PUBLIC REVIEW DRAFT

ENVIRONMENTAL IMPACT REPORT

FOR THE

LAKEHOUSE
MIXED USE DEVELOPMENT

1018 North Lower Sacramento Road
City of Lodi, CA

State Clearinghouse Number 2019029095

August 2023

Prepared for:

City of Lodi
Community Development Department
221 W. Pine Street
Lodi, CA 95240

Prepared by:

BaseCamp Environmental, Inc.
802 W. Lodi Avenue
Lodi, CA 95240

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ACRONYMS AND ABBREVIATIONS USED IN THIS DOCUMENT

AB	Assembly Bill
APN	Assessor's Parcel Number
ARB	California Air Resources Board
BMP	Best Management Practice
BTU	British Thermal Unit
CalEEMod	California Emissions Estimator Model
CalEnviroScreen	California Communities Environmental Health Screening Tool
CalEPA	California Environmental Protection Agency
Cal Fire	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal/OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
dB	decibel
dBA	A-weighted decibel
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
EPAP	Existing Plus Approved Projects
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
GSA	Groundwater Sustainability Agency
IS/MND	Initial Study/Mitigated Negative Declaration
ITMM	Incidental Take Minimization Measure
L_{dn}	Day-Night Average Noise Level
L_{eq}	equivalent noise level
LEU	Lodi Electric Utility

LOS	Level of Service
LUSD	Lodi Unified School District
mgd	million gallons per day
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
NAHC	Native American Heritage Commission
NCPA	Northern California Power Agency
NO_x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NSJWCD	North San Joaquin Water Conservation District
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PG&E	Pacific Gas and Electric Company
$PM_{2.5}$	particulate matter less than 2.5 micrometers in diameter
PM_{10}	particulate matter less than 10 micrometers in diameter
ROG	reactive organic gases
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SGMA	Sustainable Groundwater Management Act
SJCOG	San Joaquin Council of Governments
SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SJRTD	San Joaquin Regional Transit District
SJVAPCD	San Joaquin Valley Air Pollution Control District
STAA	Surface Transportation Assistance Act
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SWTF	Surface Water Treatment Facility
TAC	toxic air contaminant
UAIC	United Auburn Indian Community
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMT	vehicle miles traveled
WID	Woodbridge Irrigation District
WPCF	White Slough Water Pollution Control Facility
WSA	Water Supply Assessment

1.0 INTRODUCTION

1.1 PROJECT AND EIR OVERVIEW

This document is an Environmental Impact Report (EIR) that describes the potential environmental impacts of the proposed Lakehouse Mixed Use Development Project (project) located at 1018 North Lower Sacramento Road in Lodi (Figures 1-1 and 1-2). The project applicant is 157 California Reserve, Inc. This EIR was prepared in accordance with the California Environmental Quality Act (CEQA) and generally follows the analysis sequence of the latest Environmental Checklist in Appendix G of the State CEQA Guidelines. The City of Lodi (City) is the CEQA Lead Agency for this project.

The project proposes the development of a resort hotel, a separate standalone 150-unit residential apartment complex, and approximately 18,500 square feet of retail commercial space on a 9.75-acre site. The four-story resort hotel would include 96 guest suites with a restaurant and banquet room. The project would include on-site parking for both the hotel and the residential complex. The project requires discretionary approvals from the City of Lodi that consist of a General Plan Amendment, rezoning, and site plan approval. Construction of buildings and connections to utilities would require additional City approvals.

The hotel portion of the project is intended to meet growing demands for resort accommodations associated with the expanding vineyard, wine and related tourism industries. A long-term multi-generational, agricultural transition has resulted in what is now one of the finest wine producing regions in the State. The City of Lodi finds itself in the center of more than 25,000 acres of thriving vineyards. The Lodi area's officially recognized terroir is ranked as a premiere wine region not only in the State of California, but across the nation and Europe.

This industry's growth, particularly over the last three decades, has led to the creation of more than eighty independent wineries and affiliated tasting rooms, yielding an expansion of tourism never before realized in the history of the community. One sector responding to this growth is hospitality, which saw the recent development of six new facilities with varying levels of service and accommodation to meet the growing tourism needs. In addition, Wine & Roses, the City's first luxury class hotel and spa, completed its last phase of expansion approximately five years ago and remains the only facility of this caliber within the region.

The Lodi Conference and Visitors Bureau, noting the City's growing visitation numbers, cites recent business community survey results that indicate the need for good-quality non-franchise restaurants and banquet space. The Bureau also states, "As the destination marketing organization for the City of Lodi, we are acutely aware of the need for a variety of lodging property types to accommodate our growing visitation numbers," noting that

the City's existing inventory of visitor accommodation includes only one resort property (Nancy Beckman, pers. comm.).

1.2 PROJECT BACKGROUND

The project site is located in the northwestern portion of the City of Lodi in northern San Joaquin County on the northeast corner of the intersection of two minor arterial streets: Lower Sacramento Road and Turner Road. The largely undeveloped property has substantial existing tree cover, which consists of remnant orchard and ornamental trees and shrubs, and an abandoned railroad spur that formerly served the General Mills cereal production facility south of the site across Turner Road. Two small prefabricated steel storage buildings are located in the southwestern portion of the site; available information suggests these buildings were associated with historical agricultural operations.

The project site is surrounded by existing residential and industrial development. Five single-family homes are located immediately to the north of the project site along Lower Sacramento Road, separated from the project site by a masonry wall and an unpaved service road, approximately 20 feet wide. The Woodlake Circle single-family residential area is west of the project site, across Lower Sacramento Road. The former General Mills facility, which is currently being used for manufacturing of garden tools and outdoor furniture, is located south of the site across Turner Road. A cellular communications tower is located on a separate parcel immediately northeast of the project site (Figure 1-5)

Lands east of the project site are in utility uses, including an approximately 1.5-acre substation owned and operated by Lodi Electric Utility (LEU), an approximately one-acre electricity generation station operated by the Northern California Power Agency (NCPA), and the City's Surface Water Treatment Facility (SWTF). Lodi Lake Park, a major City recreational facility, is east of these land uses.

In accordance with CEQA, the City prepared an Initial Study for the project and determined that a Mitigated Negative Declaration was appropriate, as all potentially significant impacts resulting from the project could be avoided or reduced to levels that were less than significant with mitigation measures. The IS/MND, as the document was known, was released for public review and comment from February 15 to March 18, 2019. Based in part on comments received from the public, the City and the project applicant jointly decided that an EIR would be prepared for the project. Table 2-1 in Chapter 2.0, Summary, lists the areas of controversy and where this EIR addresses these issues.

1.3 EIR REQUIREMENTS AND INTENDED USES

CEQA, enacted in 1970, requires that public agencies document and consider the potential environmental effects of the agency's actions that meet CEQA's definition of a "project." Briefly summarized, a "project" is an action that has the potential to result in direct or indirect physical changes in the environment. A project includes the agency's direct activities as well as related or closely related activities that involve public agency approvals or funding. The proposed project, including the General Plan Amendment, rezoning, site approvals, and development of the proposed hotel and residential area, is considered a

project as defined by CEQA. Off-site utility and street improvements connected to the project are also evaluated in this EIR as a part of the project.

This EIR has been prepared in accordance with the requirements of CEQA and the State CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations). The CEQA Guidelines contain advisory and mandatory requirements for the application of CEQA to land development and other projects, as defined. CEQA requires the designation of a "lead agency" for a project. As defined in the CEQA Guidelines, the Lead Agency is the public agency that has the principal responsibility for carrying out or approving a project. Since the City has the primary approval authority over the project, it is the Lead Agency for CEQA purposes.

An EIR is intended to inform decision-makers and the public about the potentially significant adverse environmental effects of a project and to describe mitigation measures and alternatives that would reduce or avoid those effects. The EIR includes consideration of cumulative impacts, growth-inducing impacts, irreversible environmental effects, and alternatives to the proposed project. As noted, this EIR generally follows the analysis sequence of the Environmental Checklist in CEQA Guidelines Appendix G, which was last revised in 2019.

In 2015, the California Supreme Court, in its decision in *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)*, stated that "ordinary CEQA analysis is concerned with a project's impact on the environment, rather than with the environment's impact on a project and its users or residents." In other words, the potential impacts of the existing environment, such as an existing air pollution source, on a proposed project are outside the scope of CEQA analysis, with the limited exception of such analysis being required explicitly by State law for specific projects. In addition, the California Supreme Court noted that if a project would exacerbate an existing environmental condition, this exacerbated condition would be within the scope of CEQA analysis.

This EIR will note existing environmental conditions that could affect residents and users of the proposed project in the appropriate technical chapters. It will determine if the project would exacerbate existing environmental conditions, thereby requiring further analysis. If not, the EIR will not conduct further analysis, pursuant to the *CBIA v. BAAQMD* decision.

1.4 CEQA PROCEDURES FOR THE EIR

The CEQA process for the project was initiated by the City of Lodi in 2018 with the preparation of a proposed Initial Study/Mitigated Negative Declaration and its circulation for public review. Based in part on comments received during the public review period for the Initial Study/Mitigated Negative Declaration, the City and the project applicant jointly decided that an EIR would be prepared for the project.

On November 9, 2021, the City circulated a Notice of Preparation inviting comments from interested agencies and the public as to environmental concerns that should be considered in the EIR for a 30-day comment period that closed December 8, 2021. The Notice of

Preparation, associated notices, the distribution list, and comments submitted to the City are shown in Appendix A. The comments received during the NOP comment period and environmental issues and concerns identified in those comments are summarized and discussed in Section 1.5.

With the release of the Public Review Draft EIR and accompanying Notice of Availability, regulatory agencies and members of the public can comment on the adequacy of the EIR during a 45-day review period. After the close of the public review period, the City is obligated to provide written responses to the comments received, and these responses will be published in a Final EIR.

The Final EIR must be considered by City decision-makers prior to a decision on the project. Before the City decides on the project, it must first certify that the Final EIR was completed in compliance with the provisions of CEQA, that the City has reviewed and considered the information in the Final EIR, and that the Final EIR reflects the independent judgment of the City on the environmental impacts of the project. The City is also required to make specific findings related to each of the significant effects identified in the EIR. If the project involves any significant and unavoidable environmental effects, the City may still approve the project, but the CEQA findings must include a Statement of Overriding Considerations that provides reasons for the approval. If mitigation measures are included in the Final EIR, the City also must adopt a Mitigation Monitoring and Reporting Program that sets forth the mitigation measures and their implementation.

