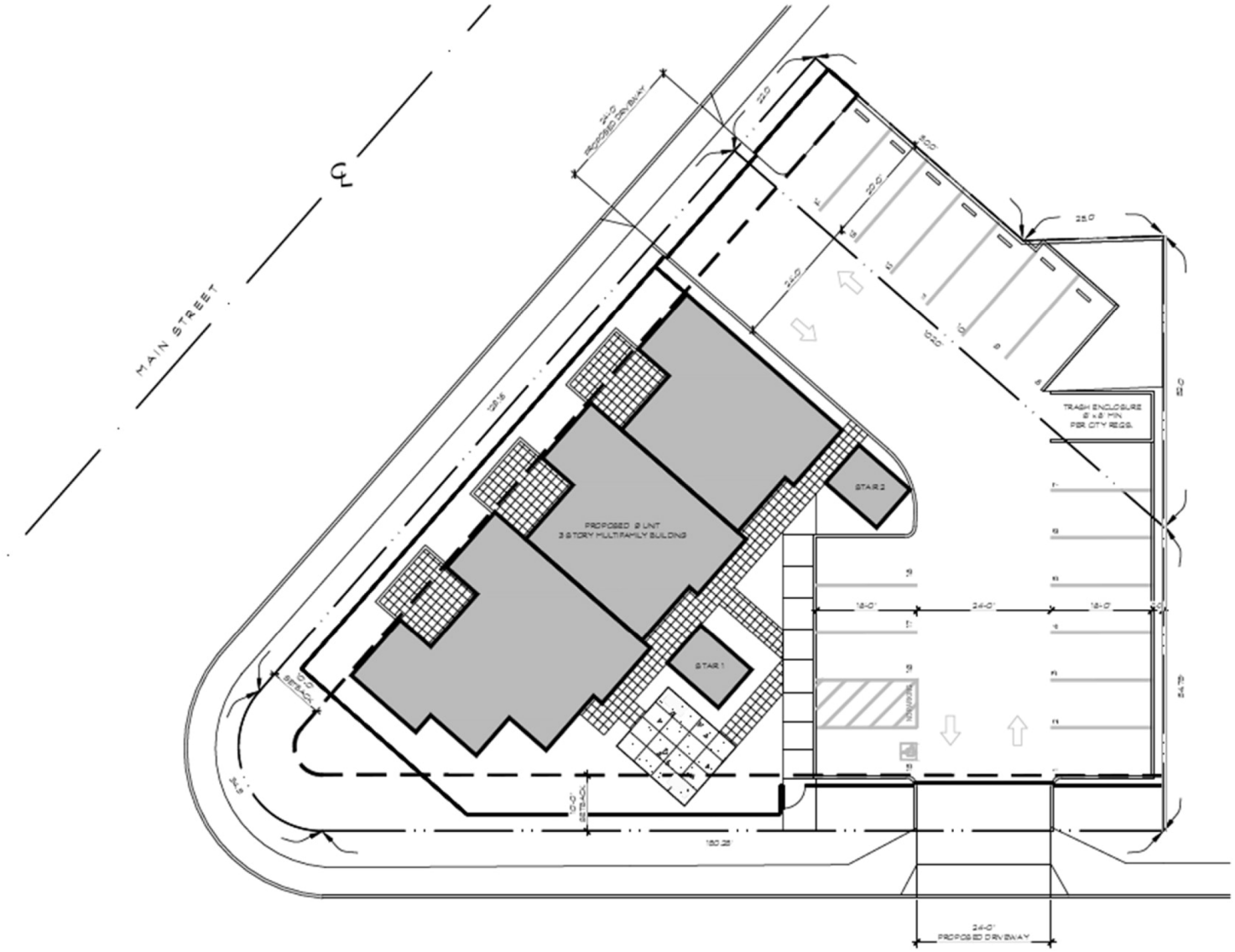
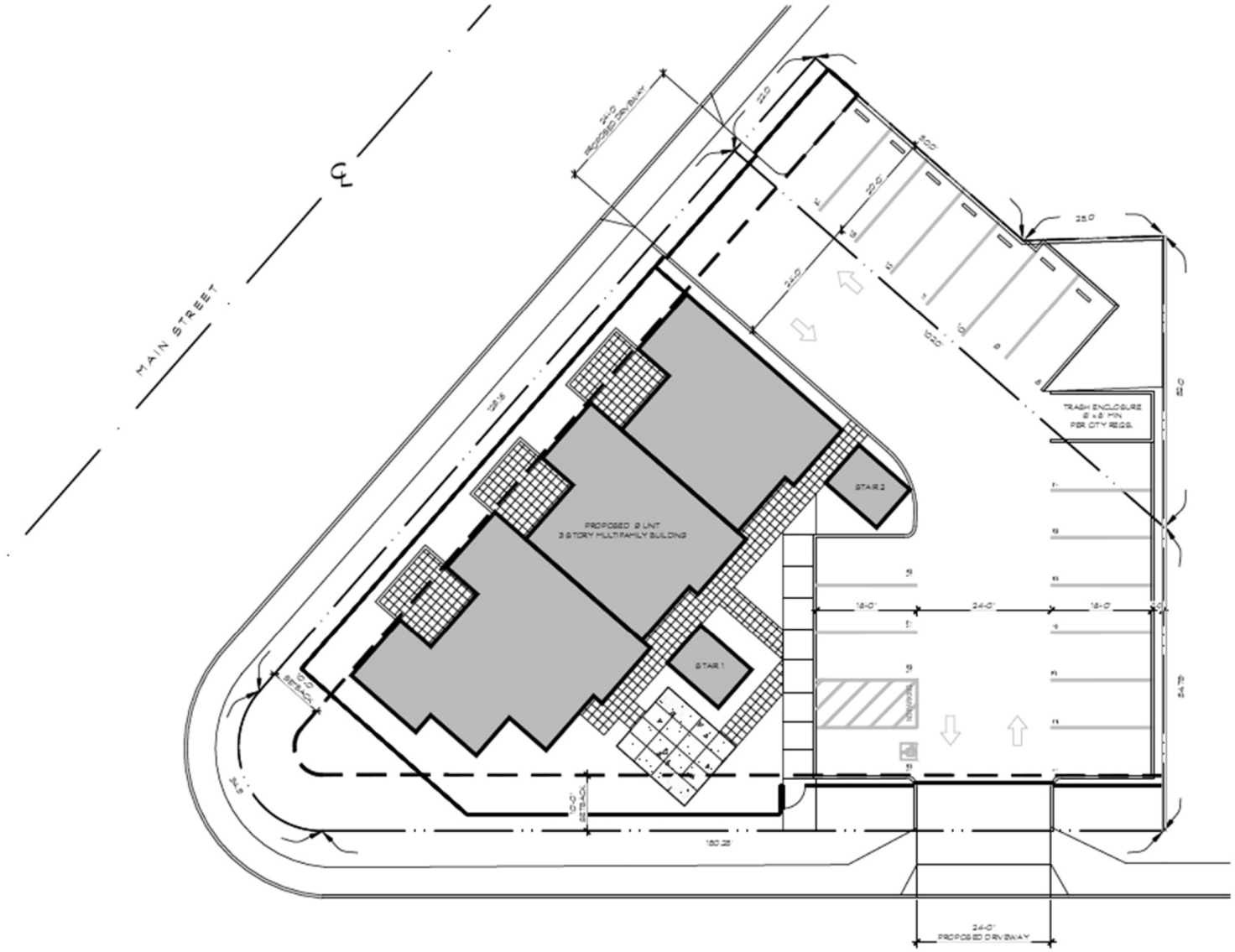


Figure 3

Site Plan



4.0 Initial Study/Environmental Checklist

1.	**Project Title**	1471 E. Main Street
2.	**Lead Agency Name and Address**	City of El Cajon
3.	**Contact Person and Phone Number**	Roma Stromberg, Roma Environmental, 951-544-3170
4.	**Project Location**	1471 E. Main Street El Cajon, California 92019 APN #511-013-03-00
5.	**Project Sponsor's Name and Address**	Vince Kattoula, Chief Executive Officer Kattoula & Associates
6.	**General Plan Designation**	General Commercial
7.	**Zoning**	Single Family, 6,000 square feet

8. Description of the Project:

The project is a proposal to construct a 10,989 square foot, three-story, nine-unit multiple family residential building on an approximately 0.37-acre lot. The proposed lot coverage is 3,663 square feet (27%) with 4,952.81 square feet of landscaped area (32%). Individual unit patios and an 1,132 square foot common recreation area is also proposed. Eighteen (18) parking spots are proposed. Figure 3 illustrates the project site plan.

The project includes a General Plan Amendment to change the existing General Plan Designation of the project site from General Commercial to Medium Density Residential and a request for a rezone from Single-Family Residential (6,000 square feet) to Multiple Family Residential (2,200 square feet). This zoning allows for the development of 6.97 units (7 units). A density bonus is being requested per California Government Code Section 65915(f)(4) and City of El Cajon Code Section 17.220.010 which awards two (2) units for making 28 percent of the units affordable for "moderate-income" families. The Housing and Urban Development Department (HUD) defines moderate-income as 80% to 120% of the average median income (AMI) of the local area. HUD data shows that the 2023 AMI for San Diego County is an annual household income of $116,800[2]. The two second-story two-bedroom units will be made affordable to moderate-income households.

9. Surrounding Land Uses:

North: Concrete Drainage Culvert/Vacant
South: Oakdale Ave and Multiple Family Residential
East: Multiple Family Residential
West: E Main Street and Commercial

10. Other Public Agencies Whose Approval is Required:

City: Adoption of MND; General Plan Amendment, and Zone Reclassification

[2] https://www.huduser.gov/portal/datasets/home-income-limits.html

4.1 Environmental Factors Potentially Affected

A summary of the environmental factors potentially affected by this project, consisting of a Potentially Significant Impact or Potentially Significant Impact Unless Mitigated, include:

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

4.2 Determination: On the Basis of this Initial Evaluation:

1.	I find that the project could not have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.	
2.	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	
3.	I find the proposed project may have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
4.	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.	
5.	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, nothing further is required.	

Signature _____ Date _____

Printed Name _____ For _____

5.0 Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less than significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than significant Impact". The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced, as discussed below).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identity the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance.

5.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than significant Impact	No Impact
(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 point)? If the project is in an urbanized area, would the project conflict with applicable zoning or 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?	☐	☐	☐	☒

Regulatory Setting:

California Scenic Highway Program

The California Department of Transportation (Caltrans) manages the California Scenic Highway Program, which was created in 1963 by the California legislature to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are eligible for designation as scenic highways or have been designated as such. A highway's designation as "scenic" may be based on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263.

El Cajon General Plan

The City of El Cajon General Plan contains objectives and policies related to development that could be applicable to the proposed project.

Objective 8-2: Ensure that the physical environment of the El Cajon area is protected from adverse impact.

Policy 8-2.1: The retention of the unique natural features of a development site such as rock outcroppings, native vegetation and trees shall be encouraged.

Policy 8-2.1: The flat, valley portions of El Cajon shall receive the most intensive development. Hillside areas shall receive less intensive development. Steep hillside areas (slope more than 25%) shall be placed in the open space land use category.

Policy 8-2.3: All graded slopes shall be adequately planted for erosion control.

Policy 8-2.4: Special design standards shall be considered for local residential service roads in hillside areas.

Objective 8-5: Achieve an urban form which respects the natural land forms of the area and preserves the unique contrast between the valley's level floor and the surrounding hills.

Policy 8-5.1: Planned Residential Developments shall be recommended for proposed projects on hillside property.

Policy 8-5.2: Excessive amounts of grading with enormous and unsightly banks shall be controlled by application of the Hillside Overlay zone to hillside property.

Policy 8-5.3: Hillside property retained in its natural state and used for passive public recreational purposes (hiking, picnicking, etc.) shall be considered for public acquisition.

City of El Cajon Municipal Code

Section 142.0730 (Outdoor Lighting) of the City of El Cajon Municipal Code states that all development, except detached single-family residences, shall provide adequate lighting for pedestrian and vehicular safety and be sufficient to minimize security problems. However, in no case shall lighting on one property create a nuisance on any other property. An on-site lighting plan for all parking areas, pedestrian walkways, and common open space/recreation areas shall be required prior to the issuance of building permits for all projects, except single-family residences, unless the single-family residences are part of a planned unit development or a planned residential development.

Impact Analysis

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

The City of El Cajon has no designated scenic vistas or scenic resources on or near the project site. Furthermore, the project is proposed in the flat valley portion of the City within a highly built environment with no designated or notable natural landforms in the area. Similarly, the area does not possess any visually unique or interesting buildings or built amenities. There are also no designated or eligible scenic highways in the project area (Caltrans 2023).

There are limited views of mountain foothills located east of the project site and vicinity. However, due to the juxtaposition of the project site (adjacent to two roadways), the proposed three-story building will not interfere with views to the east from nearby land uses.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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

The area does not possess any visually unique or interesting buildings or built amenities and there are no mature trees, rock outcroppings, on the project site. The site is adjacent to E. Main Street and Oak Avenue. These roadways have not been designated as scenic highways. Interstate 8, located north of the project site, has not been designated as a scenic highway in the project vicinity. The proposed project would not damage scenic resources within a viewshed of a state scenic highway.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

c. In a non-urbanized area, would the project substantially degrade the existing visual character or quality of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality?

Implementation of the project would change the zoning of the project site from Single Family Residential (6,000 square feet) to Multiple Family Residential (2,200 square feet). The proposed project will be located on a small lot in between existing surrounding land uses and an elevated portion of Interstate 8. The proposed three-story height which will accommodate nine residential units, would buffer views between existing lower density residential land uses east and south of the project site and Interstate 8. Furthermore, fifteen new trees, several shrubs, vines, and groundcover will be installed, further softening views in the vicinity of the project site.

Significance Determination: Less than Significant Impact.

Mitigation Measures: No mitigation is required.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project will be consistent with Section 17.140.220 Multifamily design standards of the City of El Cajon Municipal Code regarding lighting. Two 12-foot pole lights (pointed down and shielded) are proposed in the proposed on the east side of the project site in order to illuminate the proposed parking areas while limiting light spillage onto the adjacent multiple family residential property; and wall and bollard lighting is proposed at building entries. Impacts related to project lighting would not adversely affect day or nighttime views.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

5.2 Agriculture and Forest Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?	☐	☐	☐	☒

Regulatory Setting

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program identifies and designates areas with prime soils and soils of local or statewide importance based on their suitability for agricultural use. According to the San Diego Important Farmland Map, the project site is entirely classified as Urban and Built-Up Land (California Department of Conservation 2023a).

Williamson Act

The California Land Conservation Act of 1965—commonly referred to as the Williamson Act— enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses. In return, landowners receive property tax assessments that are much lower than normal because the assessments are based on farming and open space uses as opposed to full market value. According to the California Department

of Conservation's San Diego County Williamson Act Lands Map, all land in the City of El Cajon, including the project site, is designated Urban and Built-up Land. No Williamson Act lands occur on the site (California Department of Conservation 2023b).

Impact Analysis

a) Would the project 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?

The project site is designated as "Urban and Built-up Land" and is not designated as Prime, Unique or Grazing farmland, or considered Farmland of Statewide or Local Importance per the Farmland Mapping and Monitoring Program (California Department of Conservation 2023). The project site is not designated as agricultural per the City's Zoning Ordinance or General Plan Land Use Element. The proposed project would not convert Prime or Unique Farmland, or Farmland of Statewide or Local Importance.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

b) Would the project conflict with existing zoning for agriculture use, or a Williamson Contract?

The project site is designated as "non-enrolled land" and is not a part of a Williamson Contract. The project site is not designated as agricultural per the City's Zoning Ordinance or General Plan Land Use Element. The proposed project will not result in conflicts with existing zoning for agriculture use, or a Williamson Contract. Therefore, no potential impacts associated with the conflict of existing zoning for agriculture use or a Williamson Contract would occur.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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

The site is not zoned for forest uses and there are no forest resources on the project site.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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

The site is not zoned for forest uses and there are no forest resources on the project site.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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

The project site is designated as "Urban and Built-up Land" and there are no land uses adjacent to the project site that are designated as Prime, Unique or Grazing farmland, or considered Farmland of Statewide or Local Importance per the Farmland Mapping and Monitoring Program (California Department of Conservation 2023). The project would not result in changes to the location or nature or would result in the conversion of Farmland to a non-agricultural land use.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

5.3 Air Quality

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?	☐	☐	☒	☐

Regulatory Setting

Federal

Federal Clean Air Act and National Ambient Air Quality Standards

The United States Environmental Protection Agency (EPA) is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for atmospheric pollutants. It regulates emission

sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The National Ambient Air Quality Standards (NAAQS) pollutants were identified using medical evidence and are shown below in Table 2.

The EPA and the California Air Resource Board (CARB) designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the Federal annual PM2.5 standard is met if the three-year average of the annual average PM2.5 concentration is less than or equal to the standard. Attainment status is shown in Table 3.

As part of its enforcement responsibilities, the EPA requires each state with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the national standards. The State Implementation Plan (SIP) must integrate federal, state, and local components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the State Implementation Plan (SIP).

As indicated below in Table 3, the Basin has been designated by the EPA as a non-attainment area for ozone (O3) and suspended particulates (PM10 and PM2.5). Currently, the Basin is in attainment with the ambient air quality standards for carbon monoxide (CO), lead, sulfur dioxide (SO2), suspended particulate matter (PM-2.5), and nitrogen dioxide (NO2).

State

The California Air Resources Board (CARB), which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the State Implementation Plan (SIP). The California Ambient Air Quality Standards (CAAQS) for criteria pollutants are shown in Table 2. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products (e.g., hairspray, aerosol paints, and barbeque lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

The South Coast Air Basin has been designated by the CARB as a nonattainment area for ozone, PM10 and PM2.5. Currently, the South Coast Air Basin is in attainment with the ambient air quality standards for CO, lead, SO2, NO2, and sulfates and is unclassified for visibility reducing particles and Hydrogen Sulfide.

On June 20, 2002, the CARB revised the PM10 annual average standard to 20 µg/m3 and established an annual average standard for PM2.5 of 12 µg/m3. These standards were approved by the Office of Administrative Law in June 2003 and are now effective. On September 27, 2007, CARB approved the South Coast Air Basin and the Coachella Valley 2007 Air Quality Management Plan for Attaining the

Federal 8-hour Ozone and PM2.5 Standards. The plan projected attainment for the 8-hour Ozone standard by 2024 and the PM2.5 standard by 2015.

On December 12, 2008, the CARB adopted Resolution 08-43, which limits NOx, PM10 and PM2.5 emissions from on-road diesel truck fleets that operate in California. On October 12, 2009, Executive Order R-09-010 was adopted that codified Resolution 08-43 into Section 2025, Title 13 of the California Code of Regulations. This regulation requires that by the year 2023 all commercial diesel trucks that operate in California shall meet model year 2010 (Tier 4) or latter emission standards. In the interim period, this regulation provides annual interim targets for fleet owners to meet. This regulation also provides a few exemptions including a once-per-year 3-day pass for trucks registered outside of California.

The CARB is also responsible for regulations pertaining to toxic air contaminants. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. AB 2588, as amended, establishes a process that requires stationary sources to report the type and quantities of certain substances their facilities routinely release into the South Coast Air Basin. The data is ranked by high, intermediate, and low categories, which are determined by: the potency, toxicity, quantity, volume, and proximity of the facility to nearby receptors.

In 2004, the California Air Resources Board (CARB) adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (Title 13 California Code of Regulations [CCR], Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure generally does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks. While this measure primarily targets diesel particulate matter emissions, it has co-benefits of minimizing GHG emissions from unnecessary truck idling.

In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 2025, subsection (h)). CARB has also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation, adopted by the CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. While these regulations primarily target reductions in criteria air pollutant emission, they also have co-benefits of minimizing GHG emissions due to improved engine efficiencies.

Regional

San Diego Air Pollution Control District

The SDAPCD is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin. To that end, as a regional agency, the SDAPCD works directly with the San Diego Association of Governments (SANDAG), county transportation commissions, and local governments and cooperates actively with all federal and state agencies.

Air Quality Management Plan

The SDAPCD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. The SDAPCD is directly responsible for reducing emissions from stationary, mobile, and indirect sources.

The SDAPCD regulates most air pollutant sources, except for motor vehicles, marine vessels, aircraft, and agricultural equipment, which are regulated by the CARB or the EPA. In addition, the SDAPCD along with the CARB maintains and operates ambient air quality monitoring stations at numerous locations throughout San Diego County, including one at Camp Pendleton. These stations are used to measure and monitor criteria pollutant levels in order to determine the attainment status of the pollutants within the Air Basin.

The SDAPCD developed a Regional Air Quality Strategy (RAQS) to provide control measures to try to achieve attainment status for state ozone standards with control measures focused on Volatile Organic Compounds (VOCs) and oxides of nitrogen (NOX). Currently, the County is in "nonattainment" status for federal and state O3 and State PM10 and PM2.5. An attainment plan is available for only O3. The RAQS was adopted in 1992 and has been updated as recently as 2016 which was the latest update incorporating minor changes to the prior 2009 update.

The 2016 update mostly summarizes how the 2009 update has lowered NOX and VOCs emissions which reduces ozone and clarifies and enhances emission reductions by introducing three new VOC and four new NOX reduction measures. NOX and VOCs are precursors to the formation of O3 in the atmosphere. The criteria pollutant standards are generally attained when each monitor within the region has had no exceedances during the previous three calendar years.

The RAQS is largely based on population predictions by SANDAG. Projects that produce the same or less growth than predicted by SANDAG would generally conform to the RAQS. Projects that create more growth than projected by SANDAG may create a significant impact if the project produces unmitigable air quality emissions or if the project produces cumulative impacts.

The following lists the SDAPCD rules that are applicable to, but not limited to, all residential projects in the Air Basin.

Rule 20.2 – Air Quality Impact Assessment Screening Thresholds

The SDAPCD has established thresholds in Rule 20.2 for new or modified stationary sources. The County's Guidelines for Determining Significance and Report Format and Content Requirements incorporate screening level thresholds from Rule 20.2 for use in all County related Air Quality Impact Assessments (AQIA) and for determining CEQA air quality impacts (County of San Diego, 2007). These screening criteria can be used to demonstrate that a project's total emissions would not result in a significant impact as defined by CEQA. Also, since SDAPCD does not have AQIA threshold for VOCs, it is acceptable to use the Coachella Valley VOC threshold from South Coast Air Quality Management District. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the project's total air quality impacts are below the state and federal ambient air quality standards.

These screening thresholds for construction and daily operations are shown in Table 4. Non criteria pollutants such as Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs) are also regulated by the SDAPCD. Rule 1200 (Toxic Air Contaminants - New Source Review) adopted on June 12, 1996, requires evaluation of potential health risks for any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminants. The rule requires that projects that propose to increase cancer risk to between 1 and 10 in one million need to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall the project increase the incremental cancer risk to over 10 in one million or a health hazard index (chronic and acute) greater than one since risks above. Projects creating cancer risks less than one in one million are not required to implement T-BACT technology.

The U.S. EPA uses the term VOC and the CARB's Emission Inventory Branch (EIB) uses the term Reactive Organic Gases (ROG) to essentially define the same thing. There are minor deviations between compounds that define each term however for purposes of this study we will assume they are essentially the same due to the fact SCAQMD interchanges these words and because air quality models directly calculates ROG in place of VOC.

Rule 51 - Nuisance

Rule 51 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Compliance with Rule 51 will reduce local air quality and odor impacts to nearby sensitive receptors.

Rule 55 – Fugitive Dust Control

Rule 55 governs emissions of fugitive dust during construction activities and requires the following:

1. No person shall engage in construction or demolition activities in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.
2. Visible roadway dust as a result of active operations, spillage from transport trucks, erosions, or track-out/carry-out shall be minimized by the use of any of the equally effective track-out/carryout and erosion control measures listed in Rule 55 that apply to the project or operation. These measures include track-out grates or gravel beds at each egress point; wheel-washing at each egress during muddy conditions; soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; watering for dust control; and using secured tarps or cargo covering, watering, or treating of transported material for outbound transport trucks.

<u>San Diego Association of Governments</u>

SANDAG is the regional planning agency for San Diego County and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. With respect to air quality planning and other regional issues, SANDAG has prepared San Diego Forward: The Regional Plan (Regional Plan) for the San Diego region (SANDAG 2015). The Regional Plan, including its Sustainable Communities Strategy (SCS), is built on an integrated set of public policies, strategies, and investments to maintain, manage, and improve the transportation system so that it meets the diverse needs of the San Diego region through 2050. In regard to air quality, the Regional Plan sets the policy context in which SANDAG participates and responds to the air district’s air quality

plans and builds off the air district's air quality plan processes that are designed to meet health-based criteria pollutant standards in several ways (SANDAG 2015). On September 23, 2016, SANDAG's Board of Directors adopted the final 2016 Regional Transportation Improvement Program (RTIP). The 2016 RTIP is a multi-year program of projects for major transportation projects in the San Diego region. Transportation projects supported through federal, state, and TransNet (the San Diego transportation sales tax program) funds must be included in an approved RTIP. The 2016 RTIP covers five fiscal years and incrementally implements the Regional Plan (SANDAG 2016).

Local

The SDAPCD has local air quality jurisdiction over projects in San Diego County. Responsibilities of the air district include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality–related sections of the environmental documents required by CEQA. The SDAPCD is also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws and for ensuring that the NAAQS and CAAQS are met. The SDAPCD has adopted air quality plans to improve air quality, protect public health, and protect the climate. The San Diego RAQS identifies feasible emissions control measures and facilitates expeditious progress toward attaining the state ozone standards.

Impact Analysis:

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

The project site is within the San Diego Air Basin (SDAB), which is contiguous with San Diego County. The San Diego Air Pollution Control District (SDAPCD) is the regional government agency that monitors and regulates air pollution within the SDAB. It is also responsible for monitoring air quality for the region. The SDAPCD is required, pursuant to the federal or state Clean Air Act (CAA), to reduce emissions of the criteria pollutants for which the SDAB is in nonattainment status. The SDAB is currently classified as a moderate nonattainment area for the federal 8-hour ozone (O3) standard and a partial moderate maintenance area for the federal carbon monoxide (CO) standard. In addition, the SDAB is classified as a nonattainment area for state O3, particulate matter less than 2.5 microns (PM2.5), and less than 10 microns (PM10) standards (U.S. Environmental Protection Agency 2017; California Air Resources Board 2016).

All areas that have been designated as nonattainment areas are required to prepare plans that show how they would meet the state and federal air quality standards by the attainment dates. The San Diego Regional Air Quality Strategy (RAQS) is the applicable air quality plan for improving air quality in the region and attaining federal and state air quality standards. The RAQS relies on information from the California Air Resources Board (ARB) and the San Diego Association of Governments (SANDAG), including projected growth in the county, which is based in part on local general plans. Generally, projects that propose development that would be consistent with the land use designations and growth anticipated by the local general plan and SANDAG would be consistent with the RAQS. The project site currently has a General Plan designation of General Commercial and the project is proposing a General Plan Amendment to Medium Density Residential to allow for the development of 9 residential units. The Institute of Traffic Engineers (ITE) manual assigns Daily trip generation associated with the proposed residential use (multi-family low rise, not close to rail transit) 6.74 vehicle trips per day per dwelling unit for approximately 61 daily vehicle trips. In comparison, the existing General Plan designation for the project site analyzed in the most recent General Plan prepared for the City (General Commercial) would most likely result in more daily trips than the

proposed project i.e., convenience store (726.28 daily trips per thousand square feet) or a fast-food restaurant with a drive-through window (467.48 daily trips per thousand square feet). Therefore, it is reasonable to conclude that project generated vehicle traffic would be less than what the San Diego Association of Governments (SANDAG) projected was analyzed in preparation of the RAQS. The project would be considered consistent at a regional level with the underlying growth forecasts in the RAQS.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

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

proposed project activities would not result in a cumulatively considerable net increase in criteria pollutants in a nonattainment region. The project site is in the San Diego Air Basin (SDAB), which is classified as a nonattainment area for certain federal and state criteria pollutants, including O3, PM10, and PM2.5. Construction of the project would generate O3 precursors, PM10, and PM2.5. However, because the project would not require demolition or extensive grading activities, and emissions from construction would be temporary and localized, project construction emissions would be minimal and would not exceed SDAPCD's thresholds of significance for construction. Additionally, the proposed project would result in a negligible increase in the number of automobile trips. The project would comply with all required SDAPCD rules, regulations, and fugitive dust measures. This impact would be less than significant.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Future residential development on the proposed project would also be required to comply with SDAPCD's Rule 55, Fugitive Dust Control, which requires that construction activities implement specific measures to minimize fugitive dust emissions; and SDAPCD's Rule 50 (Visible Emissions), Rule 51 (Nuisance), and Rule 52 (Particulate Matter). The project's impacts related to TAC emissions would be less than significant. No mitigation is required.