In accordance with CEQA Guidelines Section 15163(c), this EIR is available for public review and comment on the dates specified in the Notice of Availability, located inside of the cover of this document. Any comments or questions regarding this EIR should be submitted to the City at the following address before the close of the public review period:

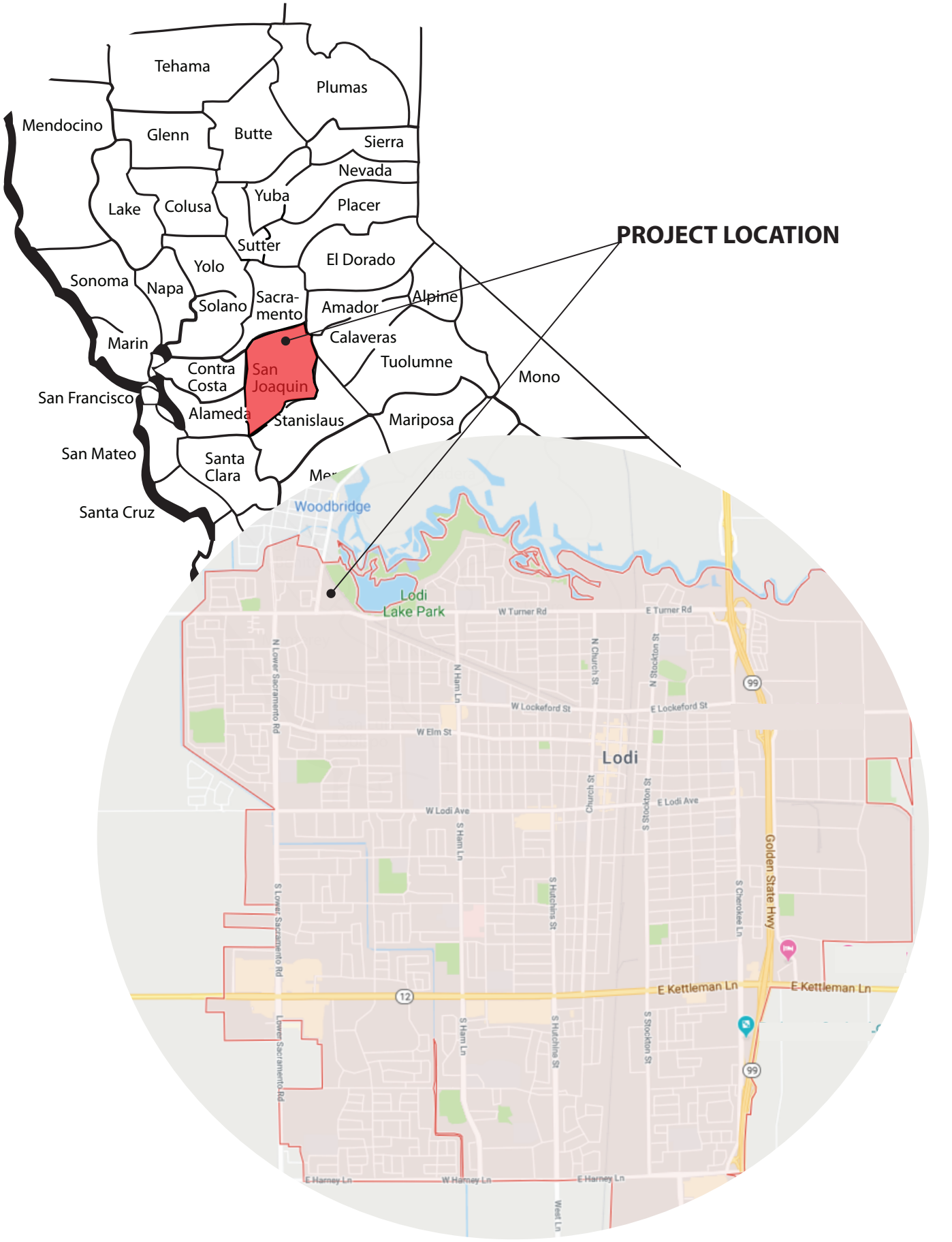
City of Lodi
Community Development Department
Attention: Eric Norris, Contract Planner
221 W. Pine Street
Lodi, CA 95240
enorris@interwestgrp.com

1.5 NOTICE OF PREPARATION AND COMMENTS

On November 9, 2021, the City circulated a Notice of Preparation (NOP) inviting comments from interested agencies and the public as to environmental concerns that should be considered in the EIR. The 30-day comment period closed on December 8, 2021. Appendix A contains the Notice of Preparation, the NOP distribution list, required notifications, and NOP comments submitted to the City. The two comment letters from agencies and interest groups received during the NOP review period are summarized in Table 1-1.

TABLE 1-1
NOP COMMENT LETTERS RECEIVED

#	Date	Commenter	Concern	Response
1	12/1/2021	Adams Broadwell Joseph & Cardozo, representing San Joaquin Residents for Responsible Development	Requested mailed Notice of Availability for CEQA document, along with copy of CEQA document when made available for public review. Also requested mailed notice of any and all hearings and actions related to the project.	The commenter will be provided with the NOA and access to the EIR when this EIR is made available for public review.
2	12/8/2021	California Department of Toxic Substances Control	Potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. Potential for ADL-contaminated soil. Recommended surveys of buildings to be demolished for the presence of hazardous substances. Proper investigation for organochlorinated pesticides should be discussed. Proper sampling of imported soil should be conducted to ensure it is free of contamination.	These concerns are addressed in Chapter 10.0 Hazards of this EIR.



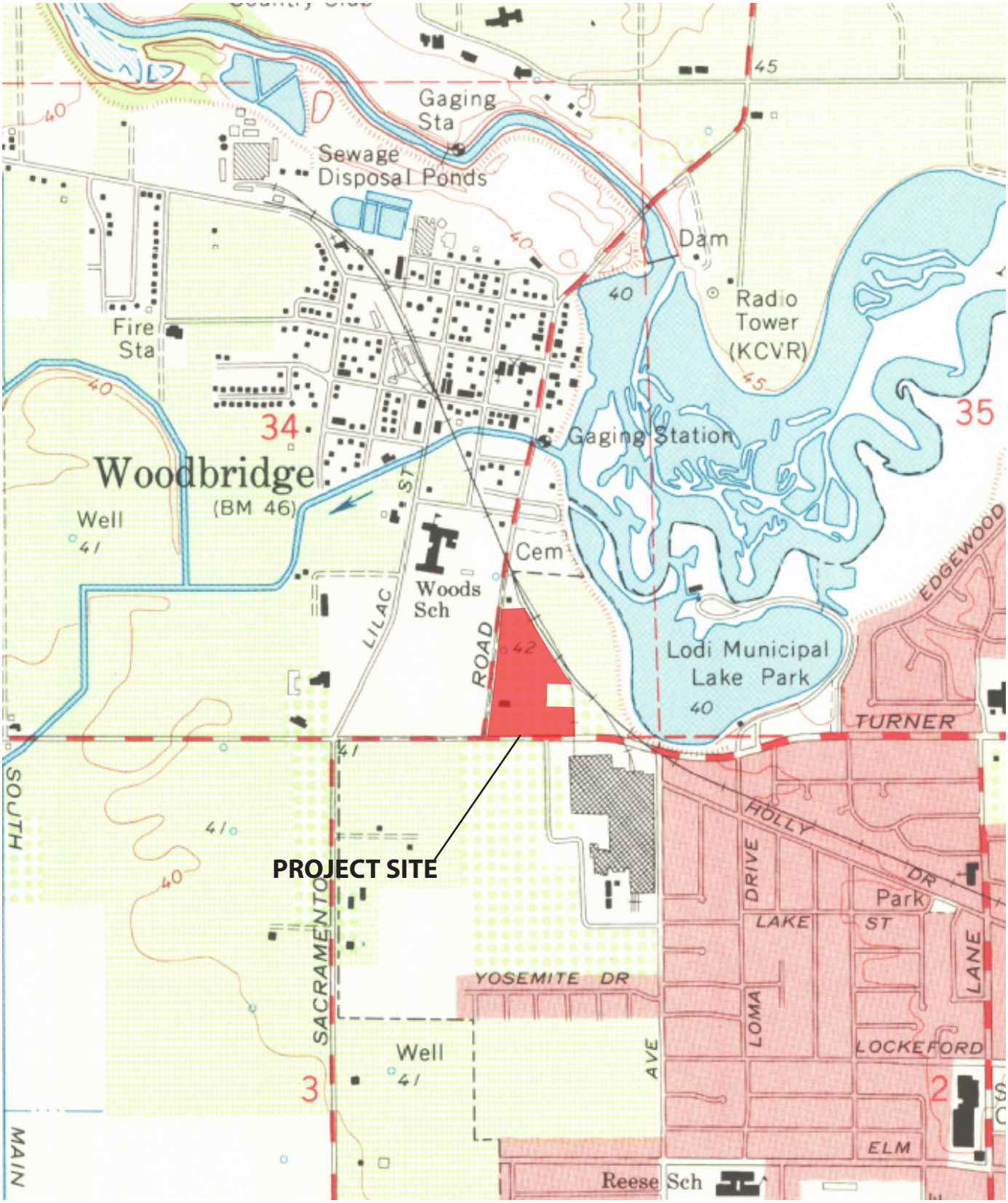
BaseCamp Environmental

Figure 1-1
REGIONAL LOCATION MAP

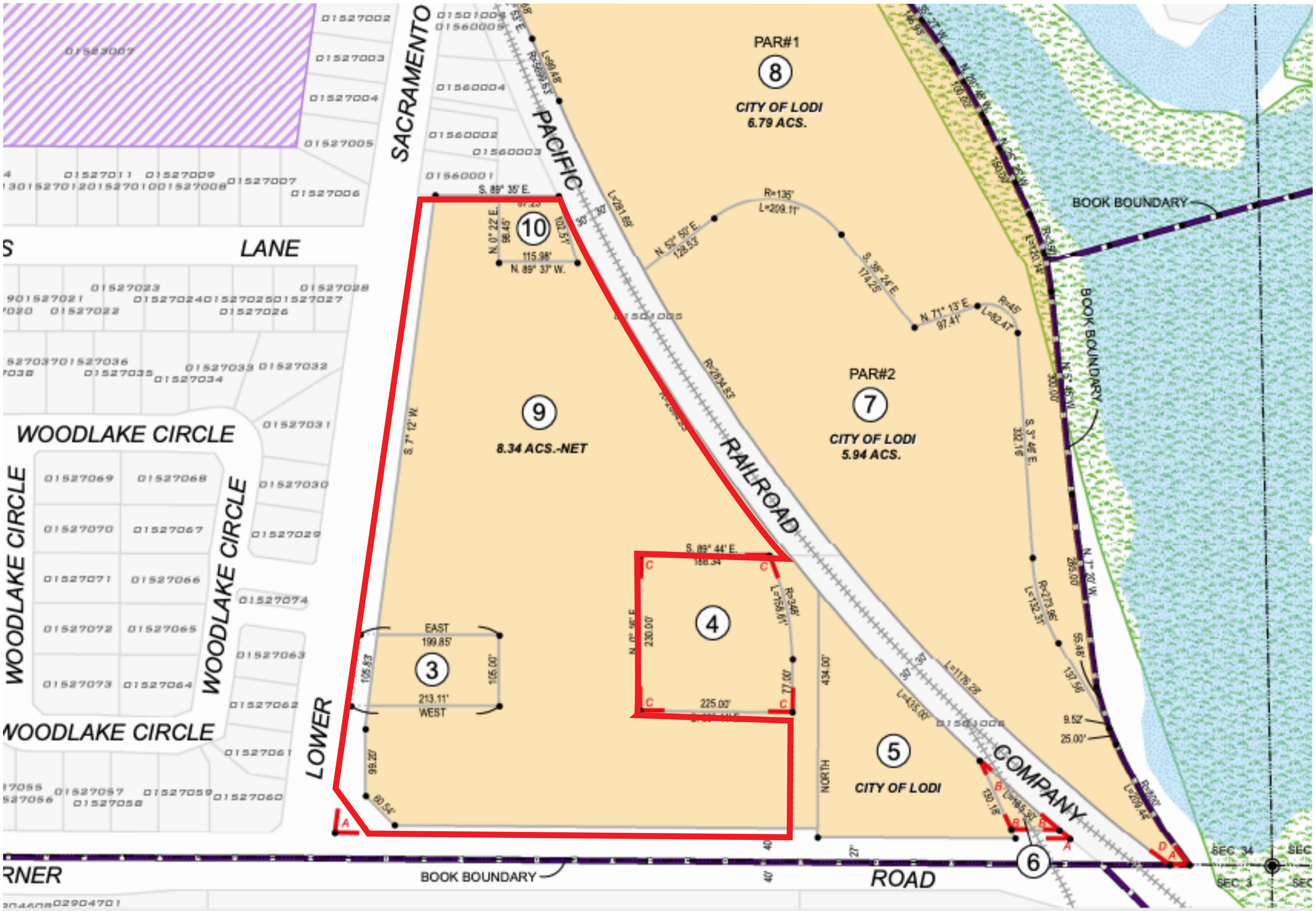


SOURCE: Google Maps

Figure 1-2
STREET MAP



SOURCE: Lodi North Quadrangle, United States Department of the Interior Geological Survey, 1968



Note: Property boundaries are being adjusted as shown on official map pending City approval.

BaseCamp Environmental

Figure 1-4
ASSESSOR PARCEL MAP



BaseCamp Environmental

Figure 1-5
AERIAL PHOTO

2.0 SUMMARY

2.1 PROJECT DESCRIPTION

The primary objective of the proposed project is the development of 150 apartment units, a 96-suite "boutique"-style hotel, associated hospitality-related facilities and 18,500 square feet of retail commercial space. The hotel project would provide upscale resort accommodations serving the wine and winery tourism markets as well as an upscale living environment for persons who wish to invest and settle in the Lodi area. Other more specific objectives are shown in Chapter 3.0, Project Description.

The project proposes development of a resort hotel, with restaurant and retail space, and a separate standalone residential apartment complex on approximately nine of 9.75 acres of largely undeveloped land. The two four-story hotel buildings would provide 96 guest rooms, along with a restaurant, banquet hall, and approximately 18,500 square feet of retail space. A total of 215 parking spaces for the hotel buildings would be provided in a parking garage and surface parking areas.

The residential apartment complex would include 150 one-bedroom, two-bedroom, and three-bedroom apartment units, varying in size from 800 to 1,700 square feet. It also would include a manager's office/community building approximately 3,000 square feet in floor area, along with a pool. The residential complex would provide 258 residential parking spaces plus 30 visitor spaces, for a total of 288 parking spaces. The City of Lodi is responsible for all the local government approvals associated with the project, including a General Plan Amendment and rezoning of the project site, site plan approval, and design review.

2.2 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The potentially environmental effects of the project are summarized in Table 2-2 at the end of this chapter, along with mitigation measures proposed to minimize these effects when required. Table 2-2 provides an indication of the significance of impacts, both before and after application of mitigation measures. As documented herein, with proposed mitigation measures, all the potential environmental effects of the project either are, or would be reduced, to a level that is less than significant.

2.3 AREAS OF CONTROVERSY

An IS/MND previously prepared for the project had been released for public review and comment in 2019. Table 2-1 shows the comments received on the IS/MND indicating areas of controversy and where the EIR addresses the issue. As discussed in Chapter 1.0, Introduction, a Notice of Preparation for this EIR was issued with a request for comment

from potentially affected public agencies. No areas of controversy were identified by any of these comments, which are shown in Appendix A.

TABLE 2-1
AREAS OF CONTROVERSY

Area of Controversy	Where Addressed in EIR
Compatibility with existing adjacent land uses	Chapter 12.0, Land Use
Exposure of sensitive receptors to air pollutant and toxic air contaminant emissions	Chapter 5.0 Air Quality
Existing and anticipated future uses of former General Mills facility and rail spurs	Chapter 12.0, Land Use
Exposure to noise from adjacent land uses	Chapter 13.0, Noise
Exposure to fire risk from features on adjacent NPCA facility	Chapter 10.0, Hazards and Hazardous Materials
Presence of special-status species and wetlands and adverse impacts of development on flying birds	Chapter 6.0, Biological Resources
Impacts on visual landscape	Chapter 4.0, Aesthetics
Traffic volumes and flow on adjacent streets	Chapter 15.0, Transportation
Presence of agricultural chemicals and other contaminants in soil	Chapter 10.0, Hazards and Hazardous Materials
Formaldehyde in building materials	Chapter 10.0, Hazards and Hazardous Materials

2.4 SUMMARY OF ALTERNATIVES

Chapter 18.0, Alternatives, identifies and discusses a range of reasonable alternatives to the project, including the "no project" alternative. The alternatives addressed in detail include:

- No Project
- Industrial Development
- Reduced Development – Hotel Only

- Reduced Development – Apartments Only

The No Project alternative is defined as the continuation of existing conditions on the project site, which means the site is to remain undeveloped. This alternative would involve no action on the part of the City or other agencies. Existing zoning would remain Agriculture, and any future land uses would be consistent with this zoning. Selection of this alternative would eliminate all the significant environmental effects of the project. However, the continuation of the undeveloped state of the project site does not fulfill any of the basic objectives of the proposed project.

The Industrial Development alternative would not allow the proposed project development. Instead, the project site would be developed consistent with the existing Lodi General Plan and zoning designations, which are Industrial. This alternative does not fulfill any of the objectives of the project.

The Reduced Development – Hotel Only alternative would allow the development only of the proposed hotel; the residential complex would not be developed. This alternative would be partially consistent with the objectives of the proposed project. Significant environmental effects of the proposed project would be substantially lessened by this alternative. Air pollutant emissions would be reduced, as would the amount of traffic that would be generated, which would reduce traffic and noise impacts. Impacts on hazardous materials and hydrology would likewise be reduced. However, effects on biological resources, cultural resources, soils, hydrology, and construction noise would be the same as the proposed project and would likely require mitigation to reduce impacts. In addition, land use and housing impacts would likely be more severe.

The Reduced Development – Apartments Only alternative would allow the development only of the proposed residential complex; the hotel would not be developed. This alternative would be consistent with the objectives of the proposed project. The significant environmental effects of the proposed project would be lessened by this alternative. Air pollutant emissions would be reduced, as would the amount of traffic that would be generated, which would reduce traffic and noise impacts. Impacts on hazardous materials and hydrology would likewise be reduced. However, effects on biological resources, cultural resources, soils, hydrology, and construction noise would be the same as the proposed project and would likely require mitigation to reduce impacts. In addition, land use and long-term transportation impacts would likely be more severe.

2.5 SUMMARY OF OTHER CEQA ISSUES

CEQA requires a discussion of significant environmental impacts of the project that cannot be avoided or mitigated to a level that would be less than significant. No significant and unavoidable environmental impacts associated with the project were identified.

The project would involve the irreversible commitment of construction materials to the construction of buildings, parking spaces, and supporting infrastructure. Construction materials would not be used in highly significant or unusual quantities when compared to similar projects and would be obtained from existing commercial sources. Commitment of

the project site to urban uses would involve an essentially irreversible loss of open space and any potential biological and agricultural resource values associated with it. However, as discussed in the EIR, these project impacts would be less than significant.

CEQA requires a discussion of the potential growth-inducing impacts of the project. Project impacts on population and housing would be less than significant, as the project is unlikely to induce population growth not already anticipated by the Lodi General Plan; employees would be drawn from the existing Lodi area populations. Infrastructure already exists in the public streets adjacent to the site to which proposed development of the site can connect; no major utility lines need to be extended in support of the project. The project vicinity is already developed with urban land uses; there are no other open space areas available for development other than the project site. Lodi Lake Park, a large nearby open space, is not planned for development. Because of this, the project would not have a growth-inducing impact.

Recently, environmental justice has been an issue which has led State agencies to comment on CEQA documents for specific development projects, even though environmental justice is not an issue that CEQA explicitly requires to be addressed. Comments have focused on the environmental impacts of projects on nearby "disadvantaged communities," as defined by SB 535. A query of the CalEnviroScreen computer model found that the project site is not in an area identified as a disadvantaged community.

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
4.0 AESTHETICS AND VISUAL RESOURCES			
Impact AES-1: Scenic Vistas. There are no scenic vistas available from the project site.	LS	None required.	-
Impact AES-2: Scenic Resources. There are no substantial scenic resources located on the project site. There are no scenic highways in the area.	LS	None required.	-
Impact AES-3: Visual Character and Quality. The proposed project would not substantially degrade the aesthetic character or quality of the project vicinity, which consists mostly of urban development. All project structures would be consistent with City design standards.	LS	None required.	-
Impact AES-4: Light and Glare. Project would involve an increase in night lighting and potential for light and glare impacts. Compliance with Lodi Municipal Code provisions would minimize light and glare impacts.	LS	None required.	-
5.0 AIR QUALITY			
Impact AIR-1: Conflict with Air Quality Plans and Standards – Construction Emissions. Project construction emissions would not exceed SJVAPCD significance thresholds, thereby being consistent with adopted air quality plans. Dust emissions would be reduced through the required implementation of SJVAPCD Regulation VIII.	LS	None required.	-
Impact AIR-2: Conflict with Air Quality Plans and Standards – Operational Emissions. Operational	LS	None required.	-

Notes: S = Significant, SU = Significant and Unavoidable, PS = Potentially Significant, LS = Less than Significant, NI = No Impact

TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
Emissions. Project operational emissions would not exceed SJVAPCD significance thresholds, thereby being consistent with adopted air quality plans. Future development would be subject to SJVAPCD's Rule 9510, further reducing NO_x and PM_{10} emissions.			
Impact AIR-3: Exposure of Sensitive Receptors to Criteria Pollutants. A specific connection between the project's criteria pollutant emissions and health impacts cannot be reasonably drawn; however, SJVAPCD significance thresholds were developed in part to ensure attainment of primary federal ambient air quality standards, which were designed to protect human health. CO concentrations at Turner Road/Lower Sacramento Road intersection would not exceed State ambient air quality standards.	LS	None required.	-
Impact AIR-4: Exposure of Sensitive Receptors to Toxic Air Contaminants. The project would generate temporary TAC emissions from construction activities, and minimal TAC emissions from operations.	LS	None required.	-
Impact AIR-5: Odors and Other Emissions. Neither the hotel nor the apartment complex is considered a significant source of odors. There are no records of odor complaints from nearby land uses since 2009.	LS	None required.	-
6.0 BIOLOGICAL RESOURCES			
Impact BIO-1: Special-Status Species and Habitats. Special-Status Species and Habitats. Project development would involve the potential for	PS	BIO-1: The proposed project shall participate in the SJMSCP, including payment of any required fees specified by the SJCOG and implementation of Incidental Take	LS

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
impacts on habitat of Swainson's hawk and burrowing owl.		Minimization Measures (ITMMs) specified by the SJCOG biologist. BIO-2: In the event that the SJCOG does not prescribe Incidental Take Minimization Measures (ITMMs) for either Swainson's hawk or burrowing owl, then the project shall comply with equivalent alternative mitigation measures specified by a qualified biologist, including pre-construction surveys, establishment of construction setbacks, monitoring requirements and other protective measures as required to obtain regulatory agency approval.	
Impact BIO-2: Riparian and Sensitive Natural Communities. No riparian areas or sensitive vegetation communities were identified on the project site.	NI		-
Impact BIO-3: Waters of the U.S. and Wetlands. No wetlands or Waters of the U.S. were identified on the project site.	NI		-
Impact BIO-4: Fish and Wildlife Migration. Project site contains non-native trees that could be used by raptors and other migratory birds during their nesting seasons.	PS	BIO-1: The proposed project shall participate in the SJMSCP, including payment of any required fees specified by the SJCOG and implementation of Incidental Take Minimization Measures (ITMMs) specified by the SJCOG biologist.	LS
Impact BIO-5: Local Biological Requirements. No local biological resource requirements apply to this project.	NI		-
Impact BIO-6: Habitat Conservation Plans. Project would participate in the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan.	NI		-

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
7.0 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES			
Impact CULT-1: Historical Resources. No historical resources have been recorded on the project site. Existing structures not considered historical resources.	LS	None required.	-
Impact CULT-2: Archaeological Resources. No archaeological resources have been recorded on the project site. However, it is possible that unknown cultural resources may be uncovered during project construction.	PS	CULT-1: The applicant shall retain a qualified professional archaeologist to monitor ground-disturbing activities within the project site, to halt construction as required, and to take action to minimize the potential damage to undiscovered archaeological and/or tribal cultural resources. The City may determine, based on pre-construction testing that indicates the site is not culturally sensitive and, in consultation with the archaeologist, that further testing or construction monitoring is not necessary. CULT-2: Unless the City determines that the site is not culturally sensitive as provided in Mitigation Measure CULT-1, Native American monitors from culturally affiliated Native American Tribes will be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American monitors shall have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. CULT-3: All construction personnel shall receive "tailgate" training by a qualified archaeologist in the identification of paleontological resources and buried cultural resources, including human remains, and in the notification protocol	LS