Significance Determination: Less than significant.

Mitigation: No mitigation is required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Future construction of residential land uses may emit odors during construction activities include the application of coatings such as asphalt pavement, paints, and solvents and from emissions from diesel equipment. The objectionable odors that may be produced during the construction process would be

temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries due to the transitory nature of construction odors. Therefore, potential impacts associated with construction-related odors would be less than significant.

Future residential development of the site may result in the emission of odors associated with cooking exhaust and trash storage areas. Trash container location and enclosure will comply with all City requirements and permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Compliance with SDAPCD's Rule 51, will minimize any odor issues associated with the on-going operations of the proposed project. Therefore, potential impacts associated with operations-related odor would be less than significant. No mitigation is required.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

5.4 Biological Resources

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or 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

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

The project site is located within a developed urban area and does not host any sensitive habitat or species. The only vegetation on the project site occurs within disturbed habitat and urban/developed land cover types. Neither of these communities is considered a sensitive vegetation community. As such, implementation of the proposed project would not disturb any sensitive vegetation communities. Special-status plant and wildlife species are not expected to occur within the proposed project because of a lack of suitable habitat. No impacts on special-status plants or special-status wildlife species are expected to occur with implementation of the proposed project. As such, there is no sensitive or riparian habitat on the project site that could be inhabited by federally or state-listed biological species.

Significance Determination: No Impact.

Mitigation Measures: No mitigation measures are required.

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

No riparian, riverine, or vernal resources were documented within or immediately adjacent to the project site. Therefore, no potential impacts associated with riparian habitat or other sensitive natural communities would occur.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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

No marshes, vernal pools, coastal lands, or wetlands are located within or immediately adjacent to the project site. Therefore, no impacts are anticipated. Therefore, no potential impacts associated with 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 would occur.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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?

No aquatic resources, or wildlife corridors are located within or immediately adjacent to the project site.

Significance Determination: No Impact.

Mitigation Measures: No Mitigation is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project site has been previously graded. All proposed construction activities would occur within the boundaries of the site. Some on-site vegetation might be disturbed during construction activities; however, the on-site trees are not subject to any tree preservation policy or ordinance. As such, the proposed project would not conflict with any local policies and/or ordinances.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The County of San Diego developed the Multiple Species Conservation Program (MSCP), which is a comprehensive, long-term habitat conservation plan that addresses issues related to the needs of multiple species and the preservation of natural vegetation communities in the San Diego region (County of San Diego 1997). The project site is not in a sensitive area, and project implementation would not conflict with applicable Habitat Conservation Plans.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

5.5 Cultural Resource

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

Regulatory Setting

Native American Heritage Commission

California PRC Section 5097.91 established the NAHC, the duties of which include inventorying places of religious or social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. California PRC Section 5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

California Public Records Act

Sections 6254(r) and 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public related to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

California Health and Safety Code Sections 7050.5 and 7052

California Health and Safety Code Section 7050.5 declares that all ground disturbance must cease and the county coroner must be notified in the event of the discovery of human remains outside a dedicated cemetery. California Health and Safety Code Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

California Penal Code Section 622.5
California Penal Code Section 622.5 provides misdemeanor penalties for injuring or destroying objects of historic or archaeological interest located on public or private lands but specifically excludes the landowner.

California Public Resources Code Section 5097.5
California PRC Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

Government Code Section 65352.3 Consultation
Senate Bill (SB) 18 requires local governments to consult with tribes prior to making certain planning decisions and provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to approvals and amendments of both general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.).

Prior to the approval or amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts on, cultural areas on land within the local government's jurisdiction that could be affected by a proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).

Impact Analysis

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

There are no structures on the project site. No structures or historical resources will be damaged with project implementation.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is Required.

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

Despite having utilized the El Cajon Valley for thousands of years there is no known surface evidence of prehistoric occupation in the project area. With the exception of a few individual parcels, the entire project area has been developed, and no surface evidence remains on the developed sites. However, there is the possibility of subsurface deposits. Buried archaeological sites would be composed of the same artifacts as surface deposits such as projectile points, scrapers, milling implements (manos and metates), flakes, and possibly animal bone and marine shell. Because the project area has been built out, the possibility for occurrence of archaeological resources is relatively low. While the likelihood is low, the potential to encounter archaeological resources within the Specific Plan area still exists.

Significance Determination: Less than significant with mitigation.

MM-CUL-1 A cultural resource monitor shall be present during ground disturbing activities. In the case that any inadvertent discoveries are made, the La Posta Band of Diegueno Mission Indians and the Viejas Band of Kumeyaay Indians will be notified.

With the incorporation of **MM-CUL-1,** potential impacts on cultural resources would be less than significant.

c) Would the project result in the disturbance of any human remains, including those interred outside of formal cemeteries?

The project site is not a formal cemetery or near a formal cemetery. The project area and vicinity are fully developed. There are no records of human remains being identified during development of the area. The site is not known to be on a burial ground. Therefore, it is highly unlikely that the proposed project would disturb any human remains during construction. However, should human remains be uncovered during construction, as specified by State Health and Safety Code Section 7050.5, no further disturbance would occur until the county coroner has made the necessary findings as to the origin and disposition, pursuant to PRC Section 5097.98. If such a discovery occurs, excavation or construction would halt in the area of the discovery, the area would be protected, and consultation and treatment would occur as prescribed by law. If the county coroner recognizes the remains to be Native American, he or she would contact the NAHC, which would appoint the Most Likely Descendant. Additionally, if the bones are determined to be Native American, a plan would be developed regarding the treatment of human remains and associated burial objects. The plan would be implemented under the direction of the Most Likely Descendant.

Significance Determination: Less than significant with Mitigation.

Mitigation: No mitigation is required.

5.6 Energy

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Implementation of the proposed development plan will not result in a notable increase in the use of energy. Future residential development will be in compliance with California Building Standards Code Title 24 energy efficiency requirements (CalGreen), which are considered demonstrable evidence of efficient use of energy. On this basis, the project would not result in the inefficient, wasteful, or unnecessary consumption of energy.

During construction, there would be a temporary consumption of energy resources required for the movement of equipment and materials; however the duration and area of construction is minimal. Compliance with local, State, and federal regulations would reduce short-term energy demand during the project's construction to the extent feasible, and the project construction would not result in a wasteful or inefficient use of energy.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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

The City of El Cajon has employed a Sustainability Initiative (SI), which consists of strategies, measures, and actions aimed at achieving an overall reduction in the City's greenhouse gas (GHG) emissions.

Accounting for legislative actions taken by the Federal and State governments, the SI focuses includes eight strategies, organized under four emissions categories that serve as the foundation for identifying and addressing ways in which the City will reduce GHG emissions. Within each strategy is a series of measures, actions, and supporting measures that define the activities, programs, policies, and projects the City will, when feasible, implement to reduce GHG emissions. These actions and measures mainly focus on community-scale reductions, but also include municipal operations. Through partnerships with and among the community, businesses, and other organizations, these measures could provide net benefits, such as an improved environment, cost savings, conserved resources, and an overall greater quality of life.

The SI accounts for existing plans, programs, directives, and activities that the City has already undertaken to reduce GHG emissions by acknowledging these efforts and, in some cases, building or expanding on them. The City has adopted the following strategies for reducing GHG emissions.

Strategy 1: Increase Use of Zero-Emission or Alternative Fuel Vehicles
Strategy 2: Increase the Efficiency of the Existing Transportation Network
Strategy 3: Reduce Vehicle Miles Traveled
Strategy 4: Increase Building Energy Efficiency
Strategy 5: Increase Renewable and Zero-Carbon Energy
Strategy 6: Increase Water Efficiency
Strategy 7: Reduce and Recycle Solid Waste
Strategy 8: Carbon Sequestration

Implementation of the proposed project will not result in a notable increase in the use of energy. The proposed residential development will be in compliance with California Building Standards Code Title 24 energy efficiency requirements (CalGreen), which are considered demonstrable evidence of efficient use of energy. Future residential development will also be required to be consistent with the City's Sustainability Initiative policies. On this basis, the project would not result in the inefficient, wasteful, or unnecessary consumption of energy.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

5.7 Geology and Soils

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 geologic feature?	☐	☒	☐	☐

Regulatory Setting

Alquist-Priolo Act

The primary purpose of the Alquist-Priolo Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. The law requires the state geologist to establish regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults and issue locational maps to all affected cities, counties, and state agencies for their use in safe construction. Before a project may be permitted, a geologic investigation is required to demonstrate that proposed buildings would not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault. It must be set back from the fault (generally 50 feet). The project site is not in an Alquist-Priolo Zone.

Seismic Hazards Mapping Act of 1990

The California State Seismic Hazards Mapping Act of 1990 addresses earthquake hazards other than surface fault rupture, including liquefaction and seismically induced landslides. The state establishes city, county, and state agency responsibilities for identifying and mapping seismic hazard zones and mitigating seismic hazards to protect public health and safety. The act requires the California Department of Conservation, Division of Mines and Geology, to map seismic hazards and establishes specific criteria for project approval that apply within seismic hazard zones, including the requirement for a geological technical report.

California Building Code

The California Code of Regulations, Title 24 (California Building Code, or CBC), applies to all applications for building permits. The CBC (also called the California Building Standards Code) has incorporated the International Building Code, which was first enacted by the International Conference of Building Officials in 1927 but has been updated approximately every 3 years since that time. The current version of the CBC was adopted in 2022.

Code requirements for ground shaking focus on two issues, with the most common issue pertaining to the imparting of inertial forces into buildings and structures. For this issue, ground shaking is oftentimes characterized in terms of a design response spectrum. The second issue (of equal significance) is the stability of the ground during ground shaking. For this second issue, analyses pertaining to slope instability, liquefaction, lateral spreading, and seismically induced ground settlement are commonly performed.

Local agencies must ensure that developments in their jurisdictions comply with the guidelines contained in the CBC. However, cities and counties can adopt building standards beyond those provided in the code.

State Water Resources Control Board Construction General Permit (Order 2009-0009-DWQ)
Construction activities that disturb 1 acre or more of land and could adversely affect hydrologic resources must comply with the requirements of the State Water Resources Control Board (SWRCB) Construction General Permit (Order 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-006-DWQ). Under the terms of the permit, applicants must file a complete and accurate Notice of Intent with the SWRCB. Applicants must also demonstrate conformance with applicable best management practices (BMPs) and prepare a Storm Water Pollution Prevention Plan (SWPPP) with a site map that shows the construction site perimeter; existing and proposed buildings; lots; roadways; stormwater collection and discharge points; general topography, both before and after construction; drainage patterns across the project site; and the construction BMPs to be implemented to eliminate or reduce pollutants generated during construction.

Impact Analysis

a) Would the project expose people or structures to 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?

The project site is in a seismically active region where several known earthquake faults occur; however, no known active faults exist beneath the project site. The nearest active faults to the project site are the Rose Canyon Fault Zone, approximately 16 miles to the west, and La Nacion Fault Zone, approximately 9 miles southwest of the project site. Additionally, the project site is not within the Alquist-Priolo Earthquake Fault Zone. The closest known Alquist-Priolo Earthquake Fault Zone is approximately 9 miles west of the project site. Because the project site is not within a delineated earthquake fault zone, rupture of a known earthquake fault would not occur as a result of implementation of the project. Therefore, no impacts would occur.

ii Strong seismic shaking?

The project site is in a known seismically active region where the potential for seismic hazards exists. Although no active or potentially active faults are within the project site itself, Southern California in general is a seismically active area. A seismic event on local faults could cause significant ground shaking on the project site. The County of San Diego Multi-Jurisdictional Hazard Mitigation Plan [3]identified the project area as having “low shake potential.”

The CBC and CRC (El Cajon Municipal Code Chapter 15.54.010) contain seismic safety standards outlining design and construction requirements. The proposed project will be required to show compliance with the CBC and/or CRC through the development review process. Building permit plans and applications will be submitted and reviewed for compliance prior to obtaining necessary

[3] San Diego County. 2008.

construction and building permits. Conformance with the City's Municipal Code, CBC, and CRC will limit potential impacts associated with the proposed project.

iii. Seismic related ground failure, including liquefaction?

The project site is mapped as being within a liquefaction hazard zone[4]. The proposed project will be required to show compliance with the CBC and/or CRC through the development review process. Building permit plans and applications will be submitted and reviewed for compliance prior to obtaining necessary construction and building permits. Conformance with the City's Municipal Code, CBC, and CRC will limit potential impacts associated with the proposed project.

iv. Landslides?

The project site is not mapped as being in an area with high risk for landslide activity. Project development will be required to comply with seismic safety standards outlining design and construction requirements. Building permit plans and applications will be submitted and reviewed for compliance prior to obtaining necessary construction and building permits. Conformance with the City's Municipal Code, CBC, and CRC will limit potential impacts associated with the proposed project.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

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

The proposed project has previously been disturbed and earthmoving will be minimal. Construction of the proposed project will comply with all requirements presented in the Storm Water Pollution Plan prepared for the project which identifies best management practices (BMPs) that will minimize soil erosion during construction.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

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

The project site is not located within an area that is likely to be subject to land sliding or lateral spreading. As mentioned previously, the project site has been mapped as being within a liquefaction hazard zone, and theoretically, subsidence could also be an issue. The proposed project will be required to show compliance with the CBC and/or CRC through the development review process. Building permit plans and applications will be submitted and reviewed for compliance prior to obtaining necessary construction and building permits. Conformance with the City's Municipal Code, CBC, and CRC will limit potential impacts associated with the proposed project.

[4] City of El Cajon. General Plan Safety Element, 2021.

Significance Determination: Less than significant

Mitigation Measures: No mitigation is required.

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

The project site falls within an area mapped as having Placentia Sandy Loam soils which is not an expansive soil. It is unlikely that the project would result in substantial risks to life or property due to expansive soils.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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

The proposed project will be served by the City sewer system and will not be utilizing septic systems.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

The project site has previously been graded.

Significance Determination: Not Significant.

Mitigation Measures: No mitigation is required.

5.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?	☐	☐	☐	☒

Regulatory Setting

CEQA Guidelines Section 15064.4 provides guidance to lead agencies for determining the significance of impacts from GHG emissions. Section 15064.4(a) states that a lead agency should make a good-faith effort, based, to the extent possible, on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. State CEQA Guidelines

Section 15064.4(b) also states that, when assessing the significance of impacts from GHG emissions, a lead agency should consider (1) the extent to which the project may increase or reduce GHG emissions compared with existing conditions, (2) whether the project's GHG emissions would exceed a threshold of significance that a lead agency determines to be applicable to the project, and (3) the extent to which the project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The State CEQA Guidelines do not provide numeric or qualitative thresholds of significance for evaluating GHG emissions. Although SDAPCD has not adopted a threshold for assessing the significance of GHG emissions for land use development projects, SDAPCD has suggested that it would be appropriate for a lead agency to use a threshold of 3,000 MT of CO2e per year.

The City of El Cajon has not yet adopted thresholds for evaluating the significance of GHG impacts and are in the process of developing a Climate Action Plan (CAP). The CAP will provide the City with actions to align with the statewide targets intended to reduce greenhouse gas (GHG) emissions. The main elements of the CAP will include and inventory of emissions, generating projections, identifying reduction targets and measures, and creating implementation and monitoring tools. The CAP efforts are underway with projected completion in Summer 2019. The significance of the project's GHG emissions is based on consistency with Assembly Bill (AB) 32. The AB 32 Scoping Plan details specific GHG emissions reduction measures that target specific GHG emissions sources. The Scoping Plan considers a range of actions. These include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms (e.g., a cap-and-trade system), including mobile-source emissions reduction measures (e.g., Pavley, Low-Carbon Fuel Standard, vehicle efficiency measures), energy production–related emissions reduction measures (e.g., natural gas transmission and distribution efficiency measures, natural gas extraction efficiency measures), and the Renewables Portfolio Standard (electricity).

Impact Analysis

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHG in the atmosphere. Rising atmospheric concentrations of GHGs, in excess of natural levels, result in increasing global surface temperatures—a phenomenon commonly referred to as *global warming.* The primary associated GHG emissions are CO2, CH4, N2O, and fluoridated compounds. AB 32 sets forth the regulatory framework in California to reduce emissions to 1990 levels by 2020. SB 32 builds on AB 32 and establishes a longer-term goal of 40 percent below 1990 levels by 2030. Unlike criteria pollutants, which are primarily pollutants of regional and local concern, GHGs are a global problem. Therefore, GHG impacts, and the analysis contained herein, are inherently cumulative. The State CEQA Guidelines do not indicate what amount of GHG emissions would constitute a significant impact

on the environment. Instead, they authorize the lead agency to consider thresholds of significance that were previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence (State CEQA Guidelines Sections 15064.4(a) and 15064.7(c)). The Implementation of the proposed nine-unit residential project will not result in notable new greenhouse gas emissions. The proposed increased density of residential development on the project site will not substantially increase GHG emissions projected in the General Plan, which were found to be consistent with state GHG emissions targets codified by AB 32 and SB 32. Impacts would be less than significant.

California Supreme Court decision2 in *The Centers for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company* (November 30, 2015, Case No. S217763) (hereafter Newhall Ranch) confirmed that there are multiple potential pathways for evaluating project-level GHG emissions consistent with CEQA, depending on the circumstances of a given project. These potential pathways include reliance on business-as-usual models, three numeric thresholds, and compliance with regulatory emissions reduction plans and programs, including qualified Climate Action Plans.

The City has not yet formally adopted specific thresholds of significance with regard to GHG emissions, nor has the City adopted a qualified plan, policy, or regulation to reduce GHG emissions that qualifies for tiering in CEQA documents (per State CEQA Guidelines Section 15183.5(a)). Lead agencies throughout the state have adopted or recommended mass emissions thresholds for evaluating construction and operational emissions. Locally, both the City and County of San Diego have in the past recommended a 900 MT CO2e screening level as a theoretical approach to identify commercial or residential projects that require further analysis and potential mitigation, but both agencies no longer provide any numerical bright-line recommendations. Project emissions below this 900 MT CO2e level are considered less than cumulatively considerable; project emissions above this level require additional analysis. Moreover, projects that result in a net benefit by reducing GHG emissions are determined to have a less-than-significant impact related to GHG emissions. Recent court decisions, including Newhall Ranch, have recommended that analyses emphasize the consideration of GHG efficiency, and although CEQA requires a focus on the GHG efficiency of a proposed project, some projects are so small that it is highly unlikely they would generate a level of GHGs that would be cumulatively considerable. Of note is that the 900 MT CO2e screening level was developed in the California Air Pollution Control Officers Association *CEQA & Climate Change* paper (2008) as a theoretical basis for screening out smaller residential and non-residential (commercial, office) uses that emit low levels of GHG emissions from further analysis. This 900 MT CO2e screening level is based on land use–related emissions sources (e.g., on-road passenger vehicles, electricity and utility consumption) that are similar to residential-related emissions sources. This is the lowest numerical threshold recommended for use by any large jurisdiction in the state4 (Association of Environmental Professionals 2016). Accordingly, the 900 MT CO2e threshold is applicable to the proposed project and meets the criteria identified in the Newhall Ranch decision needed to appropriately analyze project-level GHG emissions (e.g., project-specific emission sources).

Project construction activities would generate short-term emissions of CO2, CH4, and N2O as a result of off-road diesel equipment exhaust and emissions from construction employees' trips, material deliveries, and any haul truck travel needed to dispose of materials off-site. Construction emissions associated with development of the 0.37-acre lot would result in less than significant Impacts related to greenhouse gas emissions.

Significance Determination: Not Significant.

Mitigation Measures: No mitigation is required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The City of El Cajon does not have an adopted Climate Action Plan. Therefore, the most applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions are AB 32 and SB 32, which codified the state's GHG emissions reduction targets for the future. Consistent with recent juridical and legislative action, this analysis also considers the long-range (2050) reduction target outlined in Executive Order S-3-05.[5]

ARB adopted the AB 32 Scoping Plan (2008) and the AB 32 Scoping Plan First Update (2014) as frameworks for achieving AB 32. The Scoping Plan and Scoping Plan First Update outline a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions. These strategies are geared toward sectors and activities that generate significant amounts of GHGs. For example, the majority of measures address building energy, waste and wastewater generation, goods movement, on-road transportation, water usage, and high GWP gases. Implementation of the proposed project would not conflict with these statewide plans. Construction of the proposed project would be short term in nature, and emissions would not exceed any proposed threshold throughout the state, including the 900 MT CO2e level referenced above. In addition, long-term project operations would not generate GHG emissions in excess of the 900 MT CO2e threshold referenced above. ARB's draft Scoping Plan Update (2017) for achieving SB 32 extends and furthers many of the policies and programs included in the AB 32 Scoping Plan and AB 32 Scoping Plan First Update. The project therefore would neither conflict with implementation of AB 32 or SB 32 nor impede state progress toward meeting the long-range reduction target identified in Executive Order S-3-05.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

5.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	☐	☐	☒	☐

[5] Executive Order S-3-05 establishes a goal of 80 percent below 1990 levels by 2050.

(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 which is included on a list of hazardous materials sites complied 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?	☐	☐	☒	☐

Regulatory Setting

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act (RCRA) established an EPA-administered program to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous materials.

Cortese List

USC Section 65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, Department of Health Services lists of contaminated wells for drinking water, sites listed by SWRCB as having LUSTs or discharges of hazardous wastes or materials into water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

U.S. Department of Transportation Hazardous Materials Regulations (49 Code of Federal Regulations 100–185)

U.S. Department of Transportation Hazardous Materials Regulations cover all aspects of hazardous materials packaging, handling, and transportation. They include (but are not limited to) Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), and 177 (Highway Transportation).

California Health and Safety Code

DTSC, a department of the California Environmental Protection Agency, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous waste primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Division 20, Chapter 6.5 of the California Health and Safety Code, deals with hazardous waste control through regulations pertaining to the transport, treatment, recycling, disposal, and permitting of hazardous waste. Division 20, Chapter 6.10, contains regulations that are applicable to the cleanup of hazardous materials releases. Title 22, Division 4.5, contains environmental health standards for the management of hazardous waste. This includes standards for the identification of hazardous waste (Chapter 11) and standards that are applicable to transporters of hazardous waste (Chapter 13).

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (California Health and Safety Code, Chapter 6.11, Sections 25404–25404.9)

This program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of environmental and emergency response programs and provides authority to the Certified Unified Program Agency (CUPA). The CUPA is designed to protect public health and the environment from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes. This is accomplished through inspections, emergency response actions, enforcement, and mitigation oversight. The CUPA for the City of El Cajon is the County of San Diego Department of Environmental Health, Hazardous Materials Division.

State Water Resources Control Board Construction Stormwater Program

Dischargers with projects that disturb 1 or more acre of soil or projects that disturb less than 1 acre but are part of a larger common plan of development that, in total, disturbs 1 or more acre are required to obtain coverage under a Construction General Permit. Construction activities that would be subject to this permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation. The Construction General Permit requires completion and implementation of a site-specific SWPPP.

Impact Analysis

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

Implementation of the proposed project would not change existing routine transport of potentially hazardous materials, including gasoline, oil solvents, cleaners, paint, and soil from the project site that are required to comply with City, state, and federal health and safety requirements that are intended to minimize hazardous materials risks to the public, such as California OSHA requirements, the

Hazardous Waste Control Act, the California Accidental Release Prevention program, and the California Health and Safety Code.

Hazardous materials would be limited to private use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances. These substances are required to comply with guidelines to minimize health risk to the public associated with hazardous materials.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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

The Department of Toxic Substances Control database was reviewed to confirm that there are no toxic or hazardous materials on the project site.[6] Typical construction-related hazardous materials would be used during construction of the residential development. During construction, it is possible that these substances may be accidentally released. However, compliance with federal, state, and local regulations, in combination with construction BMPs implemented from a SWPPP, as required by the Construction General Permit, would ensure that hazardous materials would be used and stored properly, thereby minimizing potential impacts due to an accidental release of hazardous materials. No acutely hazardous materials are expected to be used. In addition, the proposed project would not be constructed on a site with hazardous material contamination.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Any persons making deliveries to the project site will be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste to reduce the likelihood and severity of accidents during buildout of the project site. The use of hazardous material on the project site post-construction would consist of those commonly used in a residential/commercial setting and routine landscape maintenance and cleaning. Proper handling of the use and disposal of hazardous materials would reduce the potential for exposure. Operation of the proposed project at the project site would not involve the transport, use, or disposal of large quantities of hazardous materials. Furthermore, the closest educational facility to the site is located approximately 0.3-mile southeast of the project site.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

[6] https://hwts.dtsc.ca.gov/facility/CAC002998690

d) Would the project be located on a site which 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?

The Department of Toxic Substances Control database was reviewed to confirm that there are no toxic or hazardous materials on the project site.[7].

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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 for people residing or working within the project area?

The project site is located approximately 2.4 miles southeast of Gillespie Field. Development of the proposed project will be required to be consistent with height restrictions contained in the City's Zoning Code, sections 17.260.050 and 17.260.090.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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

The proposed none-unit residential project will not change existing roadway circulation or create any other conditions that would impair iimplementation of or physically interfere with the City's emergency response plan, evacuation routes; or conflict with any of the Multi-Jurisdictional Hazard Mitigation Plan's specific hazard mitigation goals, objectives, and related potential actions. Development plans for the project site will be reviewed and approved by the Fire Marshall prior to issuance of building permits. Therefore, buildout of the Specific Plan would not conflict with an emergency response plan. Potential impacts associated with an adopted emergency response plan or emergency evacuation plan would be less than significant, and no mitigation would be required.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?

The project site is not located within a moderate, High, or Very High Fire Hazard Severity Zone (City of El Cajon 2021). Furthermore, the Heartland Fire and Rescue Station is located approximately 600 feet south of the project site.

[7] https://hwts.dtsc.ca.gov/facility/CAC002998690

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

5.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. Increase the rate or amount of surface runoff in a manner which would result in flooding in- or off-site;	☐	☐	☒	☐
iii Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(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?	☐	☐	☐	☒

Regulatory Setting

Federal

Federal Emergency Management Agency

FEMA administers the National Flood Insurance Program to provide subsidized flood insurance to communities that comply with FEMA regulations (e.g., limit development in floodplains). FEMA also issues FIRMs that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in the community. The design standard for flood protection is established by FEMA. FEMA's minimum level of flood protection for new development is the 100-year flood event, also described as a flood that has a 1-in-100 chance of occurring in any given year.

FEMA has developed requirements and procedures for evaluating earthen levee systems and mapping for areas affected by those systems. Levee systems are evaluated for their ability to provide protection from 100-year flood events. The results of the evaluation are documented in the FEMA Levee Inventory System. Levee systems must meet minimum freeboard standards and be maintained according to an officially adopted maintenance plan. Other FEMA levee-system evaluation criteria include structural design and interior drainage.