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Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
		should such resources be discovered during construction work. A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the project applicant shall notify the Lodi Community Development Department of the proposed earthwork start-date, in order to provide adequate time to contact the United Auburn Indian Community (UAIC). A UAIC tribal representative shall be invited to inspect project excavation work, including any soil piles, trenches, or other disturbed areas. During the inspection, a site meeting of construction personnel shall also be held to afford the tribal representative the opportunity to provide tribal cultural resources awareness information. CULT-4: If any subsurface archaeological or paleontological resources are encountered during project site construction, all construction activities within a 50-foot radius of the encounter shall be immediately halted until a qualified archaeologist or paleontologist, as appropriate, can examine these materials, evaluate their significance and, if significant, recommend any further measures needed to reduce potential effects to a less than significant level, consistent with the requirements of CEQA. A tribal representative shall also be contacted in the event archaeological resources are encountered and shall examine these resources for significance to local tribes. The Lodi Community Development Department shall be immediately notified in the event of a discovery, and the developer shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in written reports to the Community Development Department,	

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
		consistent with the requirements of CEQA and the CEQA Guidelines.	
Impact CULT-3: Human Burials. Human remains potentially could be encountered during construction or other ground disturbing activities.	PS	CULT-5: If evidence of human burial or scattered human remains is encountered, all construction activity within a 50-foot radius of the encounter shall be immediately halted, and the County Coroner, the Lodi Community Development Department, and tribal representative(s) shall be immediately notified. The applicant will be responsible for compliance with the requirements of CEQA Guidelines Section 15064.5 as to the proper treatment of human remains as defined in CEQA Guidelines Section 15064.5, with California Health and Safety Code Section 7050.5, and as directed by the County Coroner. If the human remains are determined to be Native American, the County Coroner is required to notify the Native American Heritage Commission (NAHC), and the NAHC is required to notify and appoint a Most Likely Descendant. The Most Likely Descendant has the opportunity to work with the archaeologist to decide the proper treatment of the human remains and any associated funerary objects.	LS
Impact CULT-4: Tribal Cultural Resources. Yokuts representative indicates project site is archaeologically sensitive. The possibility of the inadvertent discovery of unknown resources during project development was acknowledged during the AB 52 consultation.	PS	CULT-6: If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during implementation of Mitigation Measures CULT-1 through CULT-3, construction activities, work will cease within a 50-foot radius of the encounter. A qualified cultural resources specialist in consultation with invited Native American representatives will assess the significance of the find and make recommendations for further evaluation and treatment documented in a written report to the Lodi Community Development Department. The contractor shall implement any measures deemed by	LS

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
		City staff to be necessary and feasible to avoid or minimize significant effects to the cultural resources.	
8.0 GEOLOGY, SOILS, AND MINERAL RESOURCES			
Impact GEO-1: Soil Erosion. Project construction activities would loosen the soil, leaving it exposed to potential water and wind erosion. Project would be required to obtain a Construction General Permit and comply with City's Storm Water Development Standards.	LS	None required.	-
Impact GEO-2: Paleontological Resources and Unique Geological Features. The project site does not contain unique geological features nor any known paleontological resources. However, project construction could unearth paleontological materials of unknown significance.	PS	Implementation of Mitigation Measures CULT-1 and CULT-2.	LS
Impact GEO-3: Access to Mineral Resources. There are no identified mineral resource areas nor active mineral operations on the project site.	NI		-
9.0 GREENHOUSE GAS EMISSIONS			
Impact GHG-1: Project GHG Construction Emissions and Consistency with Applicable Plans and Policies. Construction GHG emissions would cease once work is completed and would be reduced compliance with applicable State and SJVAPCD rules and regulations.	LS	None required.	-
Impact GHG-2: Project GHG Operational Emissions and Consistency with Applicable Plans and Policies. Unmitigated operational GHG emissions would be	LS	None required.	-

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Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
reduced by project features and regulatory requirements. Reductions would be consistent with Lodi Climate Action Plan and with State and SJVAPCD plans.			
10.0 HAZARDS AND HAZARDOUS MATERIALS			
Impact HAZ-1: Hazardous Material Transportation and Storage. Residential land uses do not use hazardous materials in quantities requiring special regulation of their transport and storage. It is not anticipated that hotel operations would involve any substantial transport, use, or disposal of hazardous materials. A Hazardous Materials Business Plan would be prepared if hazardous materials are used or stored above certain thresholds.	LS	None required.	-
Impact HAZ-2: Hazardous Material Releases. Hazardous materials used during construction would be subject to SWPPP conditions. Hazardous materials transportation and storage on the project site would be subject to federal, State, and local regulations that would prevent release of hazardous materials to the soil and/or groundwater and the creation of new hazardous material or waste sites.	LS	None required.	-
Impact HAZ-3: Hazardous Material Sites and Contamination. Existing storage buildings proposed for demolition may have hazardous substances, but implementation of a Demolition Plan would minimize any releases. Potential contamination along the existing rail spur would be evaluated and remediated per mitigation measure.	PS	HAZ-1: Prior to or in conjunction with removal of the existing rail spur, the applicant shall retain a qualified environmental professional to inspect and obtain soil samples along the spur alignment and determine through testing whether soil removal, treatment or other measures are required to avoid releases of hazardous materials inconsistent with State standards for the proposed land uses. The applicant shall implement the recommendations	LS

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Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
		of the environmental professional subject to City approval..	
Impact HAZ-4: Public Airport Hazards. There are no public airports operating near the project site, and the site is not within a land use compatibility zone of an Airport Land Use Compatibility Plan.	NI		-
Impact HAZ-5: Interference with Emergency Vehicle Access and Evacuations. Project construction would involve limited encroachment into adjacent streets, but this would not result in any substantial or lengthy interference with traffic on these streets. Project-related traffic generated by the project is not expected to substantially effect or interfere with the use of adjacent streets for emergency response or evacuation purposes.	LS	None required.	-
11.0 HYDROLOGY AND WATER QUALITY			
Impact HYDRO-1: Surface Water Resources and Quality. There are no surface waters located on the project site. Construction activities could loosen soils that could eventually enter nearby surface waters. Compliance with Construction General Permits and approved Project Stormwater Plan would minimize impacts.	LS	None required.	-
Impact HYDRO-2: Groundwater Supply. Project would be served by the City's water system, which relies in part on groundwater. The City has adequate existing supplies for the project. Project site	LS	None required.	-

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Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
development would not substantially reduce recharge area for the underlying aquifer.			
Impact HYDRO-3: Drainage Patterns and Runoff. Project would alter existing drainage patterns and runoff volumes, but project features and connection to existing City storm drainage system would reduce impacts.	PS	Implementation of Mitigation Measure GEO-1.	LS
Impact HYDRO-4: Flood, Tsunami, and Seiche Hazards. The project site is not within a FEMA-designated 100-year floodplain. Project would not place any structures or other facilities containing pollutants that potentially could be released in the event of a flood.	PS	HYDRO-1: Finished floor elevations of proposed residential structures shall be elevated to or above the prescribed 200-year floodplain elevation, or proposed non-residential structures shall be floodproofed as required by Lodi Municipal Code Chapter 15.60. Code compliance shall be documented in materials prepared by licensed professionals and submitted to the Public Works Director.	LS
Impact HYDRO-5: Consistency with Water Quality and Groundwater Management Plans. Stormwater would be collected and conveyed to the City's stormwater system, in accordance with City standards and specifications. Project is expected to comply with the Groundwater Sustainability Plan for the Eastern San Joaquin Groundwater Subbasin.	LS	None required.	-
12.0 LAND USE, POPULATION, AND HOUSING			
Impact LUP-1: Division of Communities. The project site is not located within an existing residential community and would not physically divide an established community.	NI		-

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
Impact LUP-2: Conflict with Applicable Plans, Policies, and Regulations. The applicant has submitted a request for amendment of the Lodi General Plan and rezoning of the entire site from Industrial to Planned Development. The project is consistent with surrounding and nearby land uses.	LS	None required.	-
Impact LUP-3: Conversion of Farmland. The project site is classified as Urban and Built-Up Land. No Farmland as defined by the CEQA Guidelines would be affected.	NI		-
Impact LUP-4: Agricultural Zoning and Williamson Act. The project site is zoned Industrial and is not under a Williamson Act contract.	NI		-
Impact LUP-5: Indirect Conversion of Agricultural Lands. The project is in an area of urban development, including parkland. The project would not involve any activity that would indirectly convert other agricultural land to non-agricultural uses.	NI		-
Impact LUP-6: Inducement of Population Growth. The project would create residential units not planned for in the Lodi General Plan. However, this increase in residential capacity would be well within projected residential growth and would not significantly affect the overall growth rate of the City.	LS	None required.	-
Impact LUP-7: Displacement of Housing and People. There are no residences or housing units located on the project site.	NI		-

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
13.0 NOISE			
Impact NOISE-1: Increase in Noise Levels in Excess of Standards – Traffic Noise. Traffic generated by the project would minimally increase traffic noise levels along local roads. The nearest residences to Lower Sacramento Road would be exposed to traffic noise levels above City standards.	LS	None required.	LS
Impact NOISE-2: Exposure to Noise Levels in Excess of Standards – Project Construction. Based upon noise measurement data, project construction is not expected to result in a significant increase in ambient noise levels.	LS	None required.	-
Impact NOISE-3: Groundborne Noise and Vibrations. The project would not involve potential groundborne vibration sources other than operation of construction equipment, which would not result in adverse effects on people or structures.	LS	None required.	-
14.0 PUBLIC SERVICES AND RECREATION			
Impact PSR-1: Fire Protection Service. The Lodi Fire Department indicates that demands associated with the project could be accommodated with existing facilities and staff. No new or expanded facilities would be required.	LS	None required.	-
Impact PSR-2: Police Protection Services. The Lodi Police Department would have adequate resources to provide service to the project. No new or expanded facilities would be required.	LS	None required.	-

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
Impact PSR-3: Schools. The residential component of the project would likely generate new student load. The project would be required to pay to LUSD developer impact, which are considered by State law to be adequate mitigation for CEQA purposes.	LS	None required.	-
Impact PSR-4: Parks and Recreational Services. The proposed project would not create a significant increase in population, and thus an increase in park users, that would cause a substantial physical deterioration of existing recreation parks and facilities. No new or expanded facilities would be required.	LS	None required	-
Impact PSR-5: Other Public Facilities. The project would not generate additional demand for library or courthouse services, and therefore would not require new or expanded facilities.	LS	None required.	-
15.0 TRANSPORTATION			
Impact TRANS-1: Conflict with Motor Vehicle Transportation Plans. Under Existing Plus Approved Projects Plus Project conditions, all intersections affected by the project would operate at LOS above minimally acceptable City of Lodi standards.	LS	None required.	-
Impact TRANS-2: Conflict with Non-Motor Vehicle Transportation Plans. The project would not conflict with applicable non-motor vehicle transportation plans or their implementation.	LS	None required.	-
Impact TRANS-3: Safety Hazards. The project would include entrances designed to avoid safety issues, along with alterations to adjacent roads.	LS	None required.	-

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
Impact TRANS-4: Emergency Access. Adequate emergency access would be provided to the project site.	LS	None required.	-
Impact TRANS-5: Vehicle Miles Traveled. The project would lead to increased VMT.	S	**TRANS-1: The following mitigation measures shall apply to the residential portion of the project.** **Implement Subsidized or Discounted Transit Program.** See analysis of non-residential VMT impacts below. This improvement may result in marginal increases in transit usage but would not, however, result in a substantial net reduction in VMT. **Construct or Improve Pedestrian and Bike Facilities.** See TRANS-2, Provide Traffic Calming Measures below. Potential reductions in VMT associated with these improvements cannot be reliably quantified. **TRANS-2: The following measures shall apply to both the residential and non-residential components of the project:** • Implement a voluntary Commute Trip Reduction (CTR) program. • Implement an employee parking cash-out program. • Construct or improve bike facility. In addition to any bicycle parking requirements associated with building code requirements, the proposed hotel and retail commercial uses shall provide secure covered bicycle storage facilities for employee use as required by the Lodi Zoning Code.	SU
16.0 UTILITIES AND ENERGY			

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
Impact UTIL-1: Wastewater Services and Facilities. Average wastewater flows for the project can be accommodated by the WPCF without the need for new or expanded facilities or additional discharge approval by the RWQCB.	LS	None required.	-
Impact UTIL-2: Water Services and Facilities. The project would not place additional demand on the City's existing water supplies.	LS	None required.	-
Impact UTIL-3: Stormwater Services and Facilities. The City's existing storm drainage system has adequate capacity to accommodate the increase in storm drainage from the project; new stormwater drainage structures would not be required.	LS	None required.	-
Impact UTIL-4: Solid Waste. The project would not generate a substantial demand for solid waste services. Existing landfills in the County would have adequate capacity to accommodate project solid waste.	LS	None required.	-
Impact UTIL-5: Energy and Telecommunications Facilities. Existing electrical, natural gas, and telephone lines are available near the project site.	LS	None required.	-
Impact UTIL-6: Project Energy Consumption. Project construction and operations would not consume energy in a manner that is wasteful, inefficient, or unnecessary. Project has sustainability components that would further reduce energy consumption by operations.	LS	None required.	-
Impact UTIL-7: Consistency with Energy Efficiency Plans. The project would be consistent with the energy efficiency goals of CalGREEN and Title 24,	LS	None required.	-

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TABLE 2-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Significance Before Potential Impact	*Significance After Mitigation*	*Mitigation Measures*	*Mitigation*
and the energy efficiency objectives of the City's CAP.			