Clean Water Act

EPA is the lead federal agency with responsibility for water quality management. The CWA is the primary federal law that governs and authorizes water quality control activities by EPA as well as the states. Under Section 401 of the CWA, an applicant for a Section 10 or 404 permit to discharge dredged or fill material into waters of the United States must first obtain a certificate from the appropriate state agency, stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant water quality certification or waive the requirement is delegated by the SWRCB to the nine RWQCBs.

Under federal law, EPA published water quality regulations in Volume 40 of the CFR. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of two elements: (1) designated beneficial uses of the water body in question and (2) criteria that protect the designated uses. Section 304(a) requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. In California, EPA has given the SWRCB and its RWQCBs authority to identify beneficial uses and adopt applicable water quality objectives.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) was established by the CWA to regulate municipal and industrial discharges to surface waters of the United States from municipal separate storm sewer systems (MS4s). Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint- source stormwater runoff. NPDES permits generally identify effluent and receiving water limits for allowable concentrations and/or mass emissions of pollutants contained in a discharge, prohibitions on discharges that are not specifically allowed under the permit, and provisions that describe the

required actions of the discharger, including industrial pretreatment, pollution prevention, self-monitoring, or other activities.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the state must adopt water quality policies, plans, and objectives that protect its waters for the use and enjoyment of the people. The Porter-Cologne Act sets forth obligations of the SWRCB and RWQCBs to adopt and periodically update water quality control plans (Basin Plans). Basin Plans are regional water quality control plans and required by both the CWA and Porter-Cologne Act. Under the Basin Plans, beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. San Diego falls under the San Diego Region Hydrologic Basin Planning Area.

The Porter-Cologne Act also requires waste dischargers to notify the RWQCBs of their activities by filing a Report of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, Section 401 water quality certifications, or other approvals.

SWRCB Construction General Permit (Order 2009-0009-DWQ)

Construction activities that disturb 1 acre or more of land that could adversely affect hydrologic resources must comply with the requirements of the SWRCB Construction General Permit (Order 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-006-DWQ). Under the terms of the permit, applicants must file a complete and accurate Notice of Intent with the SWRCB. Applicants must also demonstrate conformance with applicable BMPs and prepare a SWPPP with a site map that shows the construction site perimeter; existing and proposed buildings; lots; roadways; stormwater collection and discharge points; general topography, both before and after construction; drainage patterns across the project site; and construction BMPs that eliminate or substantially reduce pollutants generated during construction.

Local

San Diego Integrated Regional Water Management Plan

In the San Diego region, there is a complex array of water supply, water management, water quality protection, pollution prevention, habitat protection, flood protection, and recreational needs. Numerous water management plans have been developed within the region to address these needs. However, jurisdictional and water management conflicts exist among the individual water management plans, and many challenges to identifying, addressing, and resolving water management issues also exist.

The San Diego Integrated Regional Water Management (IRWM) Program began in 2005 as an interdisciplinary effort by water retailers, wastewater agencies, stormwater and flood managers, watershed groups, the business community, tribes, agriculture, and non-profit stakeholders to improve water resources planning in the San Diego IRWM Region. The In 2007, San Diego published its first IRWM Plan. It has since been updated in 2013 and 2019. The IRWM includes Goals and Objectives that are intended to help the region the meet the IRWM Vision and Mission (below).

Vision: An integrated, balanced, and consensus-based approach to ensuring the long-term sustainability of the Region's water supply, water quality, and natural resources.

Goals: To develop and implement an integrated strategy to guide the Region toward protecting, managing, and developing reliable and sustainable water resources. Through a stakeholder-driven and adaptive process, the Region can develop solutions to water-related issues and conflicts that are economically and environmentally preferable, and that provide equitable resource protection for the entire Region.

Jurisdictional Runoff Management Plan

Under RWQCB Order No. R9-2013-0001, NPDES Permit No. CAS0109266, the 18 cities within San Diego County are required to prepare Jurisdictional Runoff Management Plans. Each jurisdictional plan must contain a component that addresses issues related to construction activities and a component that addresses issues related to existing development. As principal permittee, the County of San Diego prepares and submits an annual report on the unified Jurisdictional Runoff Management Plans that describes the progress of the programs and the strategies to reduce the discharge of pollutants of concern to the MS4 and receiving waters to the maximum extent practicable.

San Diego River Watershed Water Quality Improvement Plan

Development and implementation of a Water Quality Improvement Plan is required by the MS4 Permit (Order R9-2013-0001, NPDES No. CAS0109266) adopted by the San Diego RWQCB on May 8, 2013. The goal of the San Diego River Watershed Water Quality Improvement Plan is to further the CWA's objectives to preserve and restore water quality. The plan guides participating agencies' jurisdictional programs, including the City of El Cajon, to achieve the goals.

Impact Analysis

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The proposed project could result in an increase in surface water pollutants, such as sediment, oil, and grease, from construction of the single-family homes, including grading and the installation of utilities and street infrastructure. Disturbed sediment could temporarily affect water quality because of increased stormwater runoff. In general, the delivery, handling, and storage of construction materials and wastes, as well as use of construction equipment, could introduce a risk of stormwater contamination if materials and wastes are not properly handled and contained. Staging areas or building sites can be sources of pollution because of the use and storage of equipment and materials during construction.

Construction of the proposed project would not disturb more than 1 acre and, therefore, would not be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), in accordance with the Construction General Permit.

Operation of the proposed project would increase impervious surfaces on the project site. Generally, stormwater currently sheet flows off the project site onto Oak Avenue and E. Main Street into existing stormwater drainage facilities.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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

Much of the project site is covered by impervious surfaces due to previous development on the project site. With installation of the proposed residential building, parking, and landscaped areas, development of the proposed project will result in a slight increase in the percentage of impervious surfaces.

Potable water is delivered to the project site by Helix Water District, and groundwater is not used as part of the District's potable supplies. Therefore, future development associated with buildout of the project areas would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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;

There are no streams or rivers on the project site. Development of the proposed project will generally maintain the existing drainage patterns by conveying runoff to stormwater to onsite treatment devices and detention systems via catch basins, concrete gutters, and storm drainpipes, before ultimately discharging onto E. Main Street and Oak Avenue. Therefore, potential impacts associated with altering the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would result in erosion on or off site would be less than significant, and no mitigation would be required.

ii) Increase the rate or amount of surface runoff in a manner which would result in flooding in- or off-site;

The proposed project would result in a slight increase in a impervious surfaces. However, a large portion of the project site has previously been paved and the project will introduce new landscaped areas which will serve to slow site stormwater runoff.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The proposed project would result in a slight increase in a impervious surfaces. However, a large portion of the project site has previously been paved and the project will introduce new landscaped areas which will serve to slow site stormwater runoff. Finally, the project site is not located within a flood hazard, tsunami, or seiche zone.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

iv) Impede or redirect flood flows?

The proposed project would not be located within a 100-year flood hazard area, as mapped on FIRMs. The site is designated as Zone X and would not impede or redirect flood flows.[8]

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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

The project site is approximately 20 miles from the Pacific Ocean and approximately 14 miles from San Diego Bay. The site is not within a FEMA-designated 100-year flood zone or the inundation areas for the closest dams (i.e., Chet Harritt Dam, approximately 3.8 miles to the north, and Murray Dam, approximately 9 miles to the west). Impacts from a flood hazard, tsunami or seiche are therefore unlikely. The project site is not in a flood hazard, tsunami, or seiche zone.

Significance Determination: No impact.

Mitigation Measures: No mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Substantial regulation currently exists that addresses stormwater runoff and keeping non-stormwater pollutants out of receiving waters, including the statewide Construction General Permit (i.e., Storm Water Pollution Prevention (SWPP Plan) and the MS4 Permit (i.e., Storm Water Quality Management Plan (SWQMP) that will be required with future construction on the project site. The proposed project would adhere to these regulations as described in Section 5.10(a). Through compliance with said regulations, the proposed project would be consistent with the SDRWQCB Water Quality Control Plan.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

[8] San Diego County SanGis. Accessed October 17, 2023.https://gissd.sandag.org/plt/ParcelRpt.aspx?APN=5110130300

5.11 Land Use/Planning

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

Regulatory Setting

City of El Cajon General Plan

Goal 5: A broad range of housing types will be made available to meet the housing needs of various age and income groups.

Objective 5-2: Encourage the adequate provision of housing by location, type of unit, and price to meet the existing and future needs of El Cajon residents.

Policy 5-2.1: The City will provide a variety of residential development opportunities in the City to fulfill regional housing needs.

Policy 5-2.2: The City will facilitate the production of housing for all segments of the population, including those with special needs.

Objective 5-3: Provide increased opportunities for home ownership.
Objective 5-6: Ensure that new housing is compatible with existing development and sensitive to environmental needs.

Policy 5-6.1: The City will continue to maintain and develop a set of strong local ordinances to benefit the quality of living in residential areas and promote high standards of aesthetics.

Policy 5-6.2: The City will prohibit or restrict, as appropriate, residential development within or in proximity to airport flight patterns, freeways, railroads, industrial areas, areas subject to flooding or geologic hazards, or any other areas determined to be incompatible or inharmonious.

Policy 5-6.3: The City will encourage the design of residential developments that are buffered from nearby commercial and industrial areas, freeways, and railroads and avoid fronting on major (primary and secondary) streets.

Policy 5-6.4: The City will require residential developments to respect the natural topography by avoiding excessive grading and promoting planned or clustered developments in hillside and other areas containing sensitive physical and biological features and open spaces worthy of preservation.

Policy 5-6.5: The City will encourage residential developments that form neighborhood units with both natural (streams, ridgelines, etc.) and man-made (major streets, etc.) boundaries and focus on schools, parks, and other activity centers in order to create neighborhood focal points and foster social interaction within the neighborhood.

Goal 8: The livability of El Cajon will be maintained and enhanced through respect for the environment.

Objective 8-1: The development of property shall be coordinated with efforts at conservation of natural resources.

Policy 8-1.1: All development proposals shall receive the judicious and rational use of environmental review procedures.

Objective 8-2: Ensure that the physical environment of the El Cajon area is protected from adverse impact.

Policy 8-2.1: The retention of the unique natural features of a development site, such as rock outcroppings, native vegetation, and trees, shall be encouraged.

Policy 8-2.2: The flat, valley portions of El Cajon shall receive the most intensive development. Hillside areas shall receive less intensive development. Steep hillside areas (slopes more than 25%) shall be placed in the open space land use category.

Policy 8-2.3: All graded slopes shall be adequately planted for erosion control.

Policy 8-2.4: Special design standards shall be considered for local residential service roads in hillside areas.

Objective 8-4: Encourage future land use planning and development that take into consideration the effects of noise upon the environment.

Objective 8-5: Achieve an urban form that respects the natural land forms of the area and preserves the unique contrast between the valley's level floor and the surrounding hills.

Policy 8-5.1: Planned residential developments shall be recommended for proposed projects on hillside property.

Policy 8-5.2: Excessive amounts of grading with enormous and unsightly banks shall be controlled by application of the Hillside Overlay Zone to hillside property.

Policy 8-5.3: Hillside property retained in its natural state and used for passive public recreational purposes (hiking, picnicking, etc.) shall be considered for public acquisition.

Policy 8-5.4: The Hillside Overlay Zone shall be reviewed regarding its standards.

Objective 8-6: Promote urban development characterized by the balanced coexistence of people, wildlife, and vegetation.

Objective 8-10: Achieve and maintain a level of water quality that protects affected watersheds by minimizing runoff, which may cause erosion and pollution.

Policy 8-10.1: The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

Policy 8-10.9: Post-development runoff from a site shall not contain pollutant loads that cause or contribute to an exceedance of receiving water quality objectives or have not been reduced to the maximum extent practicable.

Goal 16: El Cajon shall take positive steps to minimize risks to life and property resulting from disasters.

Policy: 16-1.6: Soils reports shall be required for all new construction.

Policy: 16-1.7: The City shall approve only those land uses that are consistent with the Gillespie Field Land Use Plan developed by SANDAG.

City of El Cajon Zoning Code

The City of El Cajon Zoning Code is intended to carry out the goals and policies of the City of El Cajon General Plan.

Impact Analysis

a) Would the project physically divide an established community?

Multiple family residential land uses border the project site to the east and south. Future residential development of the project site would be consistent with the existing development in the project area and would not physically impede or divide the existing community. Therefore, no potential impacts associated with physically dividing an established community would occur. No mitigation is required.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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

The project includes a General Plan Amendment to change the existing General Plan Designation of the project site from General Commercial to Medium Density Residential and a request for a rezone from Single-Family Residential (6,000 square feet) to Multiple Family Residential (2,200 square feet). This zoning allows for the development of 6.97 units (7 units). A density bonus is being requested per California Government Code Section 65915(f)(4) and City of El Cajon Code Section 17.220.010 which awards two (2) units for making 28 percent of the units affordable for "moderate-income" families. The Housing and Urban Development Department (HUD) defines moderate-income as 80% to 120% of the average median income (AMI) of the local area. HUD data shows that the 2023 AMI for San Diego County is an annual household income of $116,800[9]. The two second-story two-bedroom units will be made affordable to moderate-income households. The proposed project will bring much needed additional housing to the City of El Cajon and will not cause any conflicts with land use plans or policies intended to avoid any environmental impacts.

The proposed project is consistent with the General Plan Goals and Policies presented above. It will be constructed on a relatively flat, previously disturbed vacant site and will not disturb existing environmental resources. It will help the City meet the City's goal to provide a broad range of housing types and by providing ownership opportunities. Freeway noise impacts to the project will be avoided with upgraded construction and windows and proposed landscaping, which will include 15 new trees, several shrubs, vines, and groundcover will soften the visual character and the project vicinity.

Significance Determination: Less than significant impact.

Mitigation Measures: No mitigation is required.

5.12 Mineral Resources

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

Impact Analysis

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

[9] https://www.huduser.gov/portal/datasets/home-income-limits.html

The project site has previously been developed and is not in an area designated by the state as an area known to have locally important mineral resources, or within an area utilized for mineral resource production. As such, the proposed project would not impact mineral resources.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

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

As discussed above, the project site is not identified as containing any locally important mineral resources. Therefore, no impact to the availability of a locally important mineral resource recovery site would occur.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

5.13 Noise

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?	☐	☐	☐	☒

Regulatory Setting

State

Office of Planning and Research General Plan Guidelines

California requires each local government entity to perform noise studies and implement a noise element as part of its general plan. The purpose of the noise element is to limit the exposure of the community to excessive noise levels; the noise element must be used to guide decisions concerning land use.

California Department of Transportation

Caltrans provides widely referenced vibration guidelines in its publication *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020). Although these guidelines do not represent strict standards that apply to the proposed project, they are useful in assessing groundborne vibration levels generated by project construction, particularly because the City of El Cajon does not provide any quantitative vibration standards. The manual provides guideline criteria for potential building damage from ground-borne vibration as well as thresholds for annoyance associated with groundborne vibration. The manual provides guideline criteria for potential building damage from ground-borne vibration, as summarized in Table 2 below. The vibration metric used in the table is peak particle velocity (PPV),6 measured in inches per second (in/s). Typical construction equipment would be categorized as "continuous/frequent intermittent" vibration sources.

Table 2. Guideline Vibration Damage Potential Criteria

Structure Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation. Transportation and Construction Vibration Guidance Manual, Chapter 7 Table 19, April 2020.

Notes:
(1) Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

The manual also indicates that, for continuous/frequent intermittent vibration sources, the human response to ground-borne vibration varies from barely perceptible at 0.01 in/s PPV to distinctly perceptible at 0.04 in/s PPV, strongly perceptible at 0.10, and severe at 0.4 in/s PPV.

Local

City of El Cajon Municipal Code

Per section 17.115130(C)(3) of the City of El Cajon Municipal Ordinance it is unlawful for any person within any residential zone, or within a radius of five hundred (500) feet from any residential zone, to operate equipment or perform any outside construction, maintenance or repair work on buildings, structures, landscapes or related facilities, or to operate any pile driver, power shovel, pneumatic hammer, power hoist, leaf blower, mower, or any other mechanical device, between the hours of 7 p.m. of one (1) day and 7 a.m. of the next day in such a manner that a reasonable person of normal sensitivities residing in the area is caused discomfort or annoyance.

The ordinance above does not specify a noise level limit at which a reasonable person of normal sensitivities would experience discomfort or annoyance. For the purposes of this analysis, the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (2018) criteria will be used to establish significance thresholds. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} averaged over an 8-hour period (L_{eq} (8-hr); and the nighttime noise threshold is 70 dBA L_{eq} (8-hr). For commercial uses, the daytime and nighttime noise threshold is 85 dBA L_{eq} (8-hr). In compliance with the City's Code discussed in the previous paragraph, it is assumed that construction would not occur during the noise-sensitive nighttime hours.

City of El Cajon General Plan

The following policies from the City's General Plan Noise Element are applicable to the proposed project.

General Plan Policy 8-3.1

The City shall develop an updated noise contour map using the 65 decibel, day-night average contour as the maximum acceptable standard.

General Plan Policy 8-3.2

Noise-attenuating measures such as special building insulation, increases setbacks, walls, landscaping, etc., shall be required whenever any residential noise-sensitive land uses are proposed in the noise impact area of a major transportation facility as indicated on the noise contour map on file in the office of the Department of Community Development.

General Plan Policy 8-3.5

The City shall require that notice be given to all prospective purchasers of new dwelling units constructed in noise impact areas.

Impact Analysis

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?

A Noise Impact Analysis was completed to determine potential impacts to noise associated with the development of the proposed project (Appendix A, Noise Impact Analysis, 1541 E. Main Street, City of El Cajon, Roma Environmental, August 3, 2023).

Construction Noise:

Project construction may result in short-term noise impacts associated with construction activities. They extent of the impact will vary depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of the construction work. Construction phases will include site preparation, building construction, paving, and architectural coating. Noise levels at nearby sensitive receptors due to project construction noise were calculated utilizing methodology presented in the FTA Transit Noise and Vibration Impact Assessment Manual (2018) together with several key construction parameters.

Per CEQA, the construction noise would not result in substantial increase in noise as long as it is in compliance with applicable plans and ordinances. The following analysis is provided for discussion purposes. The City of El Cajon has not established a numerical noise level limit associated with construction noise. Therefore, for purposes of this analysis, Federal Transit Administration (FTA) criteria was used. For impacts to residential land uses, the FTA daytime noise threshold is 80 dBA L_{eq} averaged over an 8-hour period (L_{eq} (8-hr); and the nighttime noise threshold is 70 dBA L_{eq} (8-hr).

A likely worst-case scenario for construction of the proposed project would be the use of a dozer and an excavator operating on-site simultaneously. This scenario was modeled by placing both pieces of equipment in the acoustic center of the project site because the equipment would be moving around the project site during the modeled noise period. A usage factor of 40 percent was assumed for each piece of equipment. Unmitigated noise levels from the acoustic center of the site to the property line of the nearest sensitive receptor (multiple family residential land use to the east) is 55 feet. Construction noise levels may reach up to 79.4 dBA L_{eq} at this property line for a limited time. They are not, however, expected to exceed the FTA construction noise criteria discussed above (80 dBA L_{eq} (8-hr). Construction noise impacts would be less than significant.

Project Generated Vehicle Noise (Offsite): Per the Institute of Traffic Engineers (ITE) Trip Generation Tables[10], multi-family low rise land uses are expected to generate 6.74 vehicle trips per day per dwelling unit. Implementation of the proposed project would result in the construction of nine low-rise (per ITE definition) multi-family residential units. Therefore, the project is expected to generate approximately 61 daily vehicle trips per day which would not be sufficient to result in a noticeable change in existing measured ambient noise levels (69 dBA CNEL). Increases in noise levels due to project generated vehicle traffic would be less than significant. No mitigation is required.

Project Generated Noise (Onsite): Noise associated with habitation of the proposed residential units may include parking lot activities, passive recreation, and heating, cooling, and ventilation systems (HVAC). Typical parking lot activities include people conversing, doors shutting, and vehicles idling which generate noise levels ranging from approximately 60 dBA to 70 dBA L_{max} at 50 feet. These activities are expected to occur sporadically throughout the day. Because a noise source needs to double in quantity In order to result in a barely noticeable increase in ambient noise levels. Parking lot events would not be loud enough or frequent enough to result in a readily noticeable increase in hourly noise levels and would not result in a substantial increase in ambient noise levels.

[10] Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021).

Although a detailed HVAC plan is not yet available, the site plan shows that the closest possible HVAC location will be setback at least 42 feet from the nearest property line shared with a residential land use but will likely be located on the northwest side of the proposed building. As long as HVAC units do not exceed a sound level of 73 dBA at a distance of 3 feet or a sound power level of 81 dB, then they are unlikely to exceed the most conservative City noise criteria for impacts from one property to another (nighttime noise standard of 50 dBA L_{eq}). Impacts associated with project on-site operations will be less than significant with the following mitigation.

Mitigation: Required.

NOI MM-1 HVAC units shall not have sound specifications that exceed 73 dBA at a distance of 3 feet (sound power level of 81).

Significance Determination: Less than significant Impact with Mitigation.

b) Generation of excessive ground-borne vibration or groundborne noise levels?

City of El Cajon Municipal Ordinance Section 17.115.130(D), Performance Standards prohibits operations that could generate groundborne vibration that is harmful or injurious to the use or development of surrounding properties. Specifically, No vibration shall be permitted which is perceptible without instruments at any use along the property line on which such use is located. For the purpose of this determination, the boundary is the property line. This standard is prohibitive for use of several commonly used pieces of construction equipment which may be perceptible if used within 75 feet of a property line. It is our professional opinion that this ordinance applies to long-term operational vibration sources, i.e., generators and pumps. For this reason, criteria published by the California Department of Transportation (Caltrans) was utilized to determine if proposed construction activities are likely to cause structural damage or strong annoyance at nearby sensitive receptors.
The California Department of Transportation (Caltrans) has developed several publications on groundborne vibration. The *Transportation and Construction Vibration Guidance Manual* (Caltrans, 2020) provides informational content that supplements previous publications with improved knowledge and information relating to groundborne transportation- and construction-induced vibrations. Although the *Transportation and Construction Vibration Guidance Manual* is not an official policy, standard, specification, or regulation, it serves as a useful guide for evaluating vibration impacts.

Vibration is considered to be distinctly perceptible at a PPV of 0.04 in/second and strongly perceptible at 0.10 peak particle velocity (PPV). The threshold at which there is a risk to “architectural” damage to historic and some older buildings is a peak particle velocity (PPV) of 0.25 in/sec, at older residential structures a PPV of 0.3 in/sec, and at new residential structures and modern commercial/industrial buildings a PPV of 0.5 in/sec. The nearby residential buildings are not new but are also not old. To be conservative, the 0.3 threshold was utilized for this analysis. Impacts would be significant if construction activities result in groundborne vibration of 0.3 PPV or higher at residential structures and/or a PPV of 0.5 or higher at commercial structures. Annoyance is temporary in nature and is not considered significant unless it is strongly perceptible and disturbs sleep or the use of sensitive equipment (approximately 0.1 PPV).

There are several types of construction equipment that can cause vibration levels high enough to result in architectural or structural damage to structures. For example, a vibratory roller could

generate up to 0.21 PPV at a distance of 25 feet; and operation of a large bulldozer (0.089 PPV) at a distance of 25 feet (two of the most vibratory pieces of construction equipment). Groundborne vibration at sensitive receptors associated with this equipment would drop off as the equipment moves away. For example, as the vibratory roller moves further than 100 feet from the sensitive receptors, the vibration associated with it would drop below 0.0026 PPV. It should be noted that these vibration levels are reference levels and may vary slightly depending upon soil type and specific usage of each piece of equipment.

The most vibratory pieces of equipment expected to be utilized on the project site include a vibratory roller and a larger bulldozer. Groundborne vibration levels associated with the use of a vibratory roller could reach up to 0.02 PPV at a distance of 25 feet and a larger bulldozer could reach up to 0.089 PPV at a distance of 25 feet. The nearest structure is located approximately 40 feet from the project site property line. No impacts related to groundborne vibration would occur.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

c) For a project located within the vicinity of a private airstrip or an air-port 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 project site is located approximately 2.4 miles southeast of Gillespie Field and is not located within any airport noise contours. The proposed project would not be significantly impacted by airports or aircraft overflight.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

5.14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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) Would the project include 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)?

The proposed project will provide 9 housing units which will inch the City forward to meeting their existing housing goals. The project will not create a substantial number of new jobs or create new businesses. Population growth associated with the proposed project would be negligible.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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

The proposed project will provide 9 housing units which will inch the City forward to meeting their existing housing goals. Therefore, no potential impacts associated with the displacement of existing people or housing would occur.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

5.15 Public Services

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Result in substantial adverse physical impacts associated with the provision of or 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:				
i. Fire Protection?	☐	☐	☒	☐
ii. Police Protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Other public facilities?	☐	☐	☒	☐

Impact Analysis:

a) Result in substantial adverse physical impacts associated with the provision of or 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:

i) Fire Protection?

The project site is currently served by Heartland Fire & Rescue. It is structured to accommodate current demands on fire services. Heartland Fire & Rescue reviews development projects to ensure adequate service is available at the time of project approval. The proposed nine-unit multiple family building is not expected to put stress on existing fire services or result in the need for new services.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

ii) Police Protection?

The Public Safety Center was built to accommodate current and future demands for police services. Through compliance with the national staffing standards of 1.3 officers per 1,000 residents, the existing facility has the capacity for an additional 53 personnel, including 40 sworn officers. This translates into a capacity for a population growth of approximately 30,000 new residents according to current staffing level ratios. The proposed nine-unit multiple family building is not expected to put stress on existing police services or result in the need for new services.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

iii) Schools?

The proposed project will be subject to school impact fees in accordance with the provisions of Chapter 15.10 and 15.12 of the City's Municipal Code, and consistent with SB 50 section 65995(3)(h) of the California Government Code, "the payment of statutory fees is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use or development of real property . . . ." With the availability of space at existing schools and through implementation of the school impact fees, future projects would have adequate school services available. With payment of statutory fees, school impacts would be less than significant.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

iv) Other public facilities?

The proposed project would create a negligible increase in demand for library services and medical services in the City, this increase would not be substantial. New or expanded facilities would not be required as a result of the project.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

5.16 Recreation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) 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) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Regulatory Setting:

State

Quimby Act

The 1975 Quimby Act (California Government Code Section 66477) was passed to require developers to help mitigate the impacts of property improvements. The Quimby Act authorizes local governments to pass ordinances that require developers to set aside land, donate conservation easements, or pay in-lieu fees for park improvements. The in-lieu fees must be paid and/or the land must be conveyed directly to the local public agencies that provide the community-wide park and recreation services.

Local

City of El Cajon General Plan

The City of El Cajon General Plan Open Space and Parks Element provides a framework for the maintenance of existing recreational facilities and the development of future facilities. The Open Space and Parks Element identifies the City's priorities of developing recreational facilities and preserving open space and hillsides for recreational uses.

Impact Analysis:

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?

The addition of nine new dwelling units may result in the addition of nine new households in the project area. These households will not put a hardship on existing park and recreational facilities.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

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?

The proposed project will provide passive outdoor recreational space and will comply with City landscaping requirements. The proposed landscape plan is shown in Figure 4. No active recreational facilities are proposed nor are any required to be constructed or expanded. Therefore, no potential impacts associated with recreational facilities or requiring the construction or expansion of recreational facilities which might have an adverse physical effect on the environment would occur.

Significance Determination: No Impact.
Mitigation Measures: No mitigation is required.

5.17 Transportation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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) Would the project result in buildout of land uses, which would generate an increase in projected traffic that is substantial in relation to the capacity of the existing circulation system?