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3.0 PROJECT DESCRIPTION

3.1 PROJECT BRIEF

The proposed project involves the construction and operation of a mixed-use hotel/residential project containing a 96-suite "boutique" hotel and a separate standalone project of 150 one-, two- and three-bedroom apartment units on nine acres of a 9.75-acre site at the northeast corner of Turner Road and Lower Sacramento Road in Lodi, CA. Project location maps are shown in Chapter 1.0.

The proposed project site plan is shown on Figure 3-1 and the elements of the project are shown in more detail on the following figures. The project location and objectives are described in Sections 3.2 and 3.3. Project details related to proposed buildings, access, circulation, parking, project open space and amenities, utility services and other details are discussed in Section 3.4. Required approvals and permits are discussed in Section 3.5.

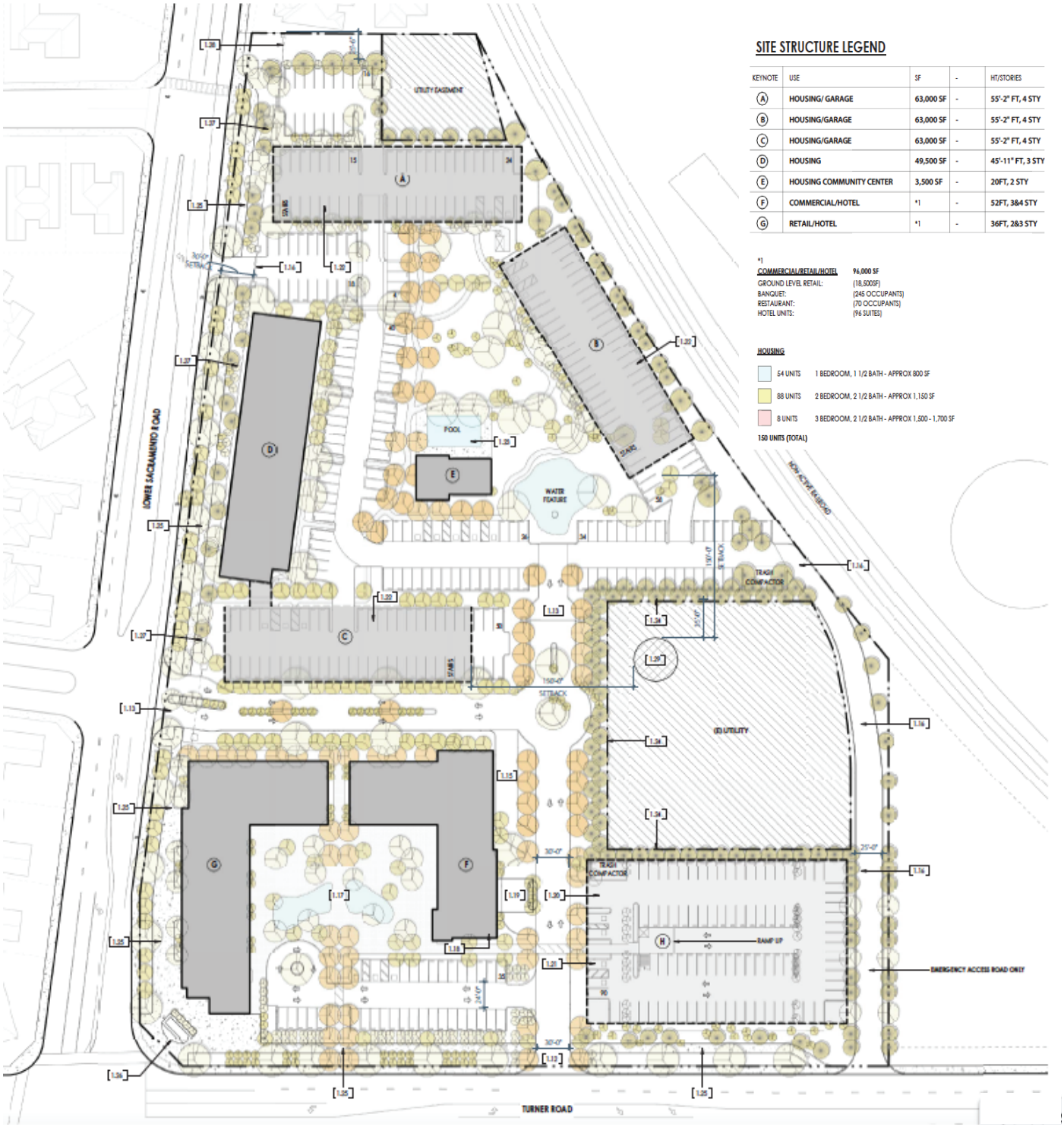
3.2 PROJECT LOCATION

The site is adjacent to Lower Sacramento Road and Turner Road northeast of their intersection in the City of Lodi in San Joaquin County (Chapter 1.0, Figures 1-1 through 1-5). The address of the project site is 1018 North Lower Sacramento Road.

The project site is approximately 0.25 miles south of the unincorporated community of Woodbridge and approximately 500 feet west of the City of Lodi's Lodi Lake regional park. The site is identified as Assessor's Parcel Numbers (APNs) 015-64-003 and -009. On the U.S. Geological Survey (USGS) Lodi North, California, 7.5-minute quadrangle map, the project site is within Section 34, Township 4 North, Range 6 East, Mt. Diablo Base and Meridian. The approximate latitude of the project site is 38º 08′ 48″ North, and the approximate longitude is 121º 18′ 05″ West.

3.3 PROJECT OBJECTIVES

The primary objective of the proposed project is to develop 150 apartment units, a 96-suite "boutique"-style hotel, associated hospitality-related facilities and 18,500 square feet of retail commercial space. The project would provide overnight accommodations for local and regional markets as well as an upscale living environment for persons who wish to invest and settle in the Lodi area. The specific project objectives are as follows:



SOURCE: NJA Architecture

Figure 3-1
OVERALL SITE PLAN

- Development of a commercial and residential Mixed-Use Center that contributes to City of Lodi economic and housing goals while providing an adequate return on investment for the property owner and applicant.
- To provide recreation and leisure services in an area of Lodi which is currently underserved with these uses.
- To take advantage of the site's location near Lodi Lake and in proximity to numerous local wineries to create a resort destination.
- To provide multi-family residential development approaching the maximum allowable density of the City's High Density Residential designation while maximizing open space and recreational amenities for residents.
- To develop and operate a destination hotel offering "boutique" accommodations, including a restaurant, banquet facility, and retail commercial, along with parking for all uses and landscaped open space areas.
- To develop the project site in a manner that is compatible with the operations of the adjacent NCPA power generation facility.

3.4 PROJECT DETAILS

The Lakehouse project would be constructed on two parcels totaling 9.75 acres. However, as one of the parcels is occupied by a telecommunications tower and accompanying easement, the actual project development would be limited to nine acres.

The project proposes the construction and operation of a boutique hotel, a restaurant, a banquet facility and retail commercial space and other related uses in the southern portion of the site. The northern portion of the site would be developed with a standalone project of 150 one-, two-, and three-bedroom market-rate apartments and community recreation facilities. Additional project components include access drives, covered and uncovered parking, pedestrian facilities, landscaping, and utility improvements. An overall site plan of the proposed project is shown on Figure 3-1. A summary of proposed buildings and site improvements is provided in Table 3-1 below. Detailed site plans and descriptions of individual project components are shown later in this section. None of the proposed hotel facilities except for a joint driveway accessing both projects from Lower Sacramento Road would be shared with the adjacent proposed residential units.

TABLE 3-1
LAKEHOUSE PROJECT
DEVELOPMENT QUANTITIES

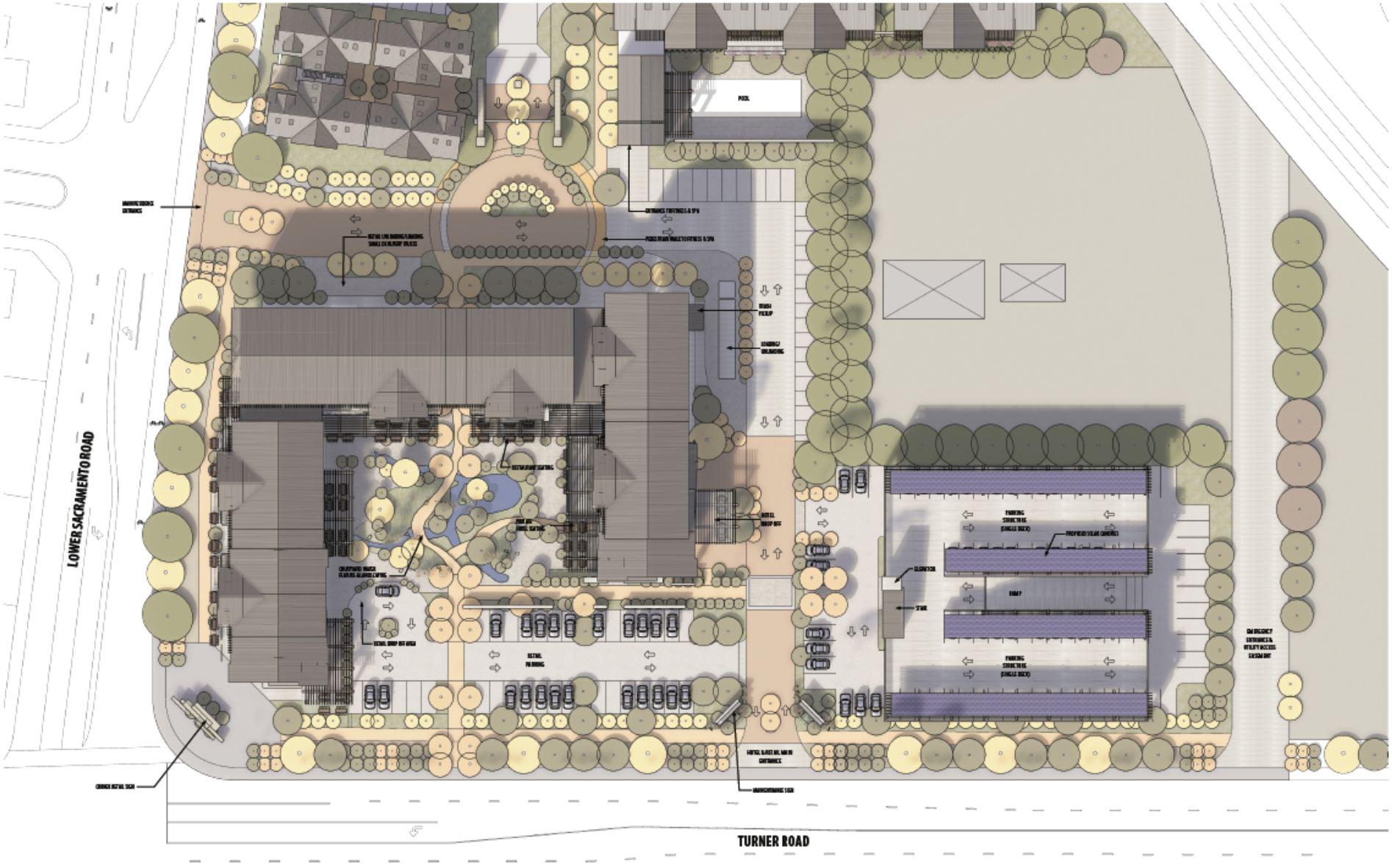
BOUTIQUE HOTEL	
Buildings	2
Building Height	2-4 stories
Guest Suites	96
Square Footage	96,000
Banquet Hall Occupancy	245
Banquet Hall Square Footage	3,600
Restaurant Seating Capacity	70
Ground Level Retail Square Footage	18,500
Parking Structure	180
Surface Parking	35
APARTMENT COMMUNITY	
Total Units	150
Apartment Buildings	4
Building Height, approximate feet	45-55
1-bedroom Units (800 square feet)	54
2-bedroom Units (1,150 square feet)	88
3-bedroom Units (1,500-1,700 square feet)	8
Community Building Square Footage	3,500
Community Building Height, feet	20
Covered Parking	130
Surface Parking (including 30 guest spaces)	158

3.4.1 "Boutique" Hotel and Retail

The boutique[1] hotel/retail portion of the would comprise two hotel buildings totaling 96,000 square feet in floor area and providing 96 guest suites. The proposed site plan for the hotel is shown on Figure 3-2.