The project site currently has a General Plan designation of General Commercial and the project is proposing a General Plan Amendment to Medium Density Residential to allow for the development of 9 residential units. The Institute of Traffic Engineers (ITE) manual assigns daily trip generation associated with the proposed residential use (multi-family low rise, not close to rail transit) 6.74 vehicle trips per day per dwelling unit for approximately 61 daily vehicle trips. In comparison, the existing General Plan designation for the project site analyzed in the most recent General Plan prepared for the City (General Commercial) would most likely result in more daily trips than the proposed project i.e., convenience store (726.28 daily trips per thousand square feet) or a fast-food restaurant with a drive-through window (467.48 daily trips per thousand square feet). Project generated vehicle trips would not noticeably change the existing or future capacity of affected roadways.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

b) Would the project result in buildout of land uses, which would generate an increase in projected traffic that is substantial in relation to the capacity of the existing circulation system?

Please see response to a) above.
Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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

The proposed project would not result in any changes to roadway geometric design. The proposed project will be required to adhere to the City's Improvement Standards manual and City Municipal Code access requirements and would avoid potentially significant traffic hazard or emergency access issues. Impacts would be less than significant. No mitigation is required.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

b) Would the project result in inadequate emergency access?

Access to the proposed project will be via provided via E. Main Street and Oakdale Avenue. Access will be required to adhere to the City's Improvement Standards Manual and City Municipal Code access requirements and will avoid creating potentially significant traffic hazards or emergency access issues. Impacts would be less than significant.

Significance Determination: No Impact.

Mitigation Measures: No mitigation is required.

5.18 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:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
(a) Listed or eligible for listing in 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.	☐	☒	☐	☐

Regulatory Setting:

AB 52 (Chapter 532, Statutes of 2014)

AB 52 (Chapter 532, Statutes of 2014) establishes a formal consultation process for California Native American tribes as part of CEQA and equates significant impacts on tribal cultural resources with significant environmental impacts (PRC Section 21084.2). PRC Section 21074 defines tribal cultural resources as follows:

- Sites, features, places, sacred places, and objects with cultural value to descendant communities or cultural landscapes defined in size and scope that are included in or eligible for listing in the California Register of Historical Resources or included in a local register of historical resources.
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.

Sacred places can include Native American sanctified cemeteries, places of worship, religious or ceremonial sites, and sacred shrines. In addition, both unique and non-unique archaeological rresources, as defined in PRC Section 21083.2, can be tribal cultural resources if they meet the criteria detailed above. The lead agency relies upon substantial evidence to make the determination that a

resource qualifies as a tribal cultural resource when it is not already listed in the California Register of Historical Resources or a local register.

AB 52 defines a California Native American tribe as a Native American tribe located in California that is on the contact list maintained by the NAHC (PRC Section 21073). Under AB 52, formal consultation with tribes is required prior to determining the level of environmental document if a tribe has requested to be informed by the lead agency of proposed projects and if the tribe, upon receiving notice of the project, accepts the opportunity to consult within 30 days of receipt of the notice. AB 52 also requires that consultation, if initiated, address project alternatives and mitigation measures for significant effects, specifically if requested by the tribe. AB 52 states that consultation is considered concluded when either the parties agree to measures to mitigate or avoid a significant effect on tribal cultural resources or when either the tribe or the agency concludes that mutual agreement cannot be reached after making a reasonable good-faith effort. Under AB 52, any mitigation measures recommended by the agency or agreed upon with the tribe may be included in the final environmental document and the adopted mitigation monitoring program if they were determined to avoid or lessen a significant impact on a tribal cultural resource. If the recommended measures are not included in the final environmental document, then the lead agency must consider the four mitigation methods described in PRC Section 21084.3 (PRC 21082.3(e)). Any information submitted by a tribe during the consultation process is considered confidential and is not subject to public review or disclosure. It will be published in a confidential appendix to the Cultural and Paleontological Resources Inventory Report of this IS/MND unless the tribe consents to disclosure of all or some of the information to the public.

Impact Analysis:

a) 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 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)?

The Native American Heritage Commission (NAHC) per Senate Bill 18 (SB 18), Government Codes §65352.3 and §65352.4, as well as Assembly Bill 52 (AB52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2, 1471 regarding the proposed project in a letter dated December 21, 2023.

Pursuant to PRC Section 21080.3.1 (AB 52), California Native American tribes that are traditionally and culturally affiliated with the project area can request notification of projects in their traditional cultural territory. The City received responses from the La Posta Band of Diegueno Mission Indians (Grey Wolf) and the the Viejas Band of Kumeyaay Indians (Viejas). The Grey Wolf requested that a cultural monitor be present during ground-disturbing activities and the Viejas requested to be informed of any inadvertent discoveries.

MM-CUL-1 (see Section V, *Cultural Resources)* includes a requirement for a cultural resource monitor to be present during all ground disturbing activities at the project site, and notification to the La Posta Band of Diegueno Mission Indians and the Viejas Band of Kumeyaay Indians of discovery of any inadvertent discoveries in order to minimize disturbance of tribal cultural resources. With the

incorporation of **MM-CUL-1,** potential impacts on tribal cultural resources would be less than significant.

Significance Determination: Less than significant With Mitigation. (See Section V, *Cultural Resources*)

b) 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 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.

Please see response to a) above.

5.19 Utilities/Service Systems

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 telecommunication 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 wastes?	☐	☐	☒	☐

Impact Analysis:

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 telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

The proposed project would result in nine new housing units within an urbanized area and waste, wastewater, storm water and other utilities are already available at the site. The project will not require construction of a new or expanded utilities.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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

The project site is served by the Helix Water District. Water treatment and conveyance facilities owned and operated by the district include the R.M. Levy Water Treatment Plant, Grossmont Reservoir (which stores treated water), and 25 storage tanks located throughout the district. Treated water conveyance facilities include a 700-mile network of pipelines consisting of transmission mains ranging from 16 to 54 inches in diameter and distribution mains ranging from 2 to 14 inches in diameter, 2 transmission pump stations (Harold Ball and Los Coches Pump Stations), and 21 distribution system pump stations. The district also has access to imported treated water through a connection to the SDCWA's treated water aqueduct system. This treated water connection is used during emergency events or under special operating circumstances such as planned shutdowns for maintenance purposes. Implementation of the proposed project would not generate the need for additional water supplies.

The proposed residential development would generate a nominal increase in the need for additional supplies. However, Helix Water District is capable of providing for future water needs associated with buildout of the project area. This impact would be less than significant. No mitigation is required.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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?

The City has more than one mile of sewer pipe and is, therefore, subject to the 2006 Waste Discharge Requirements for Sewer Systems order to prepare a Sewage System Master Plan (SSMP). The City's SSMP was completed in 2008 and updated in 2015 and 2020. It provides a review of the City's existing

sewer system, projection of future sewer system demand, identification of existing and future capacity deficiencies, recommended capital improvement projects, and plans, schedules, and programs to ensure that all feasible steps are taken to contain and control effects that could occur in the event of a Sanitary Sewer Overflow. Future flow projections contained in the SSMP are based on land uses and densities contained in the adopted General Plan and Specific Plans, with projected future population growth.

The proposed project will not increase the need for sewage treatment. As stated above the City's SSMP was updated in the year 2020 based on approved land uses contained in the City's General Plan and Specific Plans. No deficiencies were identified.
Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

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?

The proposed nine-unit residential development will not substantially change the need for solid waste services or cause an excess of the capacity of existing facilities.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid wastes?

Assembly Bill 341 requires cities and counties in California to implement recycling programs, reduce refuse at the source, and compost waste to achieve the established 75 percent diversion of solid waste from landfills. The City's recycling program helps the City meet state requirements. Additionally, the City's Municipal Code establishes regulations for the collection of solid waste and requires the diversion of designated recyclables from the City's waste stream by all new residential, commercial, and industrial customers within the City and new developments must provide on-site recycling bins and recycling service to facilitate recycling of solid waste (per Municipal Code, Chapter 17.030.160).

All future development must participate in the above-mentioned programs and comply with General Plan and Municipal Code requirements to minimize the generation of solid waste and optimize source reduction and recycling. Compliance with the City's green building code (Municipal Code, Chapter 15.60), which incorporates the state's green building code by reference, would also serve to limit waste of resources both in construction and daily operations of the future buildings. By complying with these requirements, significant solid waste disposal impacts related to construction and operation of future development in the project site would be avoided. The proposed project would not result in a change in current solid waste management.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

5.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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:

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The proposed nine-unit residential development would not generate enough vehicle trips to cause any issues with the implementation of an adopted emergency or response plan or with an emergency evacuation plan.

Significance Determination: Less than Significant Impact.

Mitigation Measures: No mitigation is required.

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?

The project site is located in a built environment. The project site is not located within the city's designated Very High Fire Hazard Severity Zone.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The proposed project is surrounded by built infrastructure including roads, utilities (electricity and gas), sewer lines, and waterlines and would not necessitate the construction of new off-site infrastructure. Additionally, as stated above the project site is not located within a fire hazard area. Therefore, potential impacts associated with the exacerbation of fire risk or result in temporary or ongoing impacts to the environment would be less than significant, and no mitigation would be required.

Significance Determination: Less than significant Impact.
Mitigation Measures: No mitigation is required.

d) Would the project 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?

The project site is located in a built environment without steep slopes. Development on the project site would be required to comply with construction standards outlined in Chapter 7A of the California Building Code. Potential impacts associated with the exposure of 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 would be less than significant.

Significance Determination: Less than significant Impact.

Mitigation Measures: No mitigation is required.

5.21 Mandatory Findings of Significance

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

Impact Analysis:

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

Implementation of the proposed project will not impact wildlife habitat. As discussed in Sections V, *Cultural Resources;* VI, *Geology and Soils;* and XVII, *Tribal Cultural Resources,* the proposed project would not eliminate important examples of major periods of California history or prehistory. The project area has been significantly disturbed from previous grading and development. However, it is possible that archaeological resources could be encountered during construction of the proposed project. The destruction of any previously undiscovered historic archaeological resources would be

considered significant. To reduce potential impacts on potentially significant archaeological resources, mitigation measures **MM-CR-1** and **MM-CR-2** would be implemented.

Significance Determination: Less than significant.

Mitigation Measures: Implementation of MM CR-1.

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

The proposed nine-unit residential project is located in an urban built-up area and will not contribute noticeably to any environmental impacts.

Significance Determination: Less than significant.

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

All potential impacts of the proposed project have been identified, and mitigation measures have been provided, where applicable, to reduce potential impacts to less than significant levels. Upon implementation of mitigation measures, the proposed project would not have the potential to result in substantial adverse impacts on human beings either directly or indirectly. No additional mitigation measures would be required.

Significance Determination: Less than significant.

Mitigation Measures: No mitigation is required.

6.0 References

City of El Cajon

2000 City of El Cajon General Plan

2021 City of El Cajon General Plan Safety Element. July.

City of El Cajon Municipal Ordinance. As amended through June 2023.

Roma Environmental, LLC

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State of California, Department of Conservation

2023a Farmland Mapping and Monitoring Program.
https://www.conservation.ca.gov/dlrp/fmmp. Accessed October 10, 2023.

2023b California Williamson Act Enrollment Finder
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State of California Department of Forestry and Fire Protection (CalFire)

2023 Cal Fire Hazard Severity Zone Viewer FHSZ Viewer (ca.gov) Accessed October 10, 2023.

State of California, Department of Transportation (Caltrans)

2020 Transportation and Construction Vibration Guidance Manual

2023 California State Scenic Highway System ARC GIS.
https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

7.0 Preparers and Persons Consulted

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Catherine Howe, Associate, M.S.

City of E Cajon Staff
Noah Alvey, Deputy Director of Community Development

8.0 Mitigation Monitoring and Reporting Program

Impact Category	Mitigation Measures	Implementation/Timing	Responsible Monitoring	Monitoring/ Reporting Methods
Cultural/Tribal Cultural	**MM-CUL-1** A cultural resource monitor shall be present during ground disturbing activities. In the case that any inadvertent discoveries are made, the La Posta Band of Diegueno Mission Indians and the Viegas Band of Kumeyaay Indians will be notified.	Construction (during Ground disturbing activities)	Project Proponent (Hired Cultural Monitor)	Notification to the City Planning Department and the La Posta Band of Diegueno Mission Indians and Viegas Band of Kumeyaay Indians.
Noise	**MM-NOI-1:** HVAC units shall not have sound specifications that exceed 73 dBA at a distance of 3 feet (sound power level of 81).	Prior to issuance of a grading permit	Planning Division	Documentation to be submitted to the Planning Department

9.0 Appendices

Appendix A Noise Impact Analysis, 1470 E. Main Street Project

APPENDIX A

Noise Impact Analysis
1541 E. Main Street Project

Noise Impact Analysis
for
1471 E Main Street

Located in the
City of El Cajon, California

Prepared for:

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Prepared by:

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August 3, 2023

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I. Introduction and Setting

A. Purpose and Objectives

The purpose of this report is to provide an assessment of the noise and vibration impacts that may occur with the development of the proposed car dealership and to identify mitigation measures that may be necessary to reduce those impacts. The objectives of the study include:

- documentation of existing noise conditions
- discussion of noise modeling methodology and procedures
- analysis of noise and vibration generated by the construction of the project
- analysis and discussion of potential traffic noise impacts to the proposed project
- analysis of noise affecting nearby sensitive receptors due to increased traffic produced by the project
- recommendations for mitigation measures

B. Project Location

The project site is located at 1471 E Main Street in the City of El Cajon. The vicinity map showing the project location is provided on Figure 1.

C. Proposed Project

The project is a proposal to construct a 10.989 square foot, three-story, nine-unit multiple family residential building on an approximately 0.37-acre lot. Figure 2 illustrates the project site plan.

D. Sensitive Noise Receptors

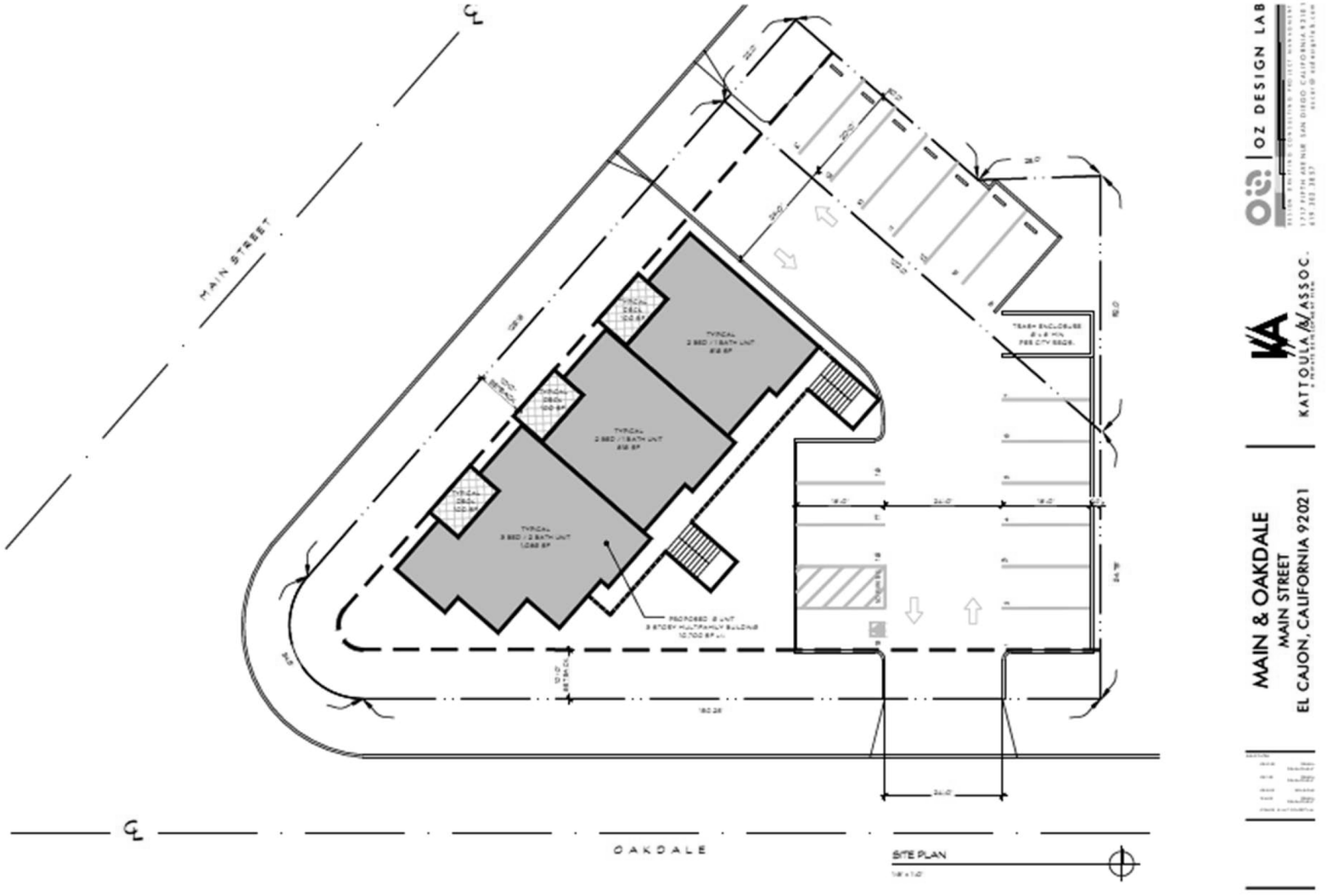
The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple-family residential, including transient lodging, motels and hotel uses make up the majority of these areas. The proposed project is considered to be a sensitive receptor. Sensitive receptors that may be affected by project generated construction noise include the multiple family residential land uses located east, southeast, and south of the project site and a hospital located west of the project site.

Figure 1

Project Location

Figure 2

Site Plan



II. Noise and Vibration Fundamentals

A. Sound and Noise

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound. Common noise sources and their associated noise levels are shown in Figure 3.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and the obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound, with associated factors summarized below.

Frequency
Continuous sound can be described by frequency (pitch) and amplitude (loudness), with a low-frequency sound perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz). A frequency of 250 cycles per second, for example, is referred to as 250 Hz), with higher frequencies sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hz. The audible frequency range for humans is generally between 20 and 20,000 Hz (or 20 kHz).

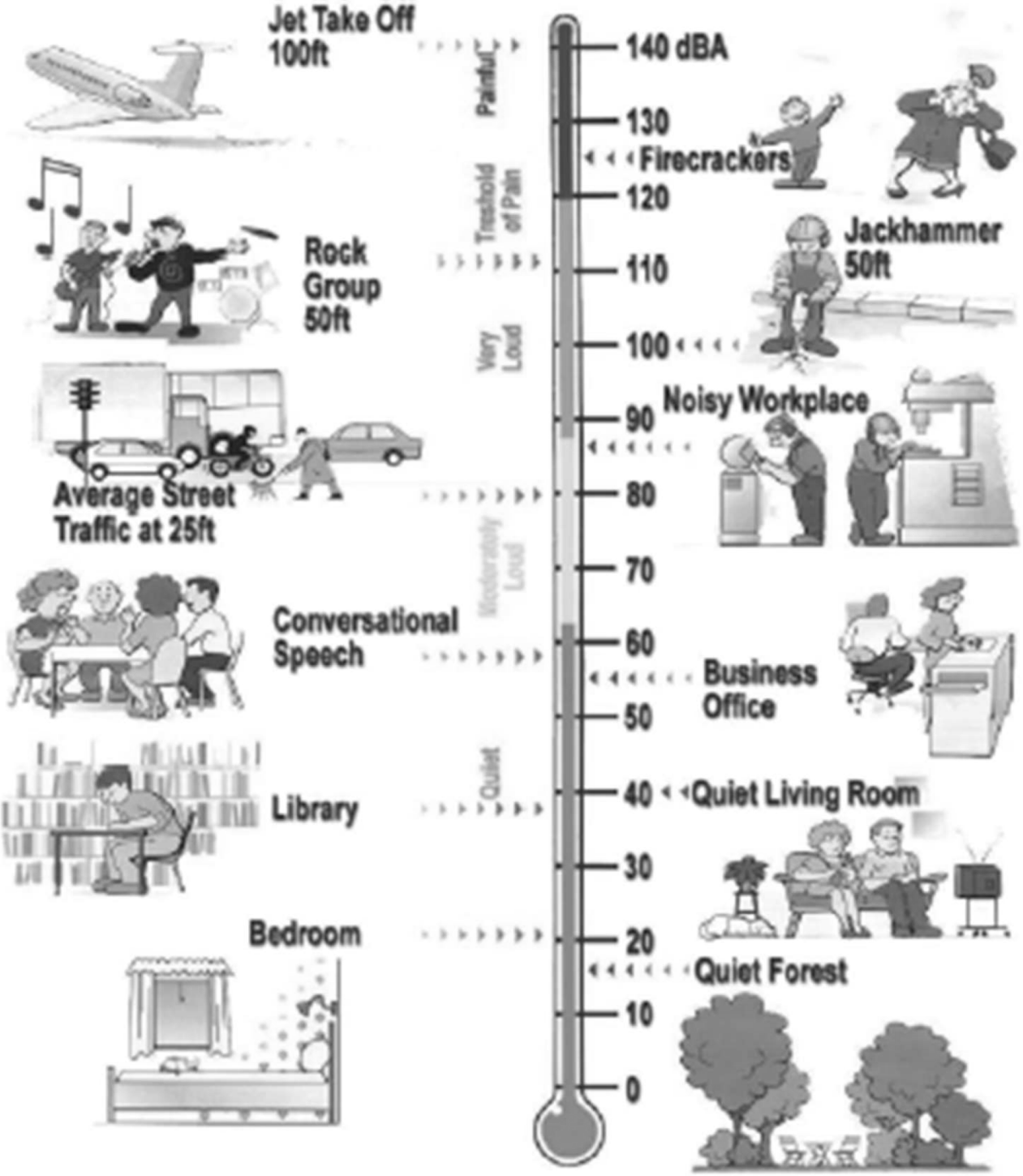
Sound Pressure Levels and Decibels
The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa), with one mPa representing approximately one hundred billionth of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB). The threshold of audible sound is about 0 dB for a healthy human ear, which corresponds to 20 mPa.

Sound Propagation
When sound propagates over a distance, it changes in level and frequency content. Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of six dB for each doubling of distance from a point source. Sound levels from a line source attenuate at a rate of three dB for each doubling of distance.

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense/deep woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver

Figure 3

Common Noise Source (dBA)



will typically result in at least five dB of noise reduction, with taller barriers providing increased noise reduction. Vegetation, such as highway landscaping, between the source and receiver is rarely effective in reducing noise, as it does not create a solid barrier.

Human Perception of Noise

The decibel scale alone does not adequately characterize how humans perceive noise, as the dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear. Human hearing is limited in the range of audible frequencies, as well as in the way it perceives the SPL within that range. In general, people are most sensitive to the frequency range of 1,000 to 8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. An "A-weighted" sound level (expressed in units of dBA) can then be calculated from this information. Noise levels are typically reported in terms of A-weighted decibels or dBA. Table 1, Typical A-weighted Noise Levels, describes levels for various noise sources.

B. Noise Descriptors

Noise in the daily human environment fluctuates over time; these changes can be minor or substantial, depending on individual factors. Specifically, noise fluctuations can be influenced by conditions such as: (1) whether noise levels occur in regular or random patterns; (2) if noise level fluctuations are rapid or slow; and (3) if noise levels vary widely or are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels, with the following noise descriptors most commonly used in transportation noise analysis.

Equivalent Sound Level (L_{eq})

L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The one-hour A-weighted equivalent sound level (L_{eq}[h]), for example, is the energy average of A-weighted sound levels occurring during a one-hour period. One hour is the normal (default) assumed time period for L_{eq} unless stated otherwise.

Percentile-Exceeded Sound Level (L_{XX})

L_{XX} represents the sound level exceeded for a given percentage of a specified period. For example, L_{10} is the sound level exceeded 10 percent of the time, and L_{90} is the sound level exceeded 90 percent of the time.

Maximum Sound Level (Lmax)

Lmax is the maximum sound level measured during a specified time period with "slow/1-second" time-averaging.

Day-Night Level (Ldn)
Ldn 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 PM and 7 AM

Community Noise Equivalent Level (CNEL)
Similar to Ldn, 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 the nighttime hours between 10 PM and 7 AM, and a 5-dB penalty applied to the A-weighted sound levels occurring during evening hours between 7 PM and 10 PM.

Table 1. Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet fly-over at 1,000 feet		
	100	
Gas lawn mower 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 lawn mower at 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 nighttime	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	
	0	

Source: California Department of Transportation, 2013.

C. Vibration Fundamentals

The way in which vibration is transmitted through the earth is called propagation. Propagation of earthborn vibrations is complicated and difficult to predict because of the endless variations in the soil through which waves travel. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Raleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. Compression waves, or P-waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. Shear waves, or S-waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or "side-to-side and perpendicular to the direction of propagation".

As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous peak of the vibration signal in inches per second. The RMS of a signal is the average of the squared amplitude of the signal in vibration decibels (VdB), ref one micro-inch per second. The Federal Railroad Administration uses the abbreviation "VdB" for vibration decibels to reduce the potential for confusion with sound decibel.

PPV is appropriate for evaluating the potential of building damage and VdB is commonly used to evaluate human response. Decibel notation acts to compress the range of numbers required in measuring vibration. Similar to the noise descriptors, L_{eq} and L_{max} can be used to describe the average vibration and the maximum vibration level observed during a single vibration measurement interval.

III. Existing Noise Environment

A. Existing Land Uses and Sensitive Receptors

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple family residential, including transient lodging, motels and hotel uses make up the majority of these areas. Sensitive receptors that may be affected by project generated noise include the single-family residential dwelling units located east of the project site and multiple family residential units located north of the project site.

B. Ambient Noise Measurements

An American National Standards Institute (ANSI Section SI4 1979, Type 1) Larson Davis model LxT sound level meter was used to document existing ambient noise levels at six locations in the project vicinity (see Figure 4).

As shown in Table 2, existing noise levels in the project vicinity range between 61.5 and 70.0 dBA L_{eq}. As shown in Table 3, measured noise levels on the project site ranged between 54.3 and 70.0 dBA L_{eq} and the 24-hour weighted Community Noise Equivalent Level (CNEL) measured on the project site was 68.9 dBA CNEL. Noise measurement field sheets and data are provided in Appendix A.

Table 2. Short-Term Noise Measurement Results

Name	Time Period	Existing Ambient Noise Levels (dBA)					
		L_{eq}	L_{max}	L_2	L_8	L_{25}	L_{50}
NM1	12:25 - 12:40 PM	70.0	89.3	76.5	72.3	68.3	65.1
NM2	12:53 - 1:08 PM	64.8	72.9	70.7	68.6	65.4	63.3
NM3	1:18 – 1:33 PM	64.6	80.5	71	68.5	65.2	61.6
NM4	1:42 – 1:57 PM	61.5	68.9	65.2	63.5	62.2	61.0

Notes:
Noise Measurements performed on May 22, 2023.
Short Term Noise Measurement Location is shown on Figure 4.

Table 3. Long-Term Noise Measurement Summary (dBA)

Hour	L_{eq}	L_{max}	$L_{(2)}$	$L_{(8)}$	$L_{(25)}$	$L_{(50)}$	$L_{(90)}$
00:00:00	56.9	74.4	64.8	60.9	56.8	53.4	47.6
01:00:00	56.2	74.9	64.0	60.1	55.7	52.1	44.5
02:00:00	54.8	71.0	63.1	59.3	54.4	50.5	39.8
03:00:00	54.3	68.8	61.7	58.6	54.5	51.2	42.7
04:00:00	57.3	70.4	63.8	61.3	58.2	55.1	49.7
05:00:00	61.8	82.5	67.5	64.5	61.9	59.9	56.4
06:00:00	64.2	82.1	69.8	67.1	64.7	62.9	59.6
07:00:00	65.4	81.9	70.0	68.0	66.0	64.4	61.5
08:00:00	65.4	76.3	69.9	68.0	66.1	64.5	61.9
09:00:00	65.4	81.4	70.3	68.1	66.1	64.4	61.4
10:00:00	64.9	76.5	69.7	67.7	65.7	64.0	61.1
11:00:00	66.0	79.0	70.7	68.7	66.9	65.1	61.8
12:00:00	66.5	83.5	71.6	69.0	66.9	65.1	61.8
13:00:00	66.2	76.4	71.2	69.0	67.1	65.1	62.2
14:00:00	66.9	82.1	72.0	69.3	67.4	65.8	62.8
15:00:00	66.6	84.8	71.9	69.0	67.0	64.9	61.2
16:00:00	66.6	87.6	71.8	69.3	67.0	64.8	60.8
17:00:00	67.0	85.5	72.3	69.5	67.3	65.2	62.3
18:00:00	67.2	93.4	71.0	68.0	65.6	63.8	60.6
19:00:00	70.0	96.4	74.1	68.7	66.2	64.0	60.5
20:00:00	63.5	81.7	68.8	66.7	64.0	61.9	58.5
21:00:00	66.0	94.6	68.9	65.8	63.1	60.7	57.1
22:00:00	61.2	73.8	67.8	64.8	61.7	59.2	54.8
23:00:00	59.7	83.5	65.3	62.5	59.4	56.5	51.3
Calculated Existing CNEL – 68.9							

Notes:
Noise Measurements performed between May 18 19, 2023.
Long Term Noise Measurement Location is shown on Figure 4.

Figure 4

Noise Measurement Locations

LTNM/STNM = Long Term Noise Measurement/Short Term Noise Measurement

IV. Regulatory Setting

The proposed project may impact sensitive receptors located within the jurisdiction of the City of El Cajon (single family residences located east of the project site) as well as sensitive receptors located within the County of San Diego (multiple family residences located north of the project site).

A. City of El Cajon General Plan

The following policies from the City's General Plan Noise Element are applicable to the proposed project.

General Plan Policy 8-3.1
The City shall develop an updated noise contour map using the 65 decibel, day-night average contour as the maximum acceptable standard.

General Plan Policy 8-3.2
Noise-attenuating measures such as special building insulation, increases setbacks, walls, landscaping, etc., shall be required whenever any residential noise-sensitive land uses are proposed in the noise impact area of a major transportation facility as indicated on the noise contour map on file in the office of the Department of Community Development.

General Plan Policy 8-3.5
The City shall require that notice be given to all prospective purchasers of new dwelling units constructed in noise impact areas.

B. City of El Cajon Municipal Code

1. Construction Noise

Per section 17.115130(C)(3) of the City of El Cajon Municipal Ordinance it is unlawful for any person within any residential zone, or within a radius of five hundred (500) feet from any residential zone, to operate equipment or perform any outside construction, maintenance or repair work on buildings, structures, landscapes or related facilities, or to operate any pile driver, power shovel, pneumatic hammer, power hoist, leaf blower, mower, or any other mechanical device, between the hours of 7 p.m. of one (1) day and 7 a.m. of the next day in such a manner that a reasonable person of normal sensitivities residing in the area is caused discomfort or annoyance.

The ordinance above does not specify a noise level limit at which a reasonable person of normal sensitivities would experience discomfort or annoyance. For purposes of this analysis, the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (2006) criteria will be used to establish significance thresholds. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} averaged over an 8-hour period (L_{eq} (8-hr); and the nighttime noise threshold is 70 dBA L_{eq} (8-hr). For commercial uses, the daytime and nighttime noise threshold is 85 dBA L_{eq} (8-hr). In compliance with the City's Code discussed in the previous

paragraph, it is assumed that construction would not occur during the noise-sensitive nighttime hours.

2. Groundborne Vibration

The City of El Cajon Municipal Ordinance Section 17.115.130(D), Performance Standards prohibits operations that could generate groundborne vibration that is harmful or injurious to the use or development of surrounding properties. Specifically, No vibration shall be permitted which is perceptible without instruments at any use along the property line on which such use is located. For the purpose of this determination, the boundary is the property line. This standard is prohibitive because use of several commonly used pieces of construction equipment may be perceptible if used within 75 feet of a property line. It is our professional opinion that this ordinance applies to operational vibration sources, i.e., generators, heating and ventilation (HVAC) equipment and pumps.

Caltrans has prepared one of the most comprehensive manuals (Caltrans 2020) regarding the analysis of groundborne vibration in light of construction equipment. It contains reasonable standards for both the potential to be annoying and the potential to result in structural damage. As shown in Table 4, vibration is considered to be distinctly perceptible at a PPV of 0.04 in/second and strongly perceptible at 0.10 peak particle velocity (PPV). Table 5 shows that the threshold at which there is a risk to "architectural" damage to historic and some older buildings is a peak particle velocity (PPV) of 0.25 in/sec, at older residential structures a PPV of 0.3 in/sec, and at new residential structures and modern commercial/industrial buildings a PPV of 0.5 in/sec.

Therefore, impacts would be significant if construction activities result in groundborne vibration of 0.3 PPV or higher at residential structures and/or a PPV of 0.5 or higher at commercial structures. Annoyance is temporary in nature and is not considered significant unless it is strongly perceptible and disturbs sleep or the use of sensitive equipment (approximately 0.1 PPV).

Table 4. Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: California Department of Transportation. Transportation and Construction Vibration Guidance Manual, Chapter 7 Table 20, April 2020.

Notes:
(1) Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 5. Guideline Vibration Damage Potential Criteria

Structure Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation. Transportation and Construction Vibration Guidance Manual, Chapter 7 Table 19, April 2020.

Notes:
(1) Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

V. Analytical Methodology and Impact Analysis

A. Methodology

1. FTA Construction Noise Calculations

Noise levels at nearby sensitive receptors due to project construction noise were calculated utilizing methodology presented in the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (2018) together with key construction parameters including: distance to each sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the project site. Distances to receptors were based on the acoustical center of the proposed construction activity. Construction noise levels were calculated for each phase.

2. SoundPLAN

The SoundPLAN acoustical modeling software was utilized to model future traffic noise levels associated with Interstate 8 and E Main Street at the project site. The SoundPLAN software utilizes algorithms (based on the inverse square law) to calculate noise level projections. The software allows the user to input specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations. In addition to the information provided below, noise modeling input and outputs assumptions are provided in Appendix B.

Vehicle volumes and truck mix provided on the Caltrans website were utilized to model Interstate 8 and data provided by the City of El Cajon was utilized to model future traffic noise associated with E Main Street at the project site. Average daily trips, trip mix, and speed used for modeling purposes is shown in Table 6.

Table 6. Roadway Modeling Parameters

Roadway	Average Daily Trips	Speed	Vehicle Mix
Interstate 8	167,000[1]	65	97.1/1.6/1.3
E Main Street	21,900[2]	40	97/1/2

Notes:
[1] https://dot.ca.gov/programs/traffic-operations/census. Accessed August 3, 2023
[2] City of El Cajon Housing Element Rezone Program EIR. September 11, 2017.

3. Caltrans Transportation and Construction Vibration Guidance Manual

Groundborne vibration associated with project construction, at nearby sensitive receptors was modeled using methodologies and source amplitudes provided in the Caltrans Transportation and Construction Vibration Guidance Manual (2020).

VI. Impact Analysis and Findings

1. Construction Noise

Project construction may result in short-term noise impacts associated with construction activities. They extent of the impact will vary depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of the construction work. Construction phases will include site preparation, building construction, paving, and architectural coating.

Noise levels at nearby sensitive receptors due to project construction noise were calculated utilizing methodology presented in the FTA Transit Noise and Vibration Impact Assessment Manual (2018) together with several key construction parameters (see Appendix C). Typical noise levels and usage factors associated with a variety of construction is presented in Table 6.

As discussed previously, the City of El Cajon has not established a numerical noise level limit that is representative of when "a reasonable person of normal sensitivities would experience discomfort or annoyance". Therefore, for purposes of this analysis, the FTA criteria was used. For impacts to residential land uses, the daytime noise threshold is 80 dBA L_{eq} averaged over an 8-hour period (L_{eq} (8-hr); and the nighttime noise threshold is 70 dBA L_{eq} (8-hr).

The grading and site preparation phase typically generates the highest sustained noise levels. A likely worst-case scenario for construction of the proposed project would be the use of a dozer and an excavator operating on-site simultaneously. This scenario was modeled by placing both pieces of equipment in the acoustic center of the project site because the equipment would be moving around the project site during the modeled noise period. A usage factor of 40 percent was assumed for each piece of equipment. Unmitigated noise levels from the acoustic center of the site to the property line of the nearest sensitive receptor (multiple family residential land use to the east) is 55 feet. Construction noise levels may reach up to 79.4 dBA L_{eq} at this property line for a limited time. They are not, however, expected to exceed the FTA construction noise criteria discussed above (80 dBA L_{eq} (8-hr). Construction noise impacts would be less than significant. No mitigation is required.

Table 7. Equipment Noise Emissions and Acoustical Usage Factor

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec. Lmax @ 50ft (dBA, slow)	Actual Measured Lmax @ 50ft (dBA, slow)	No. of Actual Data Samples (Count)
Backhoe	No	40	80	78	372
Blasting	Yes	-N/A-	94	-N/A-	0
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	-N/A-	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Forklift[2,3]	No	50	n/a	61	n/a
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Jackhammer	Yes	20	85	89	133
Paver	No	50	85	77	9
Pickup Truck	No	50	85	77	9
Paving Equipment	No	50	85	77	9
Pneumatic Tools	No	50	85	85	90
Pumps	No	50	77	81	17
Roller	No	20	85	80	16
Scraper	No	40	85	84	12
Soil Mix Drill Rig	No	50	80	-N/A-	0
Tractor	No	40	84	-N/A-	0
Vacuum Street Sweeper	No	10	80	82	19
Ventilation Fan	No	100	85	79	13
Warning Horn	No	5	85	83	12
Welder/Torch	No	40	73	74	5

Notes:

(1) Source: FHWA Roadway Construction Noise Model User's Guide January 2006.

(2) Warehouse & Forklift Noise Exposure - NoiseTesting.info Carl Stautins, November 4, 2014 http://www.noisetesting.info/blog/carl-strautins/page-3/

(3) Data provided Leq as measured at the operator. Sound Level at 50 feet is calculated using Inverse Square Law.

2. Groundborne Vibration

There are several types of construction equipment that can cause vibration levels high enough to result in architectural or structural damage to structures. For example, as shown in Table 8, a vibratory roller could generate up to 0.21 PPV at a distance of 25 feet; and operation of a large bulldozer (0.089 PPV) at a distance of 25 feet (two of the most vibratory pieces of construction equipment). Groundborne vibration at sensitive receptors associated with this equipment would drop off as the equipment moves away. For example, as the vibratory roller moves further than 100 feet from the sensitive receptors, the vibration associated with it would drop below 0.0026 PPV. It should be noted that these vibration levels are reference levels and may vary slightly depending upon soil type and specific usage of each piece of equipment.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

$$PPV_{equipment} = PPV_{ref} (25/D_{rec})^n$$

Where: PPV_{ref} = *reference PPV at 25ft.*
D_{rec} = *distance from equipment to receiver in ft.*
n = 1.5 (*the value related to the attenuation rate through ground*)

Table 8. Construction Equipment Vibration Source Levels

Equipment		PPV at 25 ft, in/sec	Approximate Lv* at 25 ft
Pile Driver (impact)	upper range	1.518	112
	typical	0.644	104
Pile Driver (sonic)	upper range	0.734	105
	typical	0.170	93
clam shovel drop (slurry wall)		0.202	94
Hydromill (slurry wall)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Loaded Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Source: Federal Transit Administration: Transit Noise and Vibration Impact Assessment Manual, 2018.
*RMS velocity in decibels, VdB re 1 micro-in/sec

The most vibratory pieces of equipment expected to be utilized on the project site include a vibratory roller and a larger bulldozer. Groundborne vibration levels associated with the use of a vibratory roller could reach up to 0.02 PPV at a distance of 25 feet and a larger bulldozer could reach up to 0.089 PPV at a distance of 25 feet. The nearest structure is located approximately 40 feet from the project site property line. No impacts related to groundborne vibration would occur. No mitigation is necessary.

3. Roadway Noise Impacts to the Proposed Project

The project site is located adjacent to E Main Street and approximately 160 feet south of Interstate 8. Interstate is approximately 24-feet higher in elevation than the project site. As discussed previously the SoundPLAN noise model was used to model future traffic noise levels at the project site due to vehicle traffic noise associated with Interstate 8 and E Main Street. As shown on Figures 5 and 6, future traffic noise levels at the proposed multiple family residential building are expected to reach up to 73 dBA CNEL. This noise level exceeds the City's exterior noise criteria of 65 dBA CNEL. However, no outdoor uses are proposed and interior noise levels will be reduced with the use of upgraded windows and sliding glass doors and by limiting vents and other necessary openings on the building roof. Where placing vents and other openings on the building roof is unavoidable, the associated piping will have a 90-degree bend and shall be placed in such a manner that the openings are facing the south or southeast. Impacts will be less than significant with the implementation of mitigation.

Mitigation Measures

a. All windows and sliding glass doors facing northwest or northeast shall have an STC rating of at least 31.

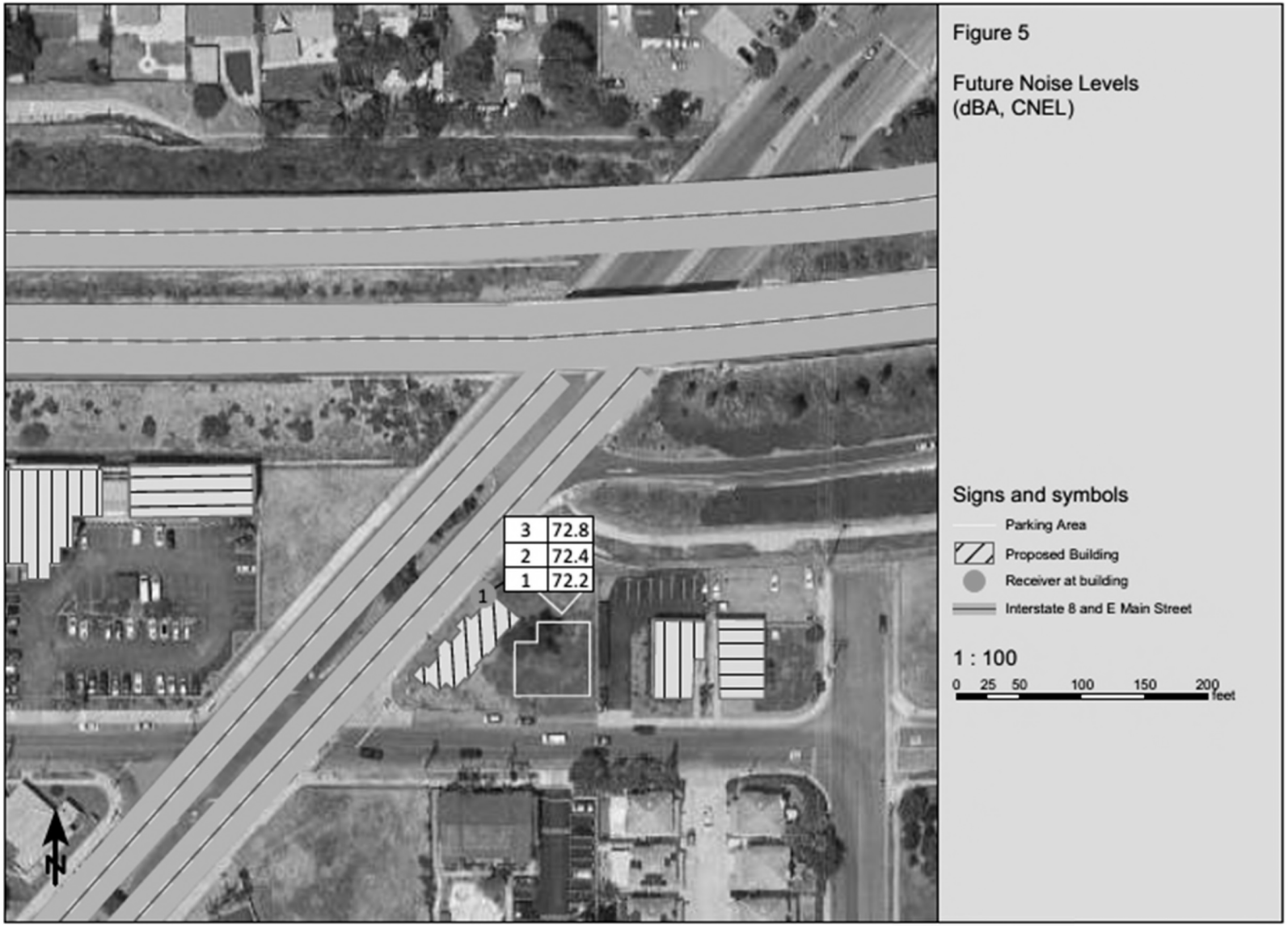
b. Where placing vents and other openings on the building roof is unavoidable, the associated piping will have a 90-degree bend and shall be placed in such a manner that the openings are facing the south or southeast. Alternatively, intake and discharge silencers, duct silencers and acoustic louvers can be used where appropriate.

4. Airport/Aircraft Noise

The project site is located approximately 2.4 miles southeast of Gillespie Field and is not located within any airport noise contours. The proposed project would not be significantly impacted by airports or aircraft overflight. No mitigation is required.

Figure 5

Operational Noise Levels
dBA, CNEL



N

Figure 6

Operational Noise Contours
dBA, CNEL

V. References

Airport Land Use Commission San Diego County
2010 Gillespie Field Airport Land Use Compatibility Plan

California Department of Transportation
2013 Technical Noise Supplement to the Traffic Noise Analysis Protocol
2020 Transportation and Construction Vibration Guidance Manual

Cyril M. Harris
1991 Handbook of Acoustical Measurement and Noise Control.

El Cajon, City of
2000 General Plan
Zoning Ordinance

APPENDIX A

Larson Davis 820 Noise Measurement Data

Noise Measurement Field Data

Project Name: 1472 East Main Street, El Cajon. **Date:** May 22, 2023

Project #:

Noise Measurement #: STNM1 **Technician:** Ian Gallagher

Nearest Address or Cross Street: 1460 East Main Street, El Cajon CA 92021

Site Description (Type of Existing Land Use and any other notable features): On-site: On sidewalk, E of parking lot to building 1460 E Main St.

I-8 Fwy overpass running E-W, 180' N & Oakdale Ave also running E-W, 100' S of STNM1. the areais a mix of urban residences & businesses.

Weather: Overcast, heavily filtered sunshine. Sunset 7:45 PM. **Settings:** SLOW FAST

Temperature: 65 deg F **Wind:** 7 mph **Humidity:** 74% **Terrain:** Flat

Start Time: 12:25 PM **End Time:** 12:40 PM **Run Time:** 1 x 15 minutes

Leq: 70 dB **Primary Noise Source:** Traffic noise from the 352 vehicles passing microphone

Lmax 89.3 dB

L2 76.5 dB **Secondary Noise Sources:** Bird song, breeze rustling vegetation & leaves, traffic noise from Oakdale Avenue

L8 72.3 dB & 8 Fwy overpass. Overhead airtraffic, choppers & fixed wing aircrsft.

L25 68.3 dB

L50 65.1 dB

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CAL250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	Cal 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	5/22/2023		

Roma Environmental

Noise Measurement Field Data

PHOTOS:

ng lot to building

les passing micro

STNM1 looking WNW from sidewalk across asphalt parking lot to building 1460 E Main St

STNM1 looking SE down E Main Street towards Oakgale Avenue intersection (120').

Measurement Report

Report Summary

Meter's File Name	LxT_Data.273.s	Computer's File Name	LxT_0003099-20230522 122507-LxT_Data.273.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM1 32°48'8.69"N 116°55'42.30"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Roma Environmental 1472 E Main St, El Cajon		
Start Time	2023-05-22 12:25:07	Duration	0:15:00.0
End Time	2023-05-22 12:40:07	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	70.0 dB		
LAE	99.6 dB	SEA	--- dB
EA	1.0 mPa²h	LAFTM5	75.4 dB
EA8	32.3 mPa²h		
EA40	161.7 mPa²h		
LA_{peak}	108.1 dB	2023-05-22 12:30:43	
LAS_{max}	89.3 dB	2023-05-22 12:30:43	
LAS_{min}	56.3 dB	2023-05-22 12:36:37	
LA_{eq}	70.0 dB		
LC_{eq}	77.4 dB	LC_{eq} - LA_{eq}	7.4 dB
LAI_{eq}	72.2 dB	LAI_{eq} - LA_{eq}	2.2 dB

Exceedances	Count	Duration
LAS > 65.0 dB	26	0:09:14.4
LAS > 85.0 dB	2	0:00:07.2
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB

	LDEN	LDay	LEve	LNight
	--- dB	--- dB	--- dB	--- dB

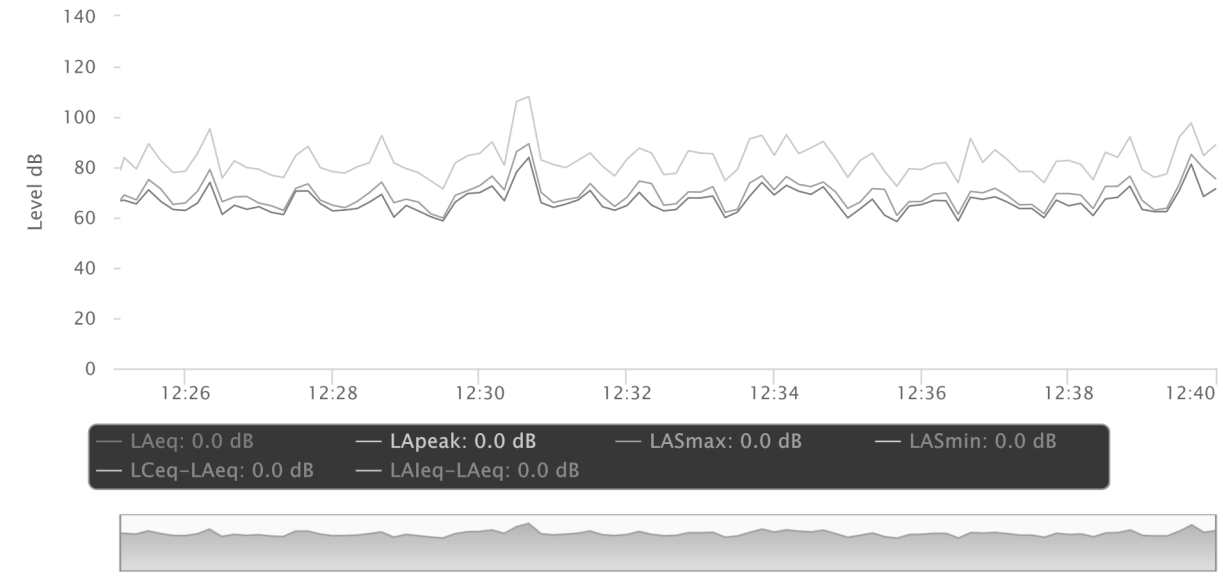
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	70.0 dB		77.4 dB		--- dB	
$L_{S(max)}$	89.3 dB	2023-05-22 12:30:43	--- dB		--- dB	
$L_{S(min)}$	56.3 dB	2023-05-22 12:36:37	--- dB		--- dB	
$L_{Peak(max)}$	108.1 dB	2023-05-22 12:30:43	--- dB		--- dB	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

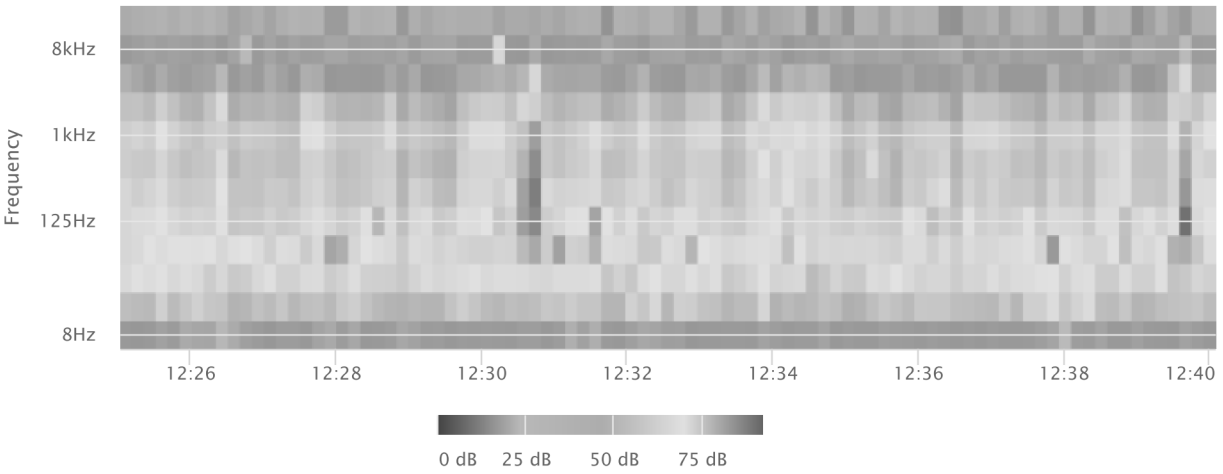
Statistics

LAS 2.0	76.5 dB
LAS 8.0	72.3 dB
LAS 25.0	68.3 dB
LAS 50.0	65.1 dB
LAS 66.6	63.3 dB
LAS 90.0	60.1 dB