The westernmost of the two buildings would be devoted primarily to hotel rooms. Building height would range from two to four stories, increasing with distance from Lower Sacramento Road. The easternmost hotel building would include the remaining rooms, the hotel lobby, approximately 18,500 square feet of ground floor retail space, a 3,600-square foot banquet hall with a maximum occupancy of 245, and a ground floor restaurant with a 70-seat capacity.

[1] As used here, "boutique" hotel is defined as, "a small stylish hotel, typically one situated in a fashionable urban location." Source: Oxford Languages.



BaseCamp Environmental

SOURCE: MRD Consulting and NJA Architecture

Figure 3-2
HOTEL SITE PLAN

Proposed retail space would be oriented to hotel guests and visitors but also open to the general public. The second-story banquet hall would provide space for conferences, meetings, or social events. Building height for the easternmost building would range from three to four stories, with building height increasing with distance from Lower Sacramento Road. Proposed hotel and banquet facilities would be subject to permitting by the California Department of Alcoholic Beverage Control (ABC) for alcohol sales only.

The hotel buildings would frame a 0.5-acre public garden between the two buildings and adjacent to the proposed retail space. The applicant indicates that the garden will include at-grade and raised drought-tolerant landscaping beds and water features.

A landscaped public pedestrian way approximately 30+ feet in width would be located along both the Lower Sacramento Road and Turner Road frontages. Pedestrian ways would be separated from the traffic lanes of the adjoining streets by approximately 20 feet of landscaped area and public sidewalk adjacent to the streets. Landscaping, including shade trees, would be provided along the public walkways as well as within the plaza courtyard.

Primary access to the hotel portion of the site would be provided by a 30-foot driveway entrance on Turner Road. Existing striping on Turner Road would be modified to delineate an eastbound left-turn-in pocket and an eastbound acceleration lane for outbound traffic. Secondary hotel area access would be provided from the main apartment area entry on Lower Sacramento Road.

Direct vehicular access to the hotel lobby will be provided by a covered drive-through on the east wall of the east building, which would be accessible from the main access drive. Vehicular access to retail space and the ground-floor restaurant would be provided by a 24-foot access aisle extending west from the main hotel access way and terminating in a roundabout. Service and supply vehicles would be accommodated at a service entrance adjacent to the east side of the hotel building.

Hotel and event parking would be provided by a 180-space two-level parking garage adjacent to Turner Road and east of the main hotel entry drive. The garage would be accessed from the main hotel entry drive. An additional 35 outdoor parking spaces would be available. Total parking for the hotel portion of the project would amount to 215 spaces.

Building elevations, massing and architecture are illustrated on Figures 3-3 through 3-8. The project design includes a number of roofline, height and setback variations, especially along Lower Sacramento Road intended to reduce inconsistency with nearby single-family residential development to the north and west. The consistency of proposed building features with the project surroundings is discussed in more detail Chapter 4.0 Aesthetics.



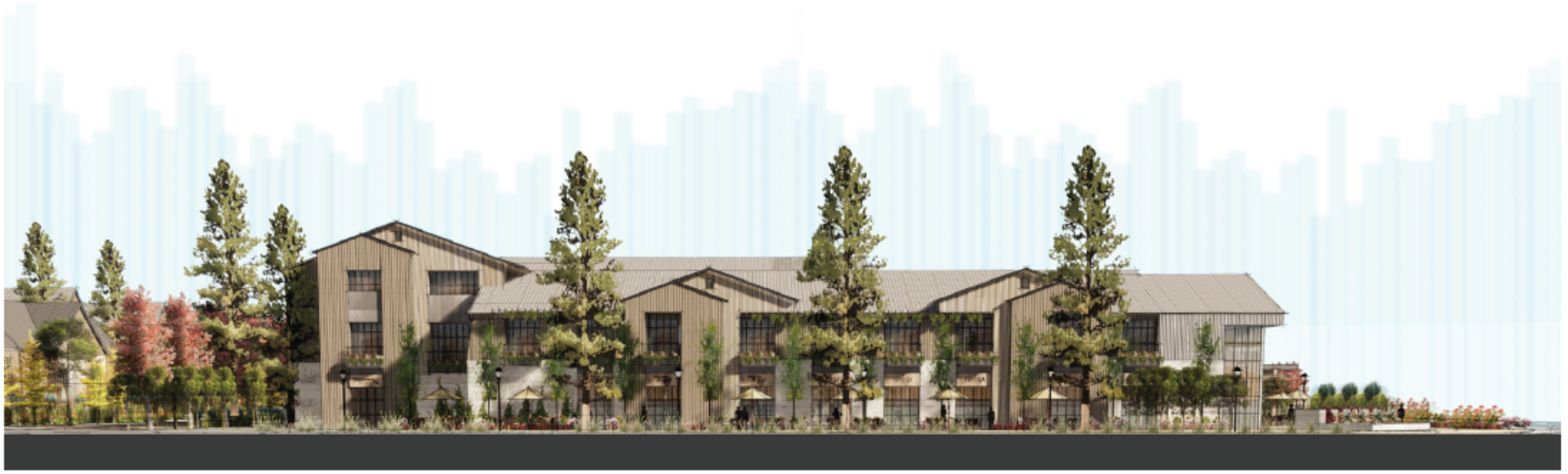
SOURCE: MRD Consulting and NJA Architecture

Figure 3-3
HOTEL AERIAL VIEW



SOURCE: MRD Consulting

Figure 3-4
HOTEL SOUTH ELEVATION



SOURCE: MRD Consulting

Figure 3-5
HOTEL WEST ELEVATION

3.4.2 Residential Apartment Complex

The proposed apartment residential complex in the northern portion of the project site would consist of four three- to four-story buildings. The proposed buildings, arranged along the site boundaries, enclose a central plaza area containing surface parking, a community center, pool, a water feature, open space and other recreational facilities (see Figures 3-6 through 3-8, below).

With the exception of one apartment building paralleling Lower Sacramento Road, the lower floor of each apartment structure would provide at-grade covered parking. Along Lower Sacramento Road, the maximum building height in each of the three buildings nearest the street corridor would be three stories. With distance from Lower Sacramento Road, the building height would increase to four stories.

A total of 150 market-rate rental units are proposed; the project would not offer any units below market rate.

- 54 units would be one-bedroom, 1.5-bathroom units approximately 800 square feet in floor area.
- 88 units would be two-bedroom, 2.5-bathroom units approximately 1,150 square feet in floor area.
- 8 units would be three-bedroom, 2.5-bathroom units ranging in floor area from 1,500 to 1,700 square feet.

The central area enclosed by the buildings would include a two-story community building approximately 3,500 square feet in floor area. The community building would areas for indoor activities such as a fitness facility, yoga, and an indoor club lounge. An outdoor pool and lounge would be located adjacent to this building. Apartment complex offices would be located in this building.

The project provides for internal pedestrian and bicycle circulation and connectivity as shown on the site plan, including interior and exterior sidewalks, landscaped courtyards, and bicycle parking. Proposed internal pedestrian ways would connect to proposed landscaped pedestrian ways and existing off-site sidewalk along the Turner Road frontage providing pedestrian access to public recreation facilities at Lodi Lake Park to the east.

Primary vehicular access to the apartment community would be provided by a median-divided driveway extending east onto the site from the intersection of Lower Sacramento Road and Woodlake Circle. No striping or other modifications to Lower Sacramento Road or this intersection are proposed. A turnaround and gated entry to the apartment community would be provided at the eastern end of the driveway.



SOURCE: MRD Consulting and NJA Architecture

Figure 3-6
APARTMENT ENTRY



SOURCE: MRD Consulting and NJA Architecture

Figure 3-7
APARTMENT AERIAL VIEW



SOURCE: MRD Consulting

Figure 3-8
HOUSING ELEVATION

Two emergency vehicle accesses to the apartment area would be provided, one by an existing driveway to the east of the Turner Road hotel entry; this driveway provides access to the adjacent NCPA power facility. An additional gated driveway would provide emergency vehicle access to the northern portion of the apartment area from Lower Sacramento Road.

Apartment complex parking would include 130 covered spaces and 128 uncovered spaces for residents, plus 30 spaces for guests, for a total of 288 parking spaces. The covered spaces would be at-grade spaces located beneath three of the proposed apartment buildings. The uncovered spaces would be located in the central portion of the apartment complex, adjacent to proposed access driveways.

The project would include bicycle parking as required by the Lodi Zoning Ordinance. Under the Zoning Ordinance, one bicycle parking stall is required for every two multi-family dwelling units. Thus, the proposed apartment complex would require a total of 75 bicycle spaces. The Zoning Ordinance also requires commercial land uses to install four bicycle parking stalls or 20 percent of required off-street auto parking stalls, whichever is greater, up to a maximum of 30 bicycle spaces, for a total of 105 bicycle spaces.

3.4.3 Utilities

The project would obtain utility service (water, sewer, etc.) from facilities located in the adjoining public streets. Potable water and storm drainage services would be provided by connecting to existing City of Lodi lines adjacent to the project. An on-site storm drainage collection system will include detention and water quality treatment prior to discharge to existing City lines in the adjoining streets. Storm water treatment and volume control would be provided using pervious pavers, bioswales, rain gardens and similar facilities, which would be specified in a Project Stormwater Plan to be submitted to the City for review and approval.

Wastewater service would be extended to the site from an existing wastewater manhole located west of the corner of Turner Road and Mills Avenue. Project wastewater would be pumped to the existing manhole by a new on-site pump station via a new force main to be installed in existing paved portions of Turner Road in conjunction with the project.

Electrical service would be provided to the project from existing underground Lodi Electric Utility (LEU) lines adjacent to the site. Natural gas service would be extended to the site from an existing Pacific Gas and Electric Company (PG&E) gas main in the project vicinity. Communication lines, such as telephone and cable television, would be extended onto the site from existing lines along Turner Road and Lower Sacramento Road.

3.4.4 Landscaping, Lighting and Signs

Areas not proposed for building or pavement will be landscaped in accordance with City landscaping standards. The project would require submittal of a formal Landscape Plan that details the location, type and irrigation of proposed landscaping materials. Proposed landscaping for the site as a whole is shown conceptually on Figure 3-1.

The Landscape Plan would be required to conform to the City's Landscape Development Code (Title 17.30) and would require City approval prior to issuance of a building permit. The project also would include a Lighting and Photometric Plan that would be consistent with The Department Code as well as State Building Energy Efficiency Standards, which include the use of LED light fixtures, time switches, and motion sensors.

A monument sign would be installed at the corner of Turner Road and Lower Sacramento Road. A water feature is proposed at the entrance to the apartment complex. Landscaping would also include the construction of a 14-foot masonry wall along the site boundary shared with the adjacent NCPA station, to function as a noise barrier. The effectiveness of this barrier is discussed in the Worley noise study, which is shown together with a peer review of the study by an acoustical consultant, in Appendix G.

3.4.5 Project Construction

The project proposes to demolish all of the existing buildings on the site, which constitute approximately 2,419 square feet of building space. Remnant orchard trees and a railroad spur traversing the central portion of the project site would also be removed. Existing evergreen trees would be preserved wherever they can be accommodated in the overall site plan.

Project construction would begin with grading and excavation as required to accommodate the proposed new buildings and site improvements. The site would be graded and recompacted as required to establish desired subgrades for proposed aggregate base and pavement, which would be imported and placed on the site. Underground utility lines and building, signage, and light standard foundations would be excavated where needed. Construction of the buildings and site improvements would proceed as sequenced by the contractor, in accordance with plans and specifications approved by the City. Project construction would be accomplished using conventional equipment.

As noted, entryways would be constructed off Turner Road and Lower Sacramento Road. The entryways would be consistent with City standards and specifications. Onsite wastewater, water, and storm drainage lines would be installed and connected to offsite mains along Lower Sacramento Road and Turner Road. No utility or infrastructure improvement plans for the project have been prepared at this time.

3.5 PERMITS AND APPROVALS

General Plan Land Use Map Amendment

As part of the proposed project, the Lodi General Plan would be amended to change the existing Industrial designation of the project site to Mixed Use Center. The Lodi General Plan states that Mixed Use Centers are intended to be focal points for new development and to include a mix of medium- to high-density residential and commercial uses that are adjacent to parks and near schools and public facilities. Essential components of Mixed Use Centers are their connectivity to the existing urban form and the establishment of

pedestrian and bicycle friendly streetscapes and publicly accessible parks. Approval of the proposed General Plan Amendment would allow for the proposed development of the hotel, apartments, retail space, and related site improvements. The proposed General Plan Amendment is shown in Figure 3-9, below.

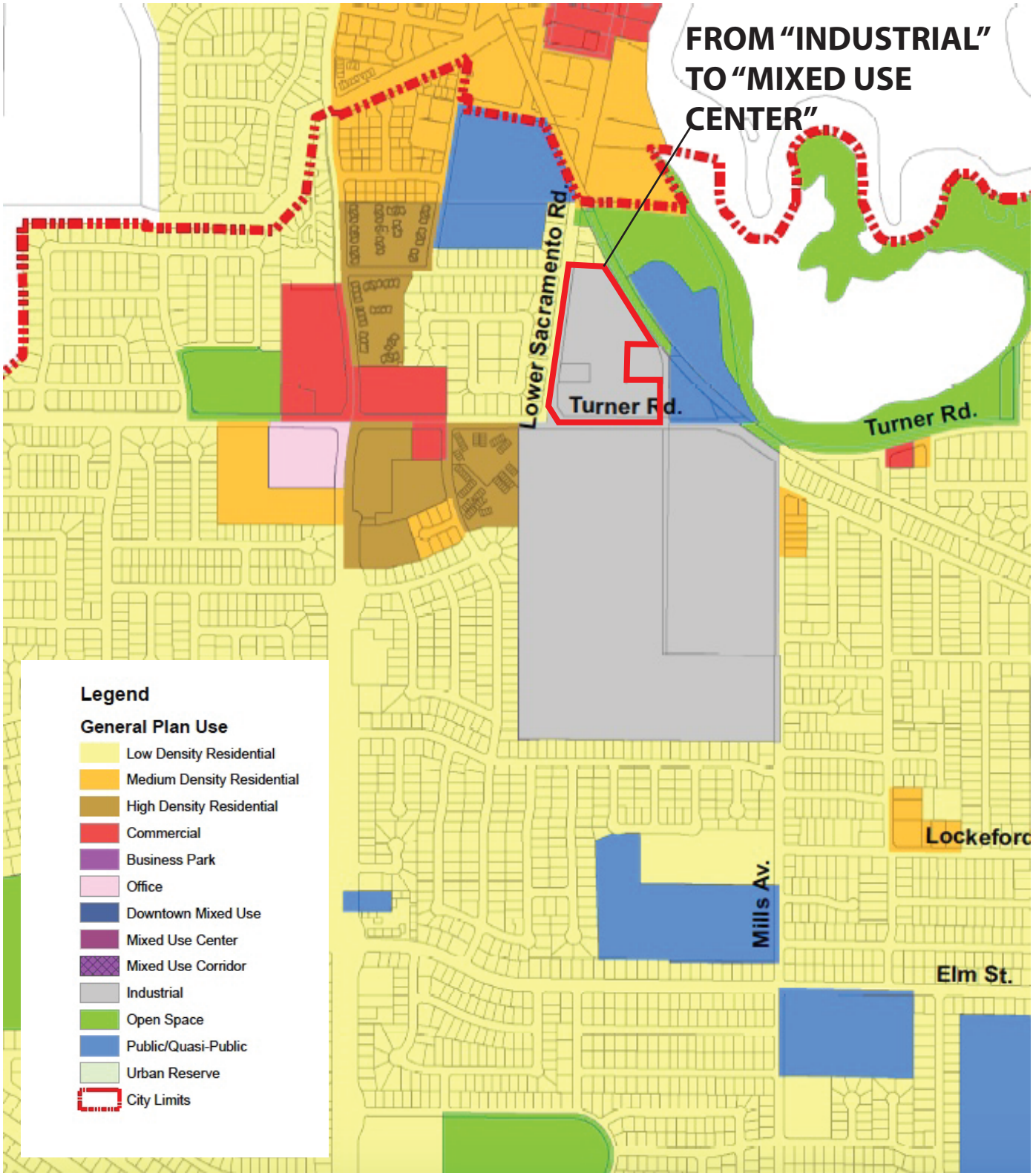
Rezoning

The project includes a request to rezone the site from the existing Industrial zoning to MCE Mixed Use Center, consistent with the proposed General Plan Amendment (Figure 3-9). The mixed use zoning districts including MCE are intended to provide for a range of uses, emphasizing high quality development, and to encourage revitalization of existing land uses. The MCE zoning district provides for a variety of residential, office, neighborhood commercial and public uses. The maximum FAR in the MCE District is 1.0. Multi-family dwellings , general retail and restaurants are allowed uses within the MCE district. Hotels, motels, parking facilities and on-site sales of alcoholic beverages require City approval of a Use Permit. As noted, hotels, motels, parking facilities and on-site alcoholic beverage sales require City approval of a Conditional Use Permit.

Site Plan and Architectural Review

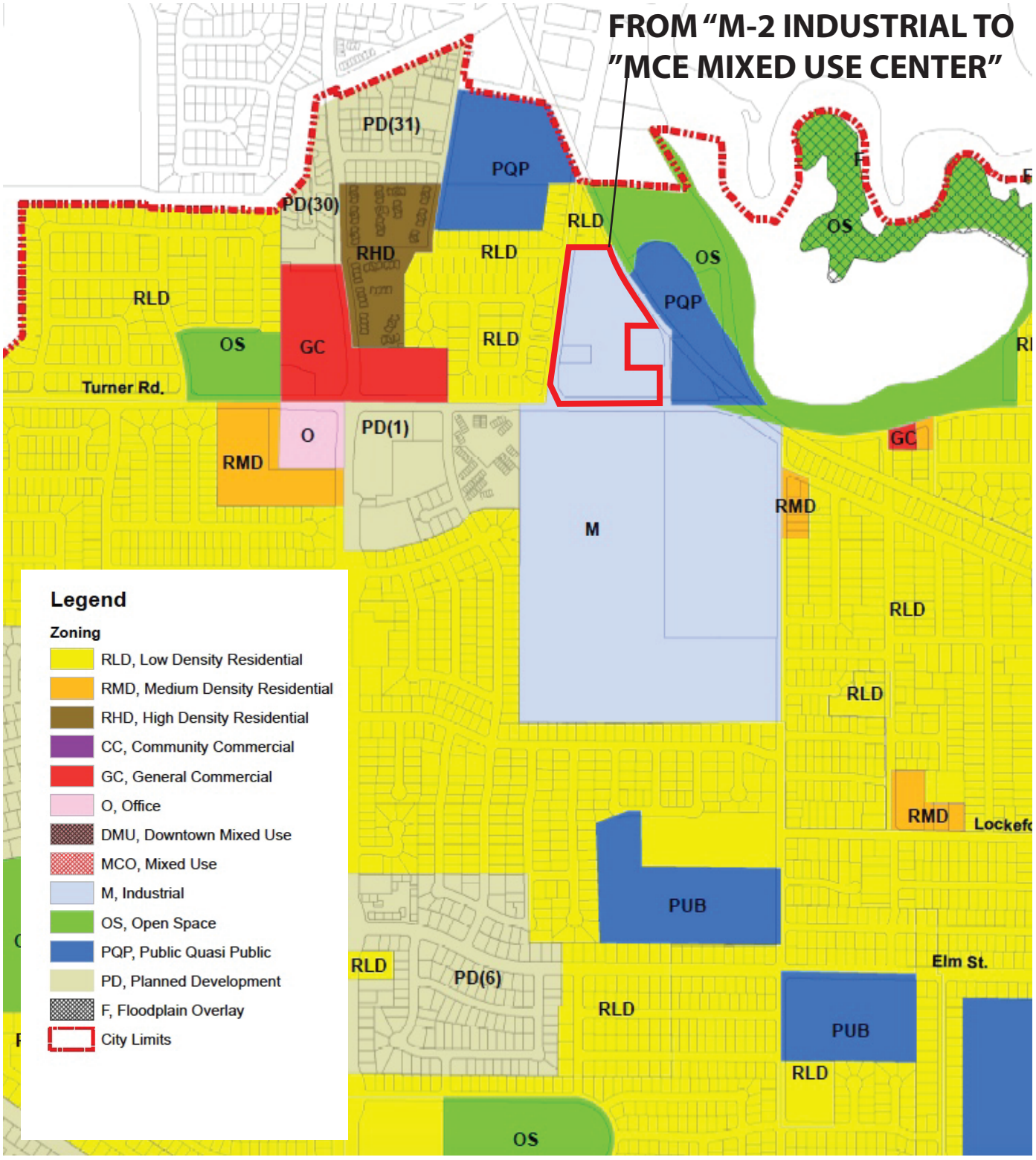
The project will be subject to site plan and architectural review, landscaping plan review and review for consistency with other established City design standards during the processing of the general plan amendment, rezoning and use permit review processes, including consistency with the City's adopted design guidelines.

Table 3-2 provides a summary of permits and approvals that would be required for the project. These include a liquor license to be issued by the California Department of Alcoholic Beverage Control for on-site sales of alcoholic beverages.



SOURCE: Lodi General Plan

Figure 3-9
PROPOSED GENERAL PLAN AMENDMENT



SOURCE: Lodi Zoning Map

TABLE 3-2

REQUIRED PERMITS AND APPROVALS FOR PROJECT

Agency	Permit/Approval
City of Lodi, City Council	Certification of Final Environmental Impact Report, adoption of CEQA findings and mitigation monitoring program General Plan Amendment - Industrial to Mixed Use Center Change of Zoning – Industrial to Mixed Use Center Approval of Growth Allocations by the City Council for the proposed residential units
City of Lodi, Planning Commission	Recommendations to the City Council on proposed General Plan and zoning changes, Conditional Use Permit for operation of a hotel, and on-site alcoholic beverage sales.
City of Lodi, Site Plan and Architectural Review Commission	Site Plan and Architectural Review for all proposed buildings and site improvements
City of Lodi, Community Development Department	Review and approval of site plan and landscaping plan Demolition and building permits from Building Inspection Division
City of Lodi, Public Works Department	Encroachment permits for road work Agreement with project applicant on connections to City's water, sewer, and storm drainage systems Review and approval of erosion control plan and Project Stormwater Plan
California Department of Alcoholic Beverage Control	Liquor license for on-site alcoholic beverage sales

4.0 AESTHETICS AND VISUAL RESOURCES

ENVIRONMENTAL SETTING

Aesthetics/Visual Resource Background

The aesthetic value assigned to a resource varies significantly from person to person, depending on their ideas and perceptions. This makes aesthetic and visual resource impacts among the more complex environmental impacts to assess. Despite the inherent difficulties, methods for assessing aesthetic values have been developed, including quantitative ones. Although this analysis will not attempt a quantitative assessment of aesthetic values, it will evaluate the key functions associated with aesthetics and visual resources.