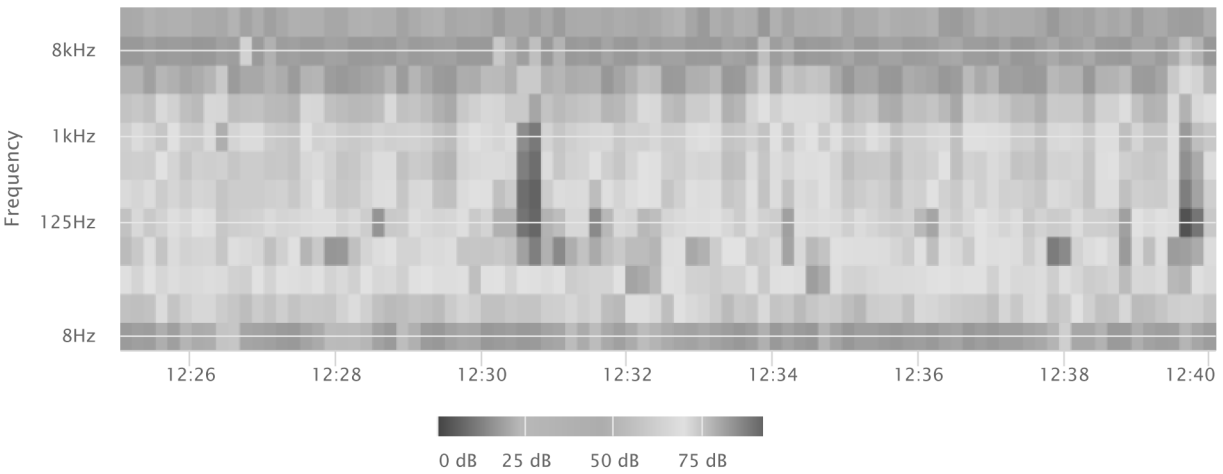
Time History



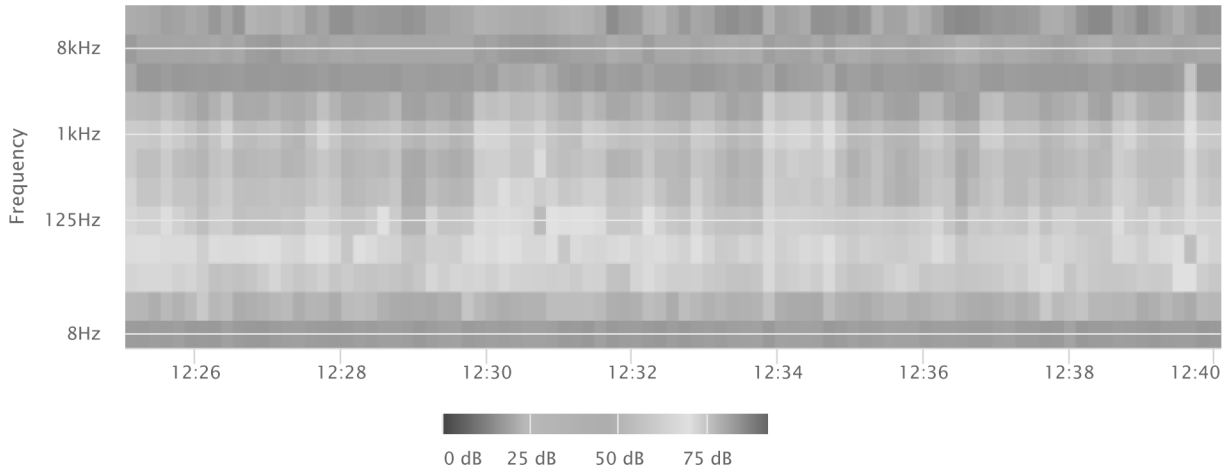
OBA 1/1 Leq



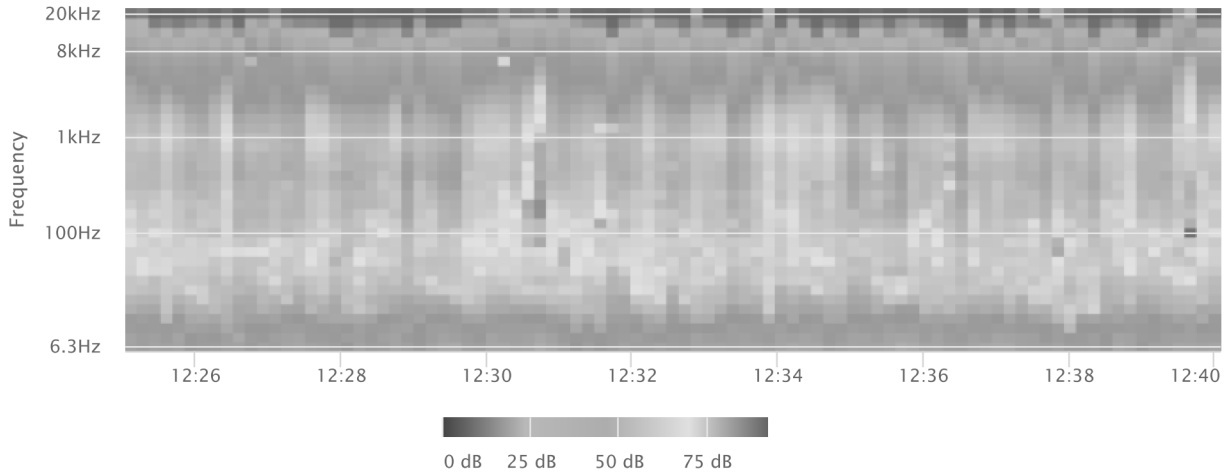
OBA 1/1 Lmax



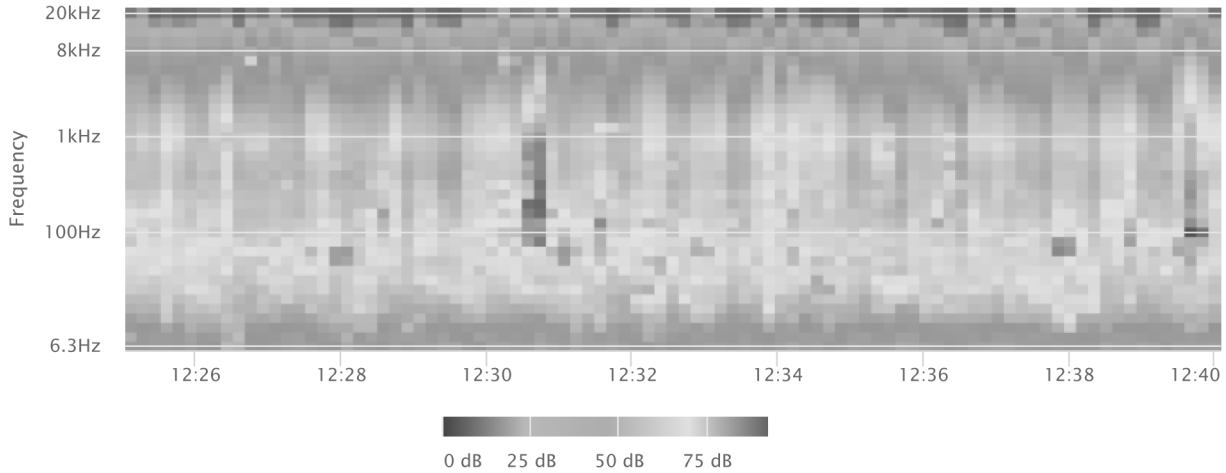
OBA 1/1 Lmin



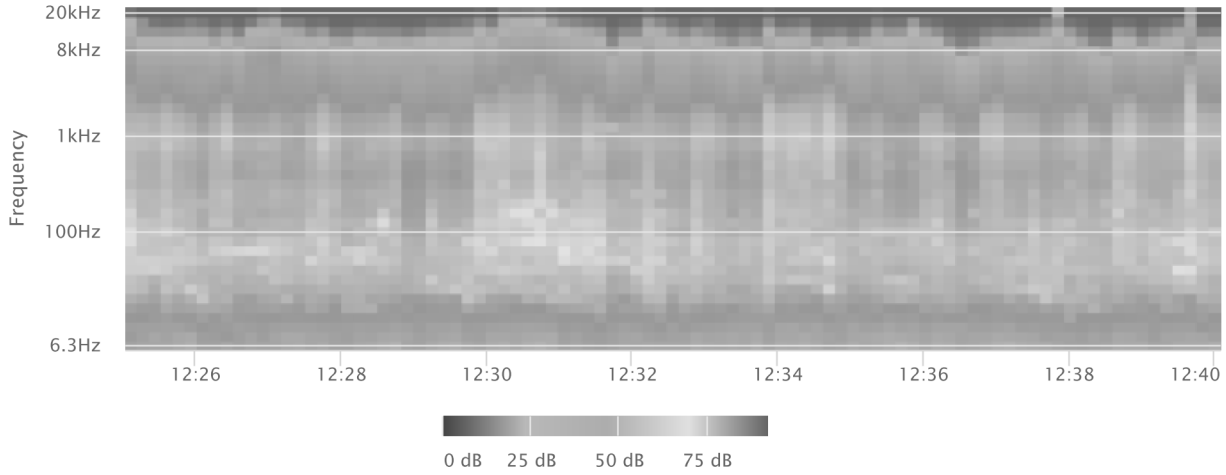
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
12:26
12:28
12:30
12:32
12:34
12:36
12:38
12:40
0 dB
25 dB
50 dB
75 dB

Noise Measurement Field Data

Project Name: 1472 East Main Street, El Cajon. **Date:** May 22, 2023

Project #:

Noise Measurement #: STNM2 **Technician:** Ian Gallagher

Nearest Address or Cross Street: 1475 Oakdale Avenue, El Cajon CA 92021

Site Description (Type of Existing Land Use and any other notable features): On-site:On sidewalk, N of multifamily residence 1475 Oakdale Ave.

I-8 Fwy overpass running E-W, 310' N & Oakdale Ave also running E-W, just N of STNM2. The area is an urban mix of residences & businesses.

Weather: Overcast, heavily filtered sunshine. Sunset 7:45 PM. **Settings:** SLOW FAST

Temperature: 65 deg F **Wind:** 7 mph **Humidity:** 74% **Terrain:** Flat

Start Time: 12:53 PM **End Time:** 1:08 PM **Run Time:** 1 x 15 minutes

Leq: 64.8 dB **Primary Noise Source:** Traffic noise from the 82 vehicles passing microphone traveling along Oakdale Ave.

Lmax 72.9 dB

L2 70.7 dB **Secondary Noise Sources:** Bird song, breeze rustling vegetation & leaves, traffic noise from E Main Street

L8 68.6 dB & 8 Fwy overpass. Overhead airtraffic, choppers & fixed wing aircrsft.

L25 65.4 dB

L50 63.3 dB

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CAL250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	Cal 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	5/22/2023		

Roma Environmental

Noise Measurement Field Data

PHOTOS:

STNM2 looking SW from sidewalk towards multifamily residence 1475 Oakdale Ave, El Cajon.

STNM2 looking W down Oakdale Avenue towards East Main Street intersection { 135'). Multifamily residence, building 1475 Oakdale Ave, El Cajon on the left.

Measurement Report

Report Summary

Meter's File Name	LxT_Data.274.s	Computer's File Name	LxT_0003099-20230522 125312-LxT_Data.274.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM2 32°48'7.34"N 116°55'40.61"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Roma Environmental 1472 E Main St, El Cajon		
Start Time	2023-05-22 12:53:12	Duration	0:15:00.0
End Time	2023-05-22 13:08:12	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	64.8 dB		
LAE	94.3 dB	SEA	--- dB
EA	300.5 µPa²h	LAFTM5	68.1 dB
EA8	9.6 mPa²h		
EA40	48.1 mPa²h		
LA_{peak}	90.4 dB	2023-05-22 12:55:31	
LAS_{max}	72.9 dB	2023-05-22 13:01:25	
LAS_{min}	57.4 dB	2023-05-22 12:53:40	
LA_{eq}	64.8 dB		
LC_{eq}	73.8 dB	LC_{eq} - LA_{eq}	9.0 dB
LAI_{eq}	65.9 dB	LAI_{eq} - LA_{eq}	1.1 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	31	0:06:34.3
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	64.8 dB		73.8 dB		--- dB	
$L_{S(max)}$	72.9 dB	2023-05-22 13:01:25	--- dB		--- dB	
$L_{S(min)}$	57.4 dB	2023-05-22 12:53:40	--- dB		--- dB	
$L_{Peak(max)}$	90.4 dB	2023-05-22 12:55:31	--- dB		--- dB	

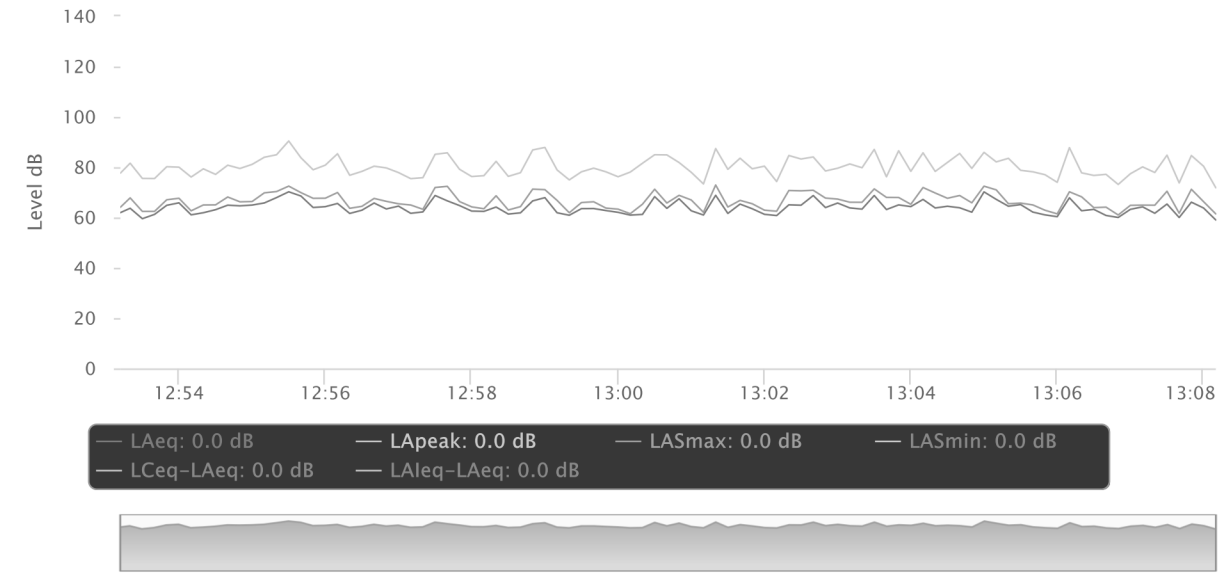
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

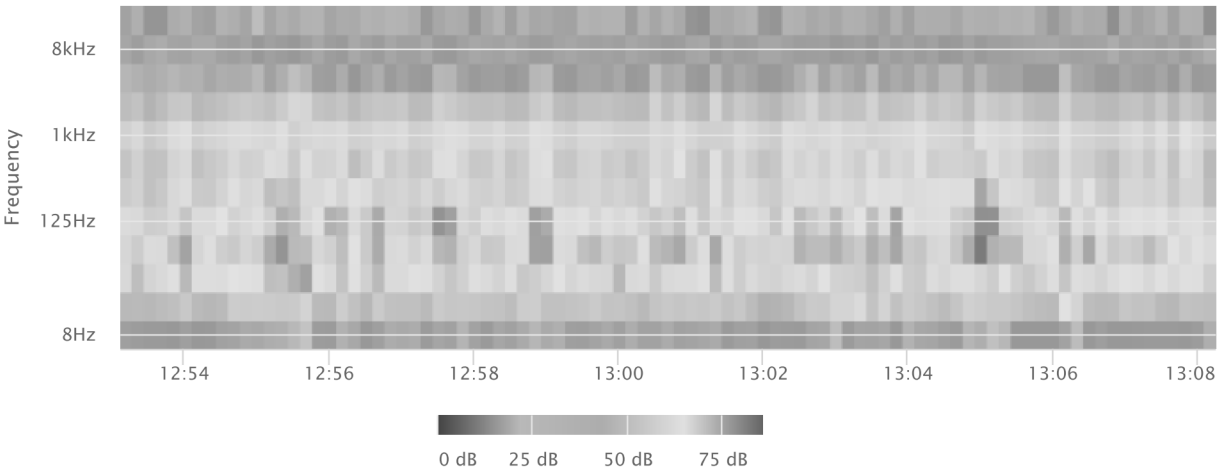
Statistics

LAS 2.0	70.7 dB
LAS 8.0	68.6 dB
LAS 25.0	65.4 dB
LAS 50.0	63.3 dB
LAS 66.6	62.0 dB
LAS 90.0	59.9 dB

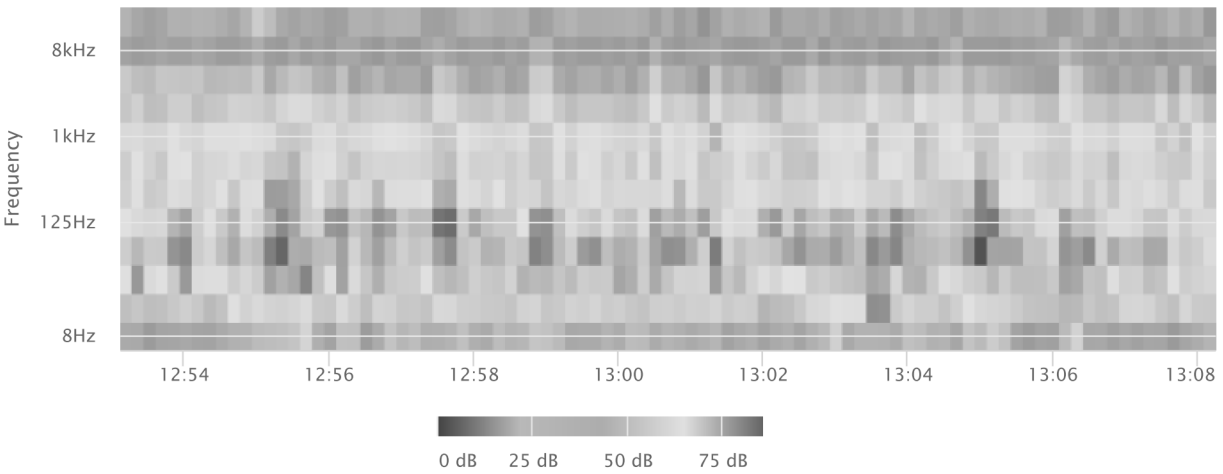
Time History



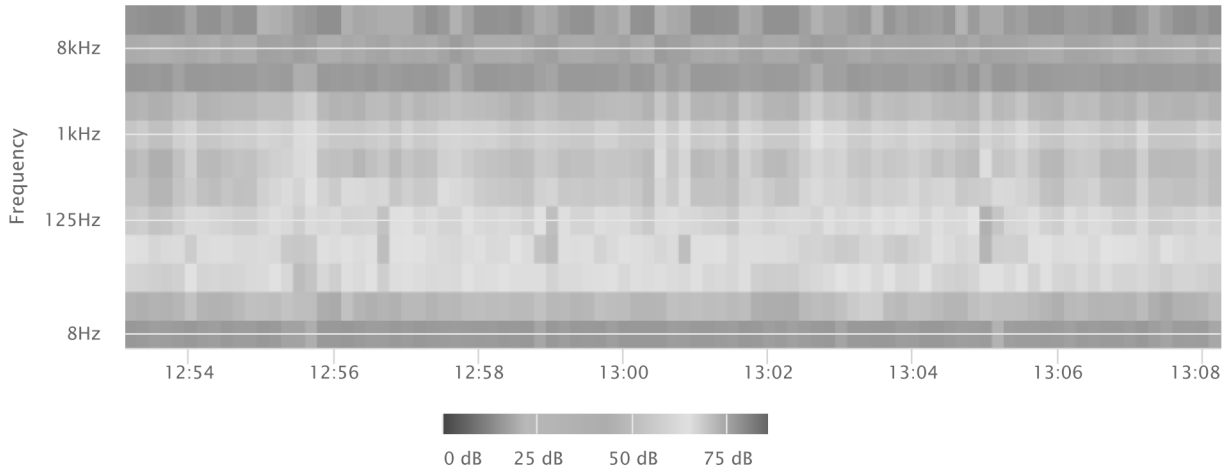
OBA 1/1 Leq



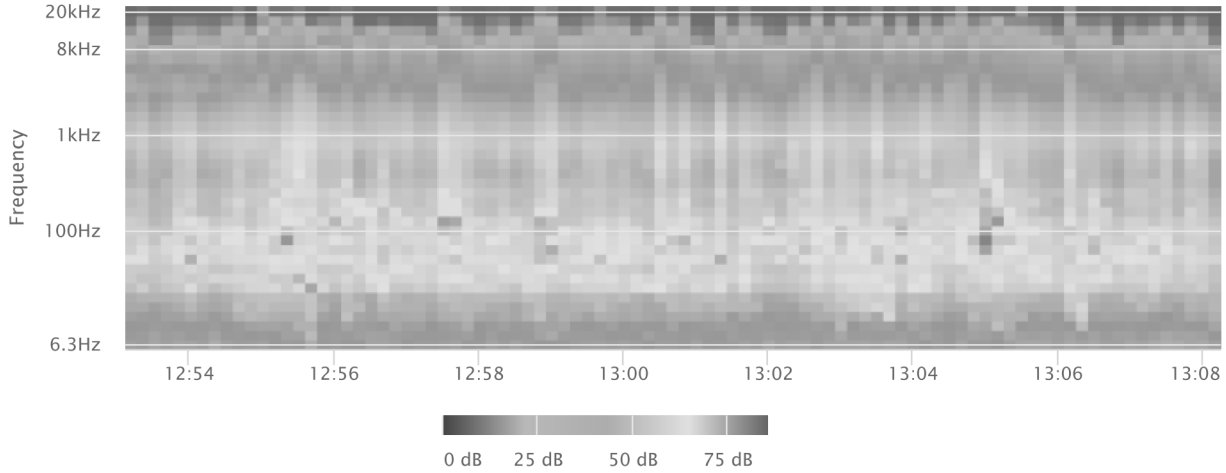
OBA 1/1 Lmax



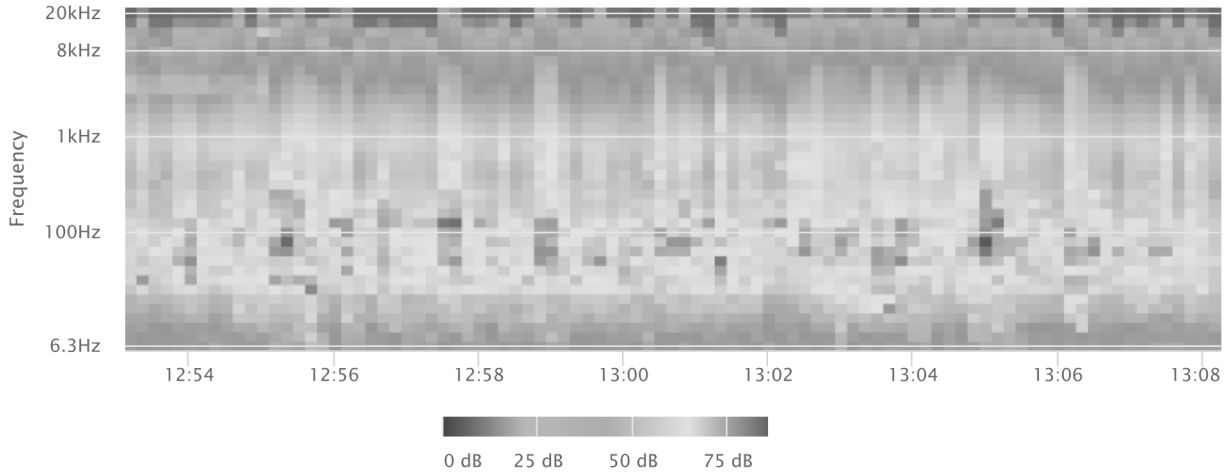
OBA 1/1 Lmin



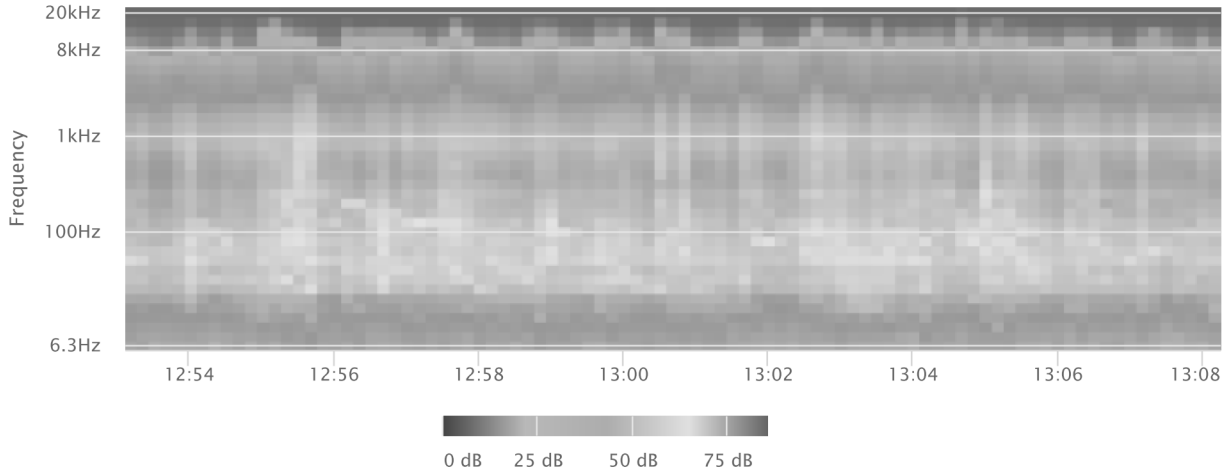
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
12:54
12:56
12:58
13:00
13:02
13:04
13:06
13:08

0 dB
25 dB
50 dB
75 dB

Noise Measurement Field Data

Project Name: 1472 East Main Street, El Cajon. **Date:** May 22, 2023

Project #:

Noise Measurement #: STNM3 **Technician:** Ian Gallagher

Nearest Address or Cross Street: 590 Granite Cove, El Cajon CA 92021

Site Description (Type of Existing Land Use and any other notable features): On-site:On Oakdale Ave sidewalk, NW of residence 590 Granite Cove.

I-8 Fwy overpass running E-W, 310' N & Oakdale Ave also running E-W, just N of STNM3. The area is an urban mix of residences & businesses.

Weather: Overcast, heavily filtered sunshine. Sunset 7:45 PM. **Settings:** SLOW FAST

Temperature: 65 deg F **Wind:** 7 mph **Humidity:** 74% **Terrain:** Flat

Start Time: 1:18 PM **End Time:** 1:33 PM **Run Time:** 1 x 15 minutes

Leq: 64.6 dB **Primary Noise Source:** Traffic noise from the 83 vehicles passing microphone travelling along Oakdale Ave.

Lmax 80.5 dB

L2 71.0 dB **Secondary Noise Sources:** Bird song, breeze rustling vegetation & leaves, traffic noise from E Main Street

L8 68.5 dB & 8 Fwy overpass. Overhead airtraffic, choppers & fixed wing aircrsft.

L25 65.2 dB

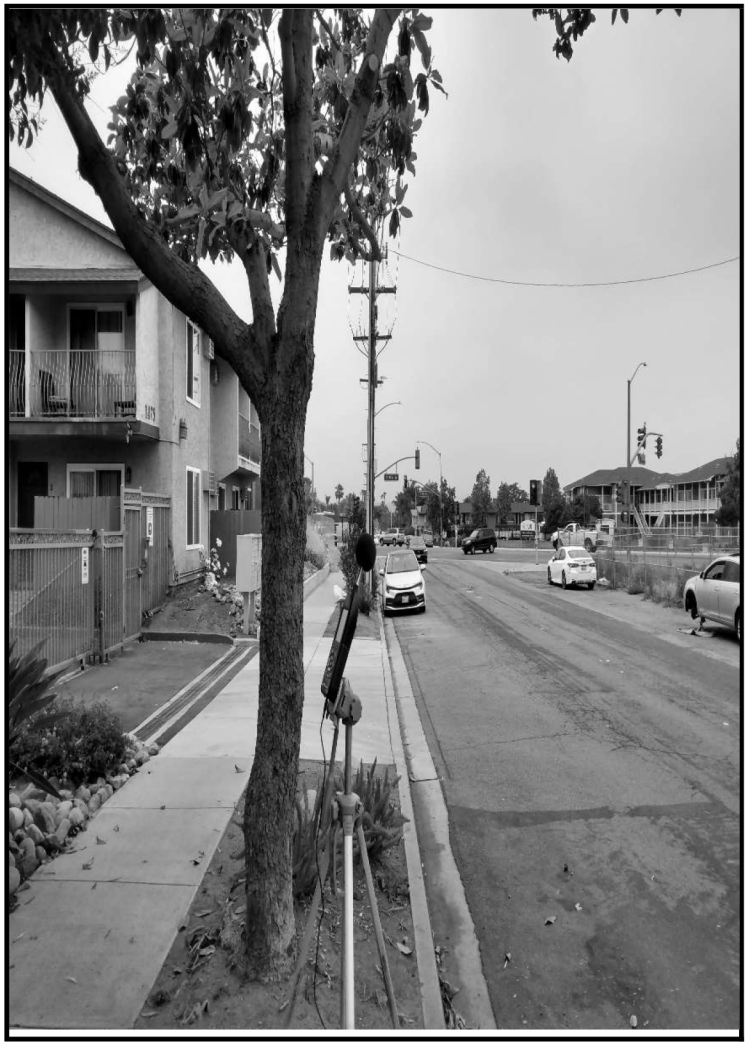
L50 61.6 dB

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CAL250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	Cal 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	5/22/2023		

Noise Measurement Field Data

PHOTOS:

STNM3 looking NW across Oakdale Avenue towards mulktifamily residence 1490 Oakdale Avenue, El Cajon.



STNM3 looking W down Oakdale Avenue towards East Main Street intersection { 230'). Multifamily residence, building 1475 Oakdale Ave, El Cajon on the left.

Measurement Report

Report Summary

Meter's File Name	LxT_Data.275.s	Computer's File Name	LxT_0003099-20230522 131807-LxT_Data.275.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM3 32°48'7.32"N 116°55'39.57"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Roma Environmental 1472 E Main St, El Cajon		
Start Time	2023-05-22 13:18:07	Duration	0:15:00.0
End Time	2023-05-22 13:33:07	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	64.6 dB		
LAE	94.1 dB	SEA	--- dB
EA	286.5 µPa²h	LAFTM5	68.9 dB
EA8	9.2 mPa²h		
EA40	45.8 mPa²h		
LA_{peak}	94.9 dB	2023-05-22 13:20:36	
LAS_{max}	80.5 dB	2023-05-22 13:20:36	
LAS_{min}	55.9 dB	2023-05-22 13:18:44	
LA_{eq}	64.6 dB		
LC_{eq}	75.0 dB	LC_{eq} - LA_{eq}	10.4 dB
LAI_{eq}	66.4 dB	LAI_{eq} - LA_{eq}	1.8 dB

Exceedances	Count	Duration
LAS > 65.0 dB	42	0:04:57.0
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB

	LDEN	LDay	LEve	LNight
	--- dB	--- dB	--- dB	--- dB

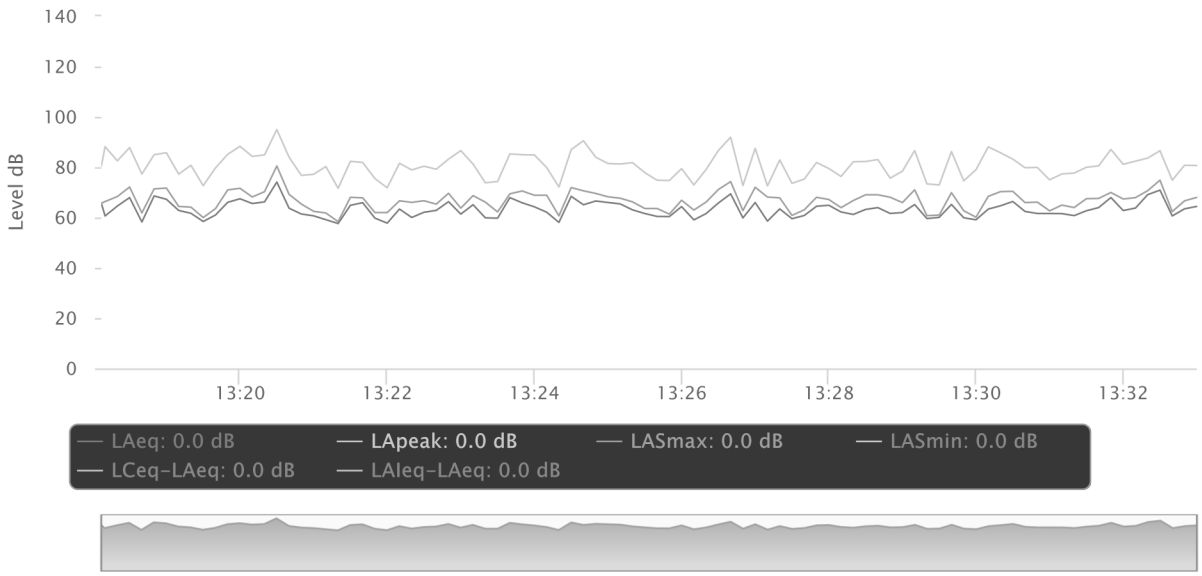
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	64.6 dB		75.0 dB		--- dB	
$L_{S(max)}$	80.5 dB	2023-05-22 13:20:36	--- dB		--- dB	
$L_{S(min)}$	55.9 dB	2023-05-22 13:18:44	--- dB		--- dB	
$L_{Peak(max)}$	94.9 dB	2023-05-22 13:20:36	--- dB		--- dB	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

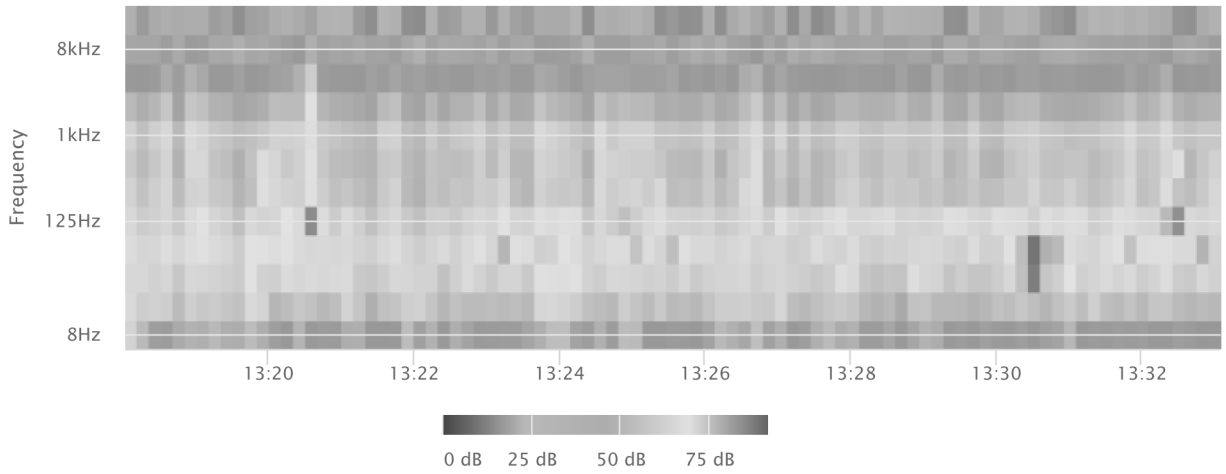
Statistics

LAS 2.0	71.0 dB
LAS 8.0	68.5 dB
LAS 25.0	65.2 dB
LAS 50.0	61.6 dB
LAS 66.6	60.2 dB
LAS 90.0	58.2 dB

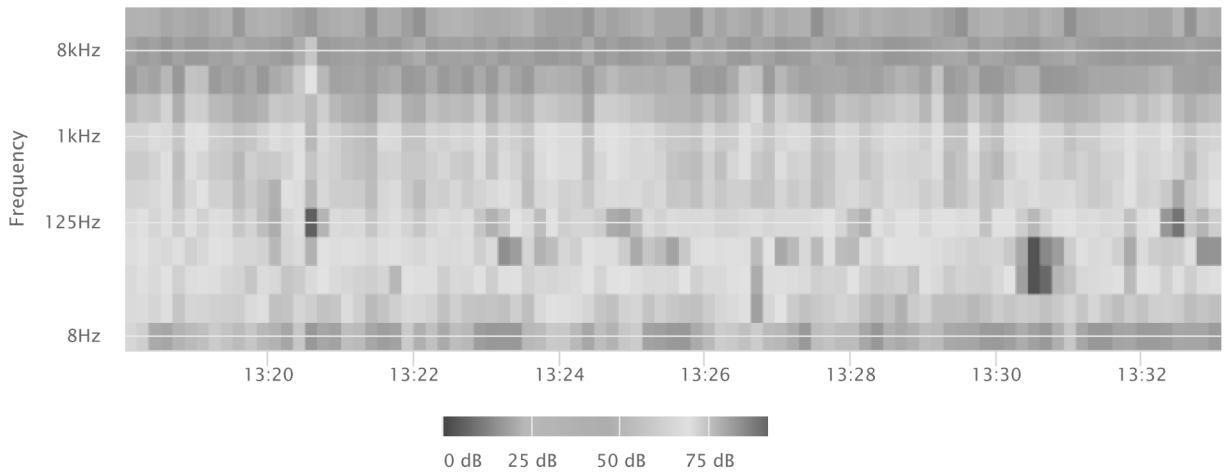
Time History



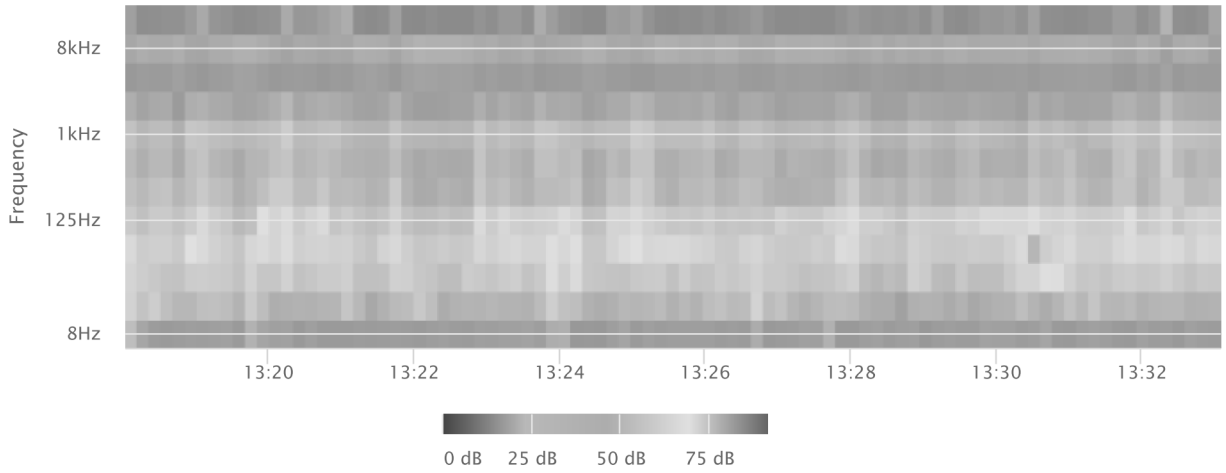
OBA 1/1 Leq



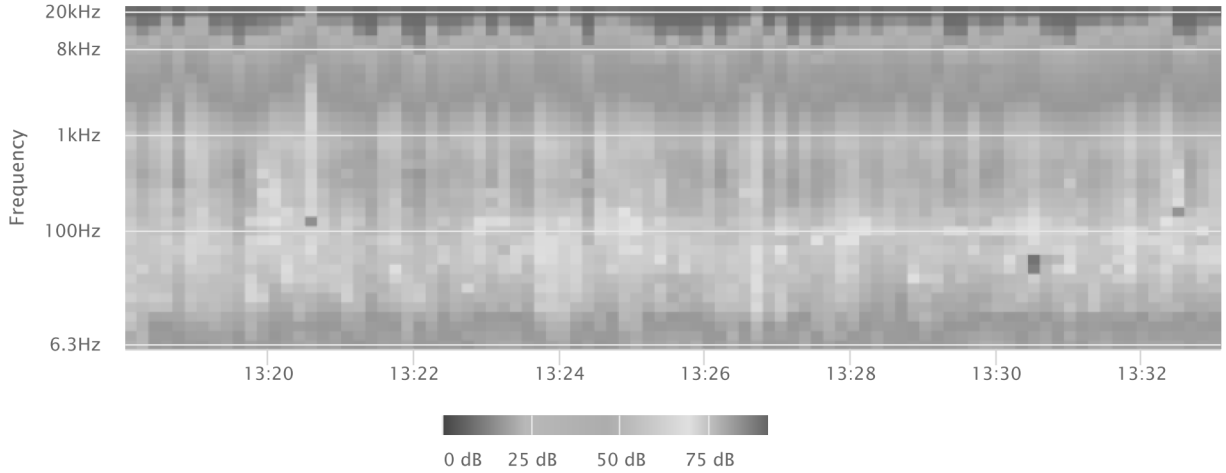
OBA 1/1 Lmax



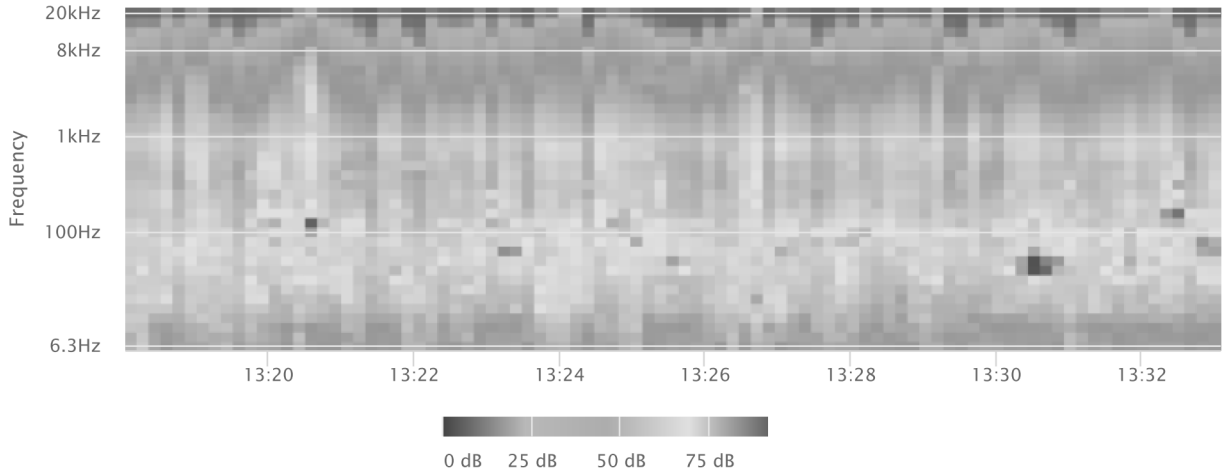
OBA 1/1 Lmin



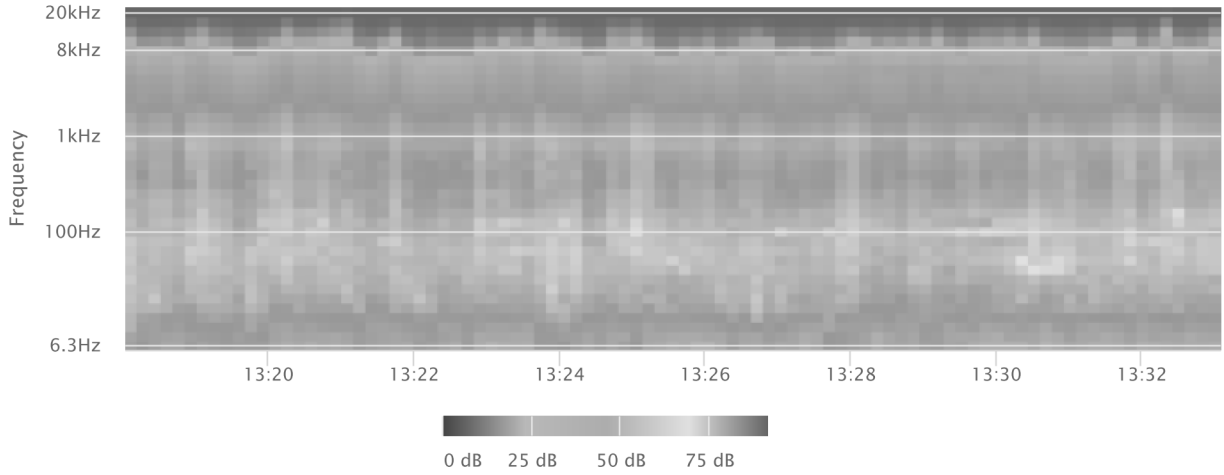
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
13:20
13:22
13:24
13:26
13:28
13:30
13:32
0 dB
25 dB
50 dB
75 dB

Noise Measurement Field Data

Project Name: 1472 East Main Street, El Cajon. **Date:** May 22, 2023

Project #:

Noise Measurement #: STNM4 **Technician:** Ian Gallagher

Nearest Address or Cross Street: 1490 Oakdale Ave, El Cajon CA 92021

Site Description (Type of Existing Land Use and any other notable features): Onsite:NW corner of parking lot to multifamily residence 1490 Oakdale Ave. Adj:

E Main St running SW-NE, 140' W, 8 Fwy overpass running E-W, 200' N & Oakdale Ave also running E-W, 85' S of STNM4. Area urban mix of residences & businesses.

Weather: Overcast, heavily filtered sunshine. Sunset 7:45 PM. **Settings:** SLOW FAST

Temperature: 65 deg F **Wind:** 7 mph **Humidity:** 74% **Terrain:** Flat

Start Time: 1:42 PM **End Time:** 1:57 PM **Run Time:** 1 x 15 minutes

Leq:	61.5	dB	**Primary Noise Source:** Traffic noise from vehicles travelling along Oakdale Ave, E Main St, 8 Freeway &
Lmax	68.9	dB	other roads during 15 minute measurement.
L2	65.2	dB	**Secondary Noise Sources:** Bird song, breeze rustling vegetation & leaves. Slight residential ambiance.
L8	63.5	dB	Overhead airtraffic, choppers & fixed wing aircrsft.
L25	62.2	dB	
L50	61.0	dB	

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CAL250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	Cal 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	5/22/2023		

Noise Measurement Field Data

PHOTOS:

STNM4 looking S along access road to residential parking lot towards Oakdale Avenue (85'). Mulyifamily residence 1490 Oakdale Avenue on the left.

STNM4 looking NNW over 5.5' high cinderblock wall and concrete drainage channel, towards 8 Freeway overpass, overpassing East Main Street (200').

Measurement Report

Report Summary

Meter's File Name	LxT_Data.276.s	Computer's File Name	LxT_0003099-20230522 134235-LxT_Data.276.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM4 32°48'8.54"N 116°55'39.39"W
Job Description	15 minute noise measurement (1 x 15 minutes)		
Note	Roma Environmental 1472 E Main St, El Cajon		
Start Time	2023-05-22 13:42:35	Duration	0:15:00.0
End Time	2023-05-22 13:57:35	Run Time	0:15:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	61.5 dB		
LAE	91.0 dB	SEA	--- dB
EA	140.1 µPa²h	LAFTM5	63.3 dB
EA8	4.5 mPa²h		
EA40	22.4 mPa²h		
LA_{peak}	90.9 dB	2023-05-22 13:44:05	
LAS_{max}	68.9 dB	2023-05-22 13:53:10	
LAS_{min}	54.8 dB	2023-05-22 13:48:28	
LA_{eq}	61.5 dB		
LC_{eq}	72.2 dB	LC_{eq} - LA_{eq}	10.7 dB
LAI_{eq}	62.2 dB	LAI_{eq} - LA_{eq}	0.7 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	6	0:00:56.2
LAS > 85.0 dB	0	0:00:00.0
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
--- dB	--- dB	0.0 dB

LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	61.5 dB		72.2 dB		--- dB	
$L_{S(max)}$	68.9 dB	2023-05-22 13:53:10	--- dB		--- dB	
$L_{S(min)}$	54.8 dB	2023-05-22 13:48:28	--- dB		--- dB	
$L_{Peak(max)}$	90.9 dB	2023-05-22 13:44:05	--- dB		--- dB	

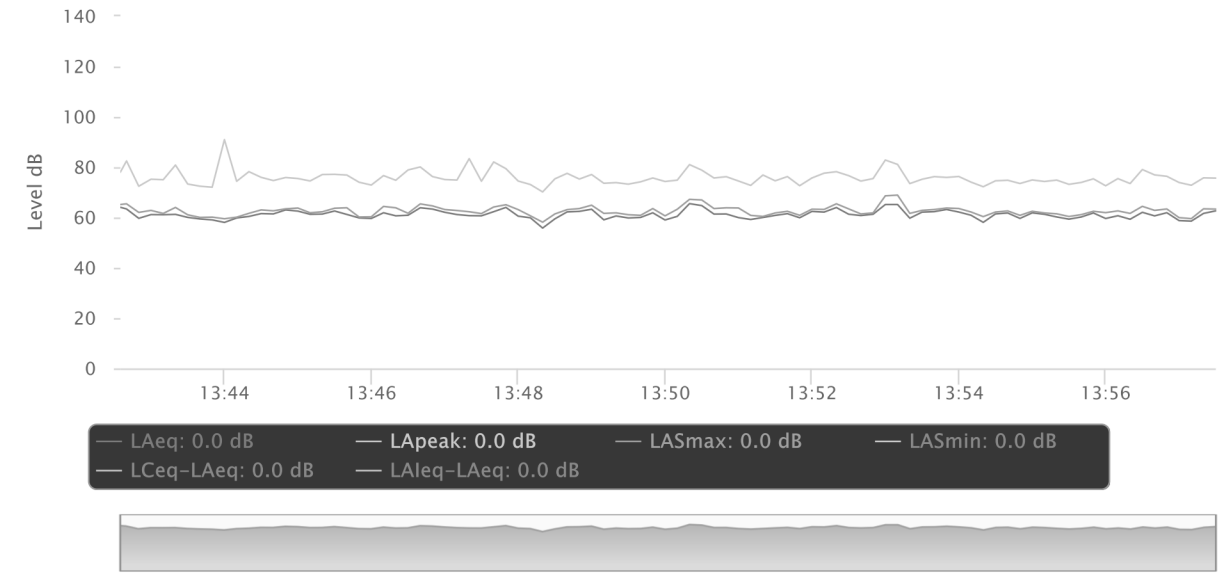
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

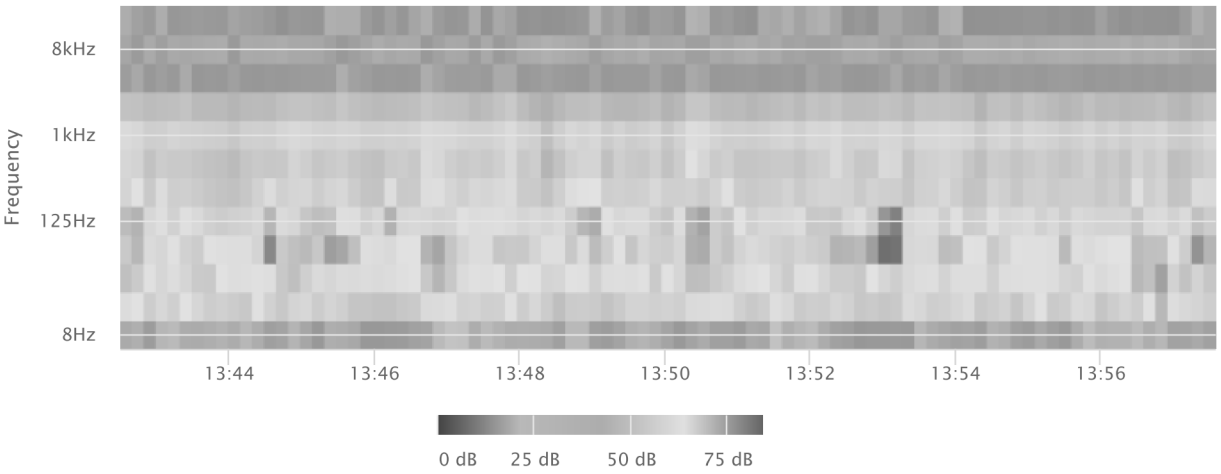
Statistics

LAS 2.0	65.2 dB
LAS 8.0	63.5 dB
LAS 25.0	62.2 dB
LAS 50.0	61.0 dB
LAS 66.6	60.2 dB
LAS 90.0	58.8 dB

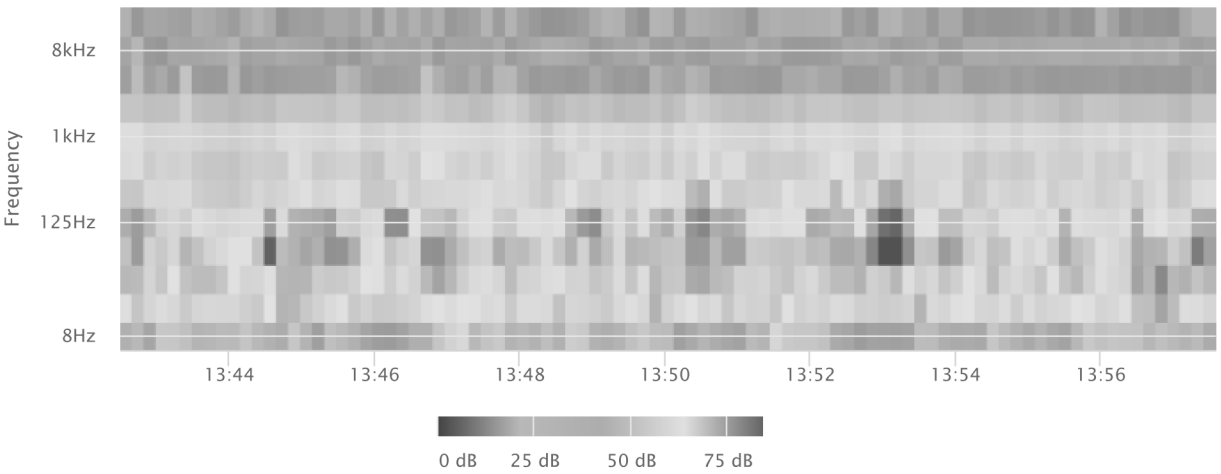
Time History



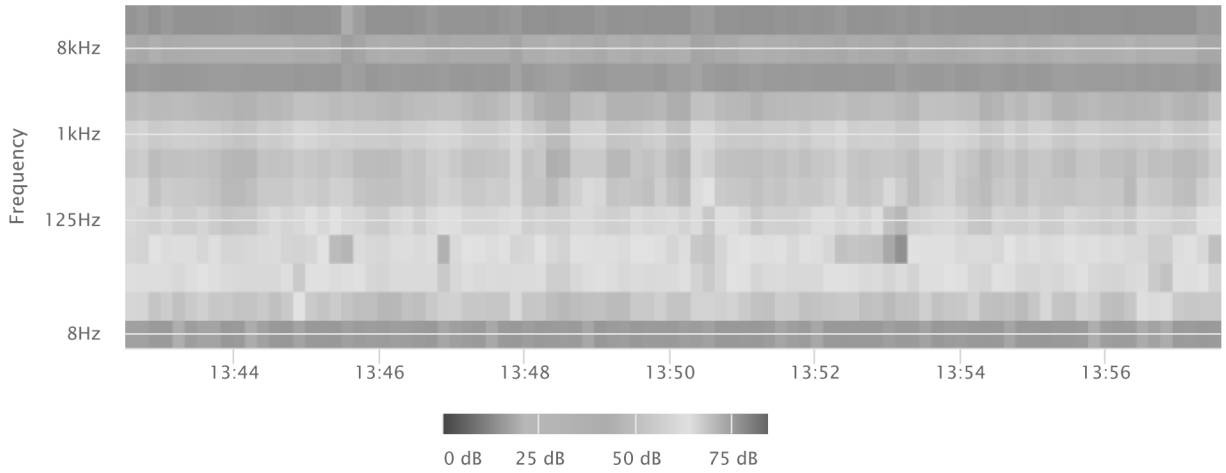
OBA 1/1 Leq



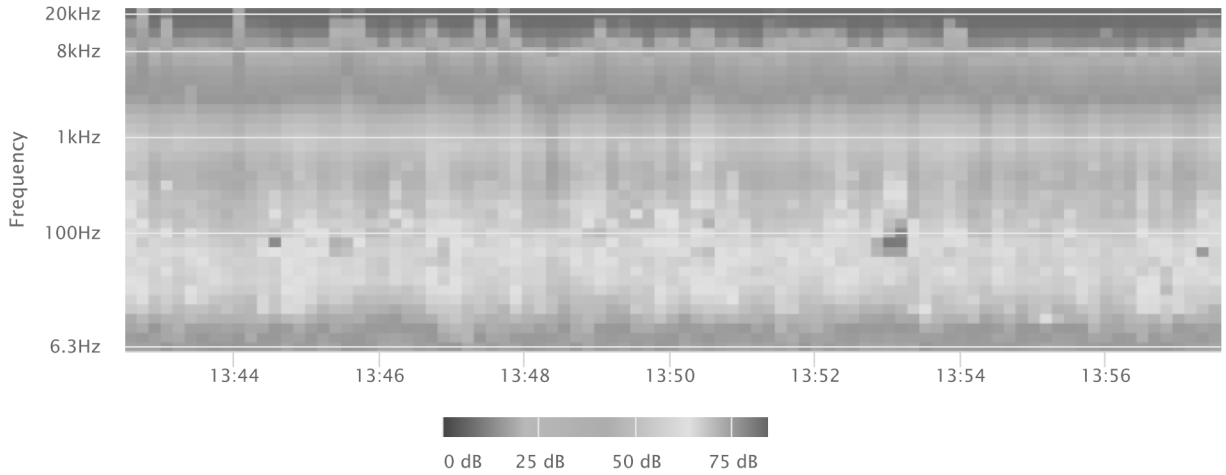
OBA 1/1 Lmax



OBA 1/1 Lmin



OBA 1/3 Leq



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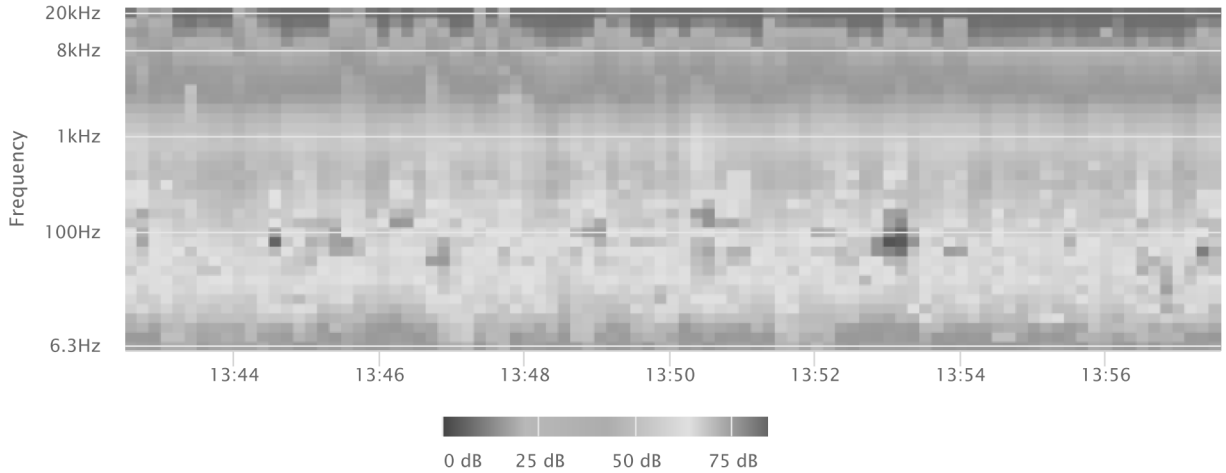
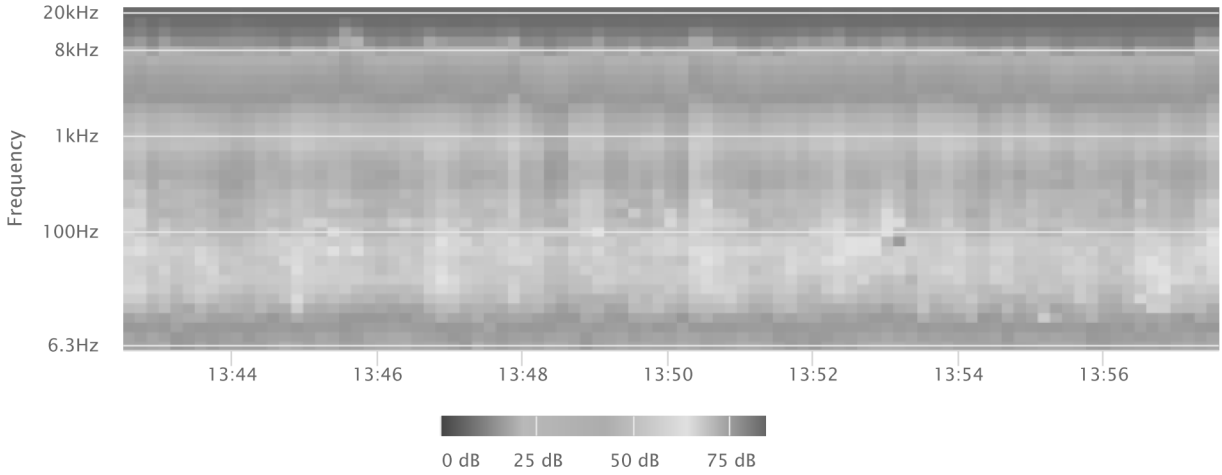


OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
13:44
13:46
13:48
13:50
13:52
13:54
13:56
0 dB
25 dB
50 dB
75 dB

Noise Measurement Field Data

Project Name: 1472 East Main Street, El Cajon. **Date:** May 18-19, 2023

Project #:

Noise Measurement #: LTNM1 **Technician:** Ian Gallagher

Nearest Address or Cross Street: 1472 East Main Street, El Cajon CA 92021

Site Description (Type of Existing Land Use and any other notable features): On-site: On the northern edge of site area, mostly grassy, overgrown concrete & asphalt footprint of the last building on site. Adjacent: 8 Fwy overpass, 120' N of LTNM1, E Main St, 30' W of LTNM1. Area mix of residences and businesses.

Weather: 50% cloud, clearing overnite. Sunset/rise 7:42PM/5:47AM **Settings:** SLOW FAST

Temperature: 59-75 deg F **Wind:** 1-10mph **Humidity:** 60-80% **Terrain:** Flat

Start Time: 7:00 PM **End Time:** 7:00 PM **Run Time:** 24 x 1 hours

Leq: 65 dB **Primary Noise Source:** Traffic noise from vehicles travelling along the 8 Fwy, E Main St & other roads.

Lmax 96.4 dB Minor vehicle collision on E Main St & Oakdale Ave intersection 7:09PM, 18 May.

L2 70.2 dB **Secondary Noise Sources:** Bird song by day, crickets at night. Breeze rustling vegetation & leaves.

L8 67.9 dB Pedestrians. Homeless living in areas around site area. Overhead air traffic.

L25 65.3 dB

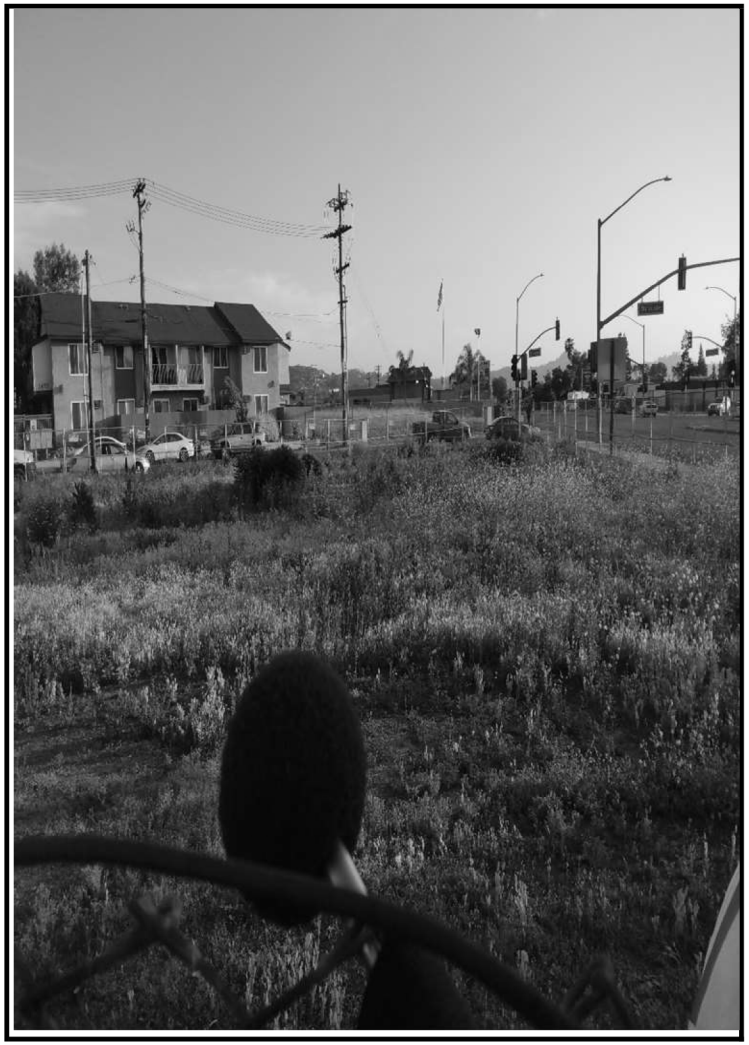
L50 62.7 dB

NOISE METER:	SoundTrack LXT Class 1	**CALIBRATOR:**	Larson Davis CAL250
MAKE:	Larson Davis	**MAKE:**	Larson Davis
MODEL:	LXT1	**MODEL:**	Cal 250
SERIAL NUMBER:	3099	**SERIAL NUMBER:**	2723
FACTORY CALIBRATION DATE:	11/17/2021	**FACTORY CALIBRATION DATE:**	11/18/2021
FIELD CALIBRATION DATE:	5/18/2023		

Noise Measurement Field Data

PHOTOS:

LTNM1 looking N across E Main St, towards E Main St Street underpass, underpassing the 8 Fwy (120' N).



LTNM1 looking S across site area,, Oakdale Ave & E Main St intersection on the right (traffic lights, 260') & multifamily residence, 1475 Oakdale Ave on the left. (200').

Measurement Report

Report Summary

Meter's File Name	LxT_Data.272.s	Computer's File Name	LxT_0003099-20230518 190000-LxT_Data.272.ldbin
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	LTNM1 32°48'9.12"N 116°55'40.11"W
Job Description	24 hour noise measurement (24 x 1 hours)		
Note	Roma Environmental 1472 E Main St, El Cajon		
Start Time	2023-05-18 19:00:00	Duration	24:00:00.0
End Time	2023-05-19 19:00:00	Run Time	24:00:00.0
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	65.0 dB		
LAE	114.3 dB	SEA	--- dB
EA	30.0 mPa²h	LAFTM5	68.6 dB
EA8	10.0 mPa²h		
EA40	50.0 mPa²h		
LA_{peak}	109.9 dB	2023-05-19 18:09:56	
LAS_{max}	96.4 dB	2023-05-18 19:06:06	
LAS_{min}	30.9 dB	2023-05-19 02:51:39	
LA_{eq}	65.0 dB		
LC_{eq}	73.0 dB	LC_{eq} - LA_{eq}	8.1 dB
LAI_{eq}	66.6 dB	LAI_{eq} - LA_{eq}	1.7 dB

Exceedances	Count	Duration
LAS > 65.0 dB	1462	9:17:44.2
LAS > 85.0 dB	8	0:00:34.6
LApeak > 135.0 dB	0	0:00:00.0
LApeak > 137.0 dB	0	0:00:00.0
LApeak > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB

	LDEN	LDay	LEve	LNight
	--- dB	--- dB	--- dB	--- dB

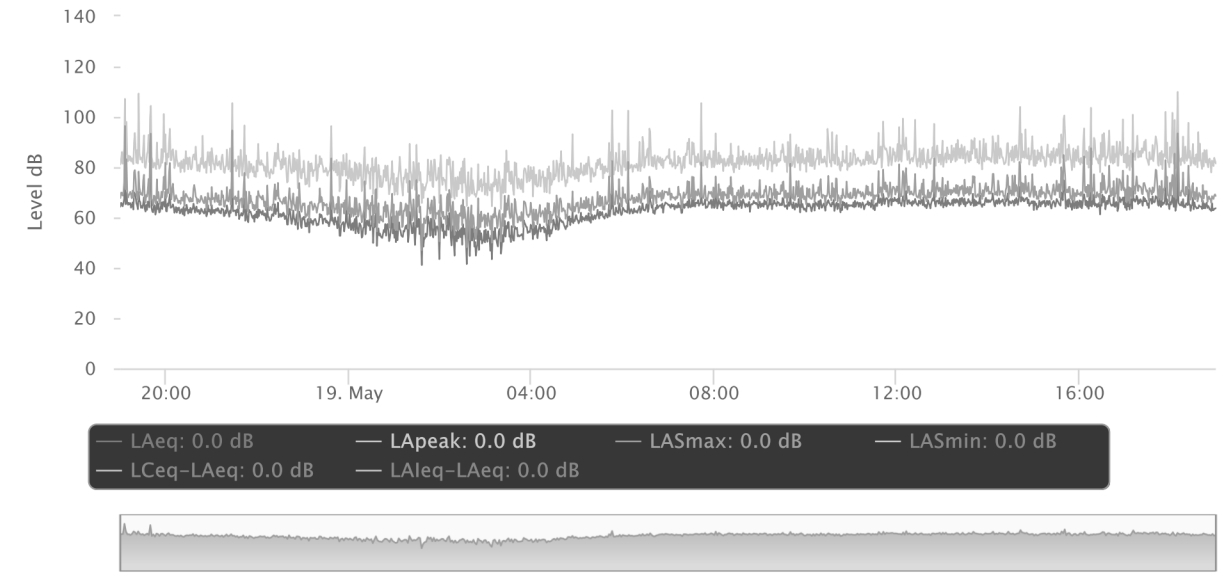
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	65.0 dB		73.0 dB		--- dB	
$L_{S(max)}$	96.4 dB	2023-05-18 19:06:06	--- dB		--- dB	
$L_{S(min)}$	30.9 dB	2023-05-19 02:51:39	--- dB		--- dB	
$L_{Peak(max)}$	109.9 dB	2023-05-19 18:09:56	--- dB		--- dB	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

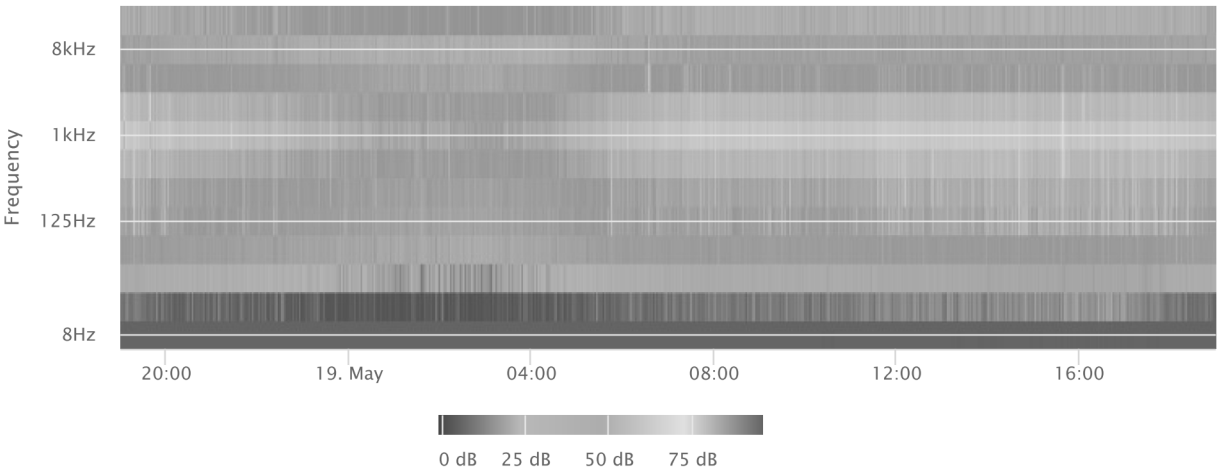
Statistics

LAS 2.0	70.2 dB
LAS 8.0	67.9 dB
LAS 25.0	65.3 dB
LAS 50.0	62.7 dB
LAS 90.0	52.0 dB
LAS 99.0	41.0 dB

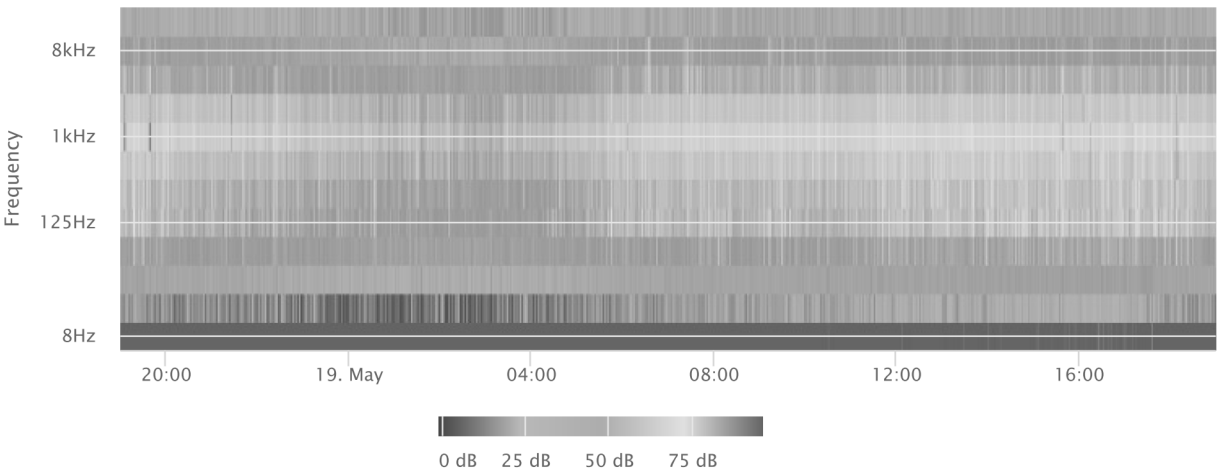
Time History



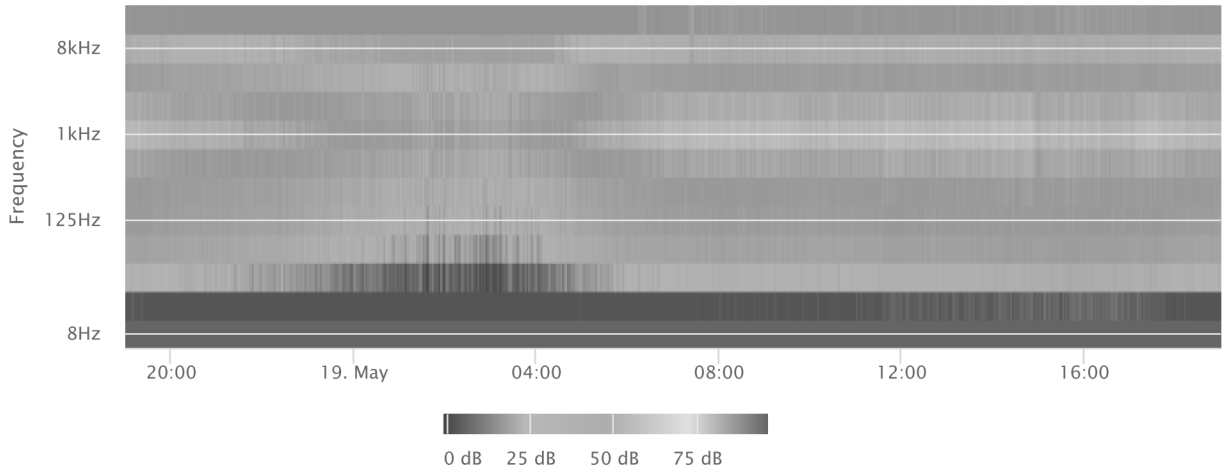
OBA 1/1 Leq



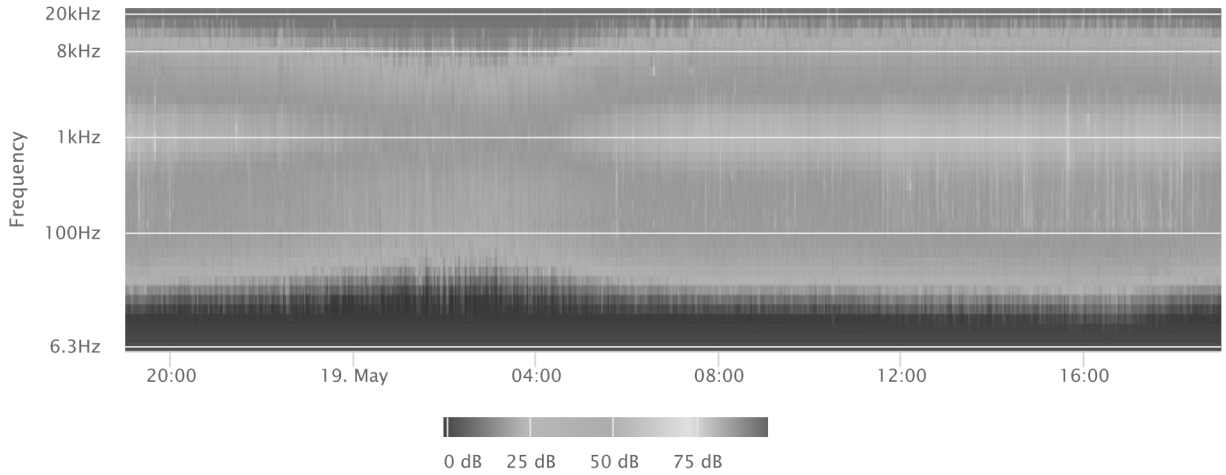
OBA 1/1 Lmax



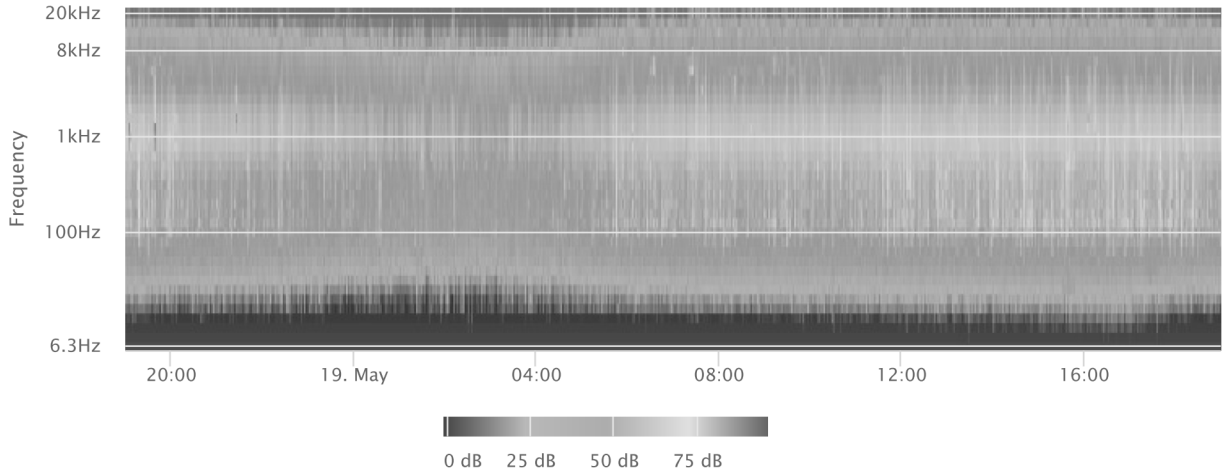
OBA 1/1 Lmin



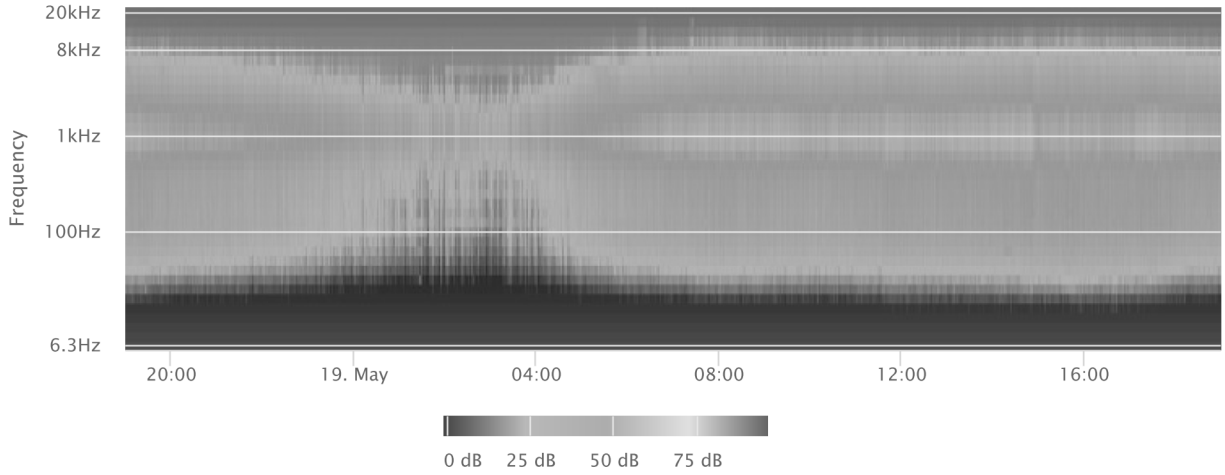
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin


20kHz
8kHz
1kHz
100Hz
6.3Hz
Frequency
20:00
19. May
04:00
08:00
12:00
16:00

0 dB
25 dB
50 dB
75 dB

APPENDIX B

SoundPLAN Input/Output

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 08/03/2023
Case Description: E Main Street

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential	Residential	65.0	65.0	45.0

Description	Impact Device	Usage (%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	55.0	0.0
Excavator	No	40		80.7	55.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	80.8	76.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	79.9	75.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.8	79.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

APPENDIX C

Construction Noise Calculations

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Contr devic	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Interstate 8 Eastbound			Traffic direction: In entry direction									
0+00	83500	Total	-	5103	3635	1262	-	none	-	-	Average (of DGAC a	1.7
		Automobiles	-	4836	3591	891	40					
		Medium trucks	-	100	17	139	40					
		Heavy trucks	-	167	28	232	40					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
0+05	83500	Total	-	5103	3635	1262	-	none	-	-	Average (of DGAC a	2.4
		Automobiles	-	4836	3591	891	40					
		Medium trucks	-	100	17	139	40					
		Heavy trucks	-	167	28	232	40					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
0+10	83500	Total	-	5103	3635	1262	-	none	-	-	Average (of DGAC a	3.5 / 8
		Automobiles	-	4836	3591	891	40					
		Medium trucks	-	100	17	139	40					
		Heavy trucks	-	167	28	232	40					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
Interstate 8 Westbound			Traffic direction: In entry direction									
0+00	83500	Total	-	5103	3635	1262	-	none	-	-	Average (of DGAC a	6.3 / 1
		Automobiles	-	4836	3591	891	40					
		Medium trucks	-	100	17	139	40					
		Heavy trucks	-	167	28	232	40					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
Main Street NB			Traffic direction: In entry direction									
0+00	10950	Total	-	669	477	166	-	none	-	-	Average (of DGAC a	0.1 / 1.
		Automobiles	-	634	471	117	25					
		Medium trucks	-	13	2	18	25					
		Heavy trucks	-	22	4	30	25					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					
Main Street SB			Traffic direction: In entry direction									
0+00	10950	Total	-	669	477	166	-	none	-	-	Average (of DGAC a	1.7 / 0
		Automobiles	-	634	471	117	25					
		Medium trucks	-	13	2	18	25					
		Heavy trucks	-	22	4	30	25					
		Buses	-	-	-	-	-					
		Motorcycles	-	-	-	-	-					
		Auxiliary vehicle	-	-	-	-	-					

Receiver list

No.	Receiver name	Building side	Floor	Limit Lden dB(A)	Level w/o NP Lden dB(A)	Level w NP Lden dB(A)	Difference Lden dB	Conflict Lden dB
1	1	North west	EG	-	72.2	0.0	-72.2	-
			1.OG	-	72.4	0.0	-72.4	-
			2.OG	-	72.8	0.0	-72.8	-

Contribution levels of the receivers

Source name	Traffic lane	Level w/o NP Lden dB(A)	Level w NP Lden dB(A)
1 EG		72.2	0.0
Interstate 8 Eastbound	-	65.7	-
Interstate 8 Westbound	-	63.9	-
Main Street NB	-	68.8	-
Main Street SB	-	64.6	-
1 1.OG		72.4	0.0
Interstate 8 Eastbound	-	65.5	-
Interstate 8 Westbound	-	63.7	-
Main Street NB	-	69.4	-
Main Street SB	-	64.6	-
1 2.OG		72.8	0.0
Interstate 8 Eastbound	-	67.1	-
Interstate 8 Westbound	-	64.5	-
Main Street NB	-	69.2	-
Main Street SB	-	64.7	-