In general, the value of visual resources of a geographic area is a function of the following:

1) Landscape character
2) Distance between the affected landscape and viewer
3) Number and sensitivity of viewers

Landscape character may be defined as distinctive, common, or minimal. "Distinctive" landscapes include those with unusual topography or vegetation, or for urban landscapes unique or aesthetically pleasing design or landscaping elements. "Common" landscapes, both natural and urban, have elements that are prevalent and relatively uniform in the analysis area. "Minimal" landscapes include extensive areas of very repetitive or uninteresting elements, as well as areas highly disturbed by development activities.

The sensitivity of potential viewer areas may range from low to high, depending on the nature and expectations of users and the duration of use of the area. Areas of high sensitivity typically include recreation sites and scenic routes. Areas of moderate sensitivity include residential areas of common character but involving long exposure times of viewers. Areas of low sensitivity include high-volume and/or high-speed travel corridors through urbanized areas.

A recent change to the Environmental Checklist in CEQA Guidelines Appendix G emphasizes aesthetic and visual resource impacts on public views in non-urbanized areas. As defined in Appendix G, "public views" are views that are experienced from publicly accessible vantage points. Although not specifically defined, "publicly accessible vantage points" are assumed to include, though not necessarily limited to, public roads, parks, trails, and vista turnouts. For this project, publicly accessible vantage points would include Lodi Lake Park, Lower Sacramento Road, and Turner Road.

Aesthetic/Visual Resources on Project Site and in Vicinity

Project Site

There are no substantial distance views from public streets in the project vicinity. Views are confined mainly to the street area and immediate foreground by existing buildings and landscaping adjoining the streets. According to the Lodi General Plan and the California Department of Transportation, there are no existing federal, state, or local designated scenic vistas, roads, or highways in the project vicinity.

Turner Road and Lower Sacramento Road bound the project site to the south and west, respectively. Pedestrians and motorists using Turner Road have direct foreground views of the project site that are partially obstructed by a chain link fence. At the Lakewood Circle residential area west of the site, there are no direct views of the project site except from a few residences at the entry, as the subdivision is surrounded by an existing 8-foot decorative masonry block wall. There are no ground-level views of the interior project site from Lower Sacramento Road, due to a slatted chain link fence that lines the street frontage.

The canopy of the relatively dense ornamental tree plantings within the project site are visible above the fencing. The tree canopy suggests the presence of open space, which is notable and of interest to residents of the area that frequently pass the site. However, due to the screening effect and ordinary appearance of the fencing, these views are not aesthetically important. The top half of a cellular communications tower, approximately 150 feet in height, can be seen above the tree canopy in the northeast corner of the project site.

Project Vicinity

Views in the project vicinity consist of both urban and natural elements and are similar to those of other urban areas in the San Joaquin Valley. The most prominent visual features in the vicinity include the former General Mills facility south of Turner Road, the NCPA station, the City's water treatment plant, a LEU substation, Lodi Lake Park, single-family residences, and a railroad spur.

The 75-acre former General Mills facility is opposite the project site south of Turner Road. The massive and architecturally featureless building exceeds 40 feet in height in the general vicinity of Turner Road, looming over the streetscape opposite the project frontage, although some evergreen trees planted along the south side of Turner Road partially screen the facility.

The NCPA station, the City of Lodi Surface Water Treatment Facility (SWTF), and the LEU substation are located between the project site and Lodi Lake. Visual elements of these facilities include electrical lines, fuel supply tank, boiler, compressor, air intakes, electric transformers, and supply lines. The SWTF is less congested and includes two brick buildings, a large water storage tank, parking, and open space.

Lodi Lake Park, east of the project site, is a regional park along the Mokelumne River. The park surrounds Lodi Lake and includes river frontage. The lake, a sand beach, and picnic areas are highly visible from Turner Road between Mills Avenue and Laurel Avenue.

Additional information on Lodi Lake Park is provided in Chapter 14.0, Public Services and Recreation.

Single-family homes, landscaping trees, streets, and sidewalks make up the views to the west of the project site. Additional single-family homes are located immediately to the north, separated from the project site by a masonry wall approximately six feet in height. An existing Union Pacific railroad spur parallels the eastern boundary of the project site. A line of mature oaks is located within the spur right-of-way, immediately east of the project boundary. This spur crosses Turner Road and is readily visible to motorists on this road. A second railroad spur on the project site is not visible to the public.

Existing Lighting

The project site itself is not lighted. There are four pole-mounted streetlights along Turner Road and five pole-mounted streetlights along Lower Sacramento Road that are adjacent to the project site. There is one pole-mounted streetlight at each corner of the Lower Sacramento Road/Turner Road intersection. The internal streets in the Lakewood Circle residential area to the west are lighted. Security lighting is provided at the LEU substation and the NCPA station immediately to the east of the project site and at the former General Mills facility to the south.

REGULATORY FRAMEWORK

California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. The laws governing the Scenic Highway Program are found in Streets and Highways Code Section 260 *et seq*. A highway may be designated scenic based on the scenic quality of the landscape, how much of the natural landscape can be seen by travelers, and the extent to which development intrudes upon the traveler's enjoyment of the view.

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. According to the Caltrans list of designated scenic highways under the California Scenic Highway Program, there are only two officially designated state scenic highways within San Joaquin County: Interstate 5 (I-5) from the Stanislaus County Line to Interstate 580 (0.7 miles), and Interstate 580 from I-5 to the Alameda County Line (15.4 miles). Both are officially designated state scenic highways in southwestern San Joaquin County (Caltrans 2017).

San Joaquin County Scenic Highways

The Natural and Cultural Resources Element of the recently updated San Joaquin County General Plan contains goals and policies related to aesthetics and visual resources. Goal NCR-7 is "To protect and enhance the unique scenic features of San Joaquin County." Policy NCR-7.1 states that the County shall protect the visual character of designated scenic roadways. Policy NCR-7.3 states that the County shall preserve scenic views from

roadways by designating scenic routes based on several criteria listed in this policy. The County has designated 26 local scenic highways, but none are in the project vicinity (San Joaquin County 2016a).

CALGreen

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), known as CALGreen, establishes building design and construction standards that have a reduced negative or a positive environmental impact and that encourage sustainable construction practices. Section 5.106.8, Light Pollution Reduction, establishes mandatory requirements for outdoor lighting systems of non-residential development that are designed to minimize the effects of light pollution. The City of Lodi has adopted the 2019 version of CALGreen by reference in Lodi Municipal Code Chapter 15.18.

Lodi Municipal Code

Title 17 of the Lodi Municipal Code, referred to as the Development Code, implements the City's General Plan by classifying and regulating land uses and structural development within Lodi; by protecting and promoting the public health, safety, and general welfare; and by preserving and enhancing the aesthetic quality of Lodi. The following provisions of the Development Code affect the aesthetic and visual impacts of new development projects.

Section 17.14.070, Lighting

This section states that exterior lighting fixtures shall not exceed a height of twenty feet or the height of the nearest building, whichever is less. Lighting shall be energy-efficient and shielded or recessed so that direct glare and reflections are confined to the maximum extent feasible within the boundaries of the site. Also, lighting shall be directed downward and away from adjoining properties and public rights-of-way. All lighting fixtures shall be appropriate in scale, intensity, and height to the use they are serving.

Section 17.14.080, Screening

This section establishes standards for the screening and separation of adjoining residential and non-residential land uses, equipment and outdoor storage areas, and surface parking areas. A solid, decorative masonry wall, of minimum six feet in height, shall be installed along parcel boundaries whenever a non-residential use adjoins a residential zoning district. The maximum height of the wall shall comply with the provisions of Section 17.14.100 (Walls, Fences, and Hedges). The wall shall be architecturally treated on both sides, subject to the approval of the Community Development Director.

Chapter 17.16, Applicability and General Design Guidelines

The design guidelines in this chapter are intended to assist property owners and project designers in understanding the City's goals for attaining high-quality development that is sensitive to the City's unique character. Issues covered by these guidelines, among others, include landscaping, lighting fixtures, on-site pedestrian amenities (e.g., benches, drinking fountains), and screening of features. The guidelines will be used by City staff and the Site Plan and Architectural Review Committee during the design review process, and by the

Planning Commission in the review of land use permit applications. The design guidelines in this article apply to all development within the City.

Chapter 17.22 – Mixed Use Zoning Districts

The project would request a rezoning of the project site to Mixed Use Center (MCE). The mixed-use zoning districts in the Lodi Municipal Code are intended to provide for a range of uses, emphasizing high quality development, and to encourage revitalization of existing land uses. The MCE zone specifically provides for a variety of residential, office, neighborhood commercial, and public uses. Proposed development shall comply with the requirements specified for the MCE in Chapter 17.22, including that landscaping shall be provided as required by Lodi Municipal Code Chapter 17.30.

The project site is currently zoned M – Industrial. As set forth in Section 17.24.040, development in the M zone is required to have front and street side setbacks of a minimum of 10 feet. No rear setbacks are required except when adjacent to a residential zone boundary, where a minimum of 20 feet is required. Building height shall be limited to no higher than 70 feet. A minimum of 10 feet of landscaping shall be provided across the entire frontage of an industrial building, and landscaping shall be provided as required by Chapter 17.30 (Landscaping).

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on aesthetics and visual resources if it would:

- Have a substantial adverse effect on a scenic vista,
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway,
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings; or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality, or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As a result of a recent change to State law, some projects do not require an analysis of their aesthetic impacts. Public Resources Code Section 21099 states that the aesthetic and parking impacts of residential, mixed-use residential, or employment center projects on an infill site within a transit priority area shall not be considered significant. The Environmental Checklist in Appendix G of the CEQA Guidelines was recently revised to incorporate this new law. While the project analyzed in this EIR has a residential component and appears to meet the infill definition of Public Resources Code Section 21099, there are no designated transit priority areas in Lodi. Therefore, this EIR analyzes the aesthetic impacts of the project.

Impact AES-1: Scenic Vistas

The project site is in an urban area, surrounded by view-obscuring urban development and landscaping such as trees. Distant views or scenic vistas are not available from the project site or streets in the vicinity. Since no scenic vistas are available, the proposed project structures would not obscure any existing scenic vistas. Proposed guest suites and apartment units would reach 3-4 stories in height and may open up distance views for apartment residents and hotel or guests at hotel-hosted events. This would be considered a minor beneficial impact.

The project would have no adverse impact on scenic vistas.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AES-2: Scenic Resources

There are no substantial scenic resources located on the project site. The site itself is planted with a wide range of mature ornamental trees and remnant orchard trees, the canopy of which is visible from off-site areas above the slatted chain link fence that obscures ground-level/views of the site. Many, if not most, of these trees would be removed in conjunction with proposed development and would be replaced by buildings, perimeter trees, and landscape plantings. Due to the presence of the fence, the trees do not comprise an important scenic resource, and their removal would not constitute a significant adverse aesthetic effect. The project would replace the mostly grass undergrowth, an unused railroad spur, and two storage buildings, none of which have scenic resource value.

Lodi Lake Park is the most significant scenic resource in the area. The project site is set back at least 600 feet from the park, and the NCPA station, LEU substation, and the SWTF are between the project site and the park. The project would not affect the scenic resources within the park. As noted, there are no State or local scenic highways near the project site. Project impacts on scenic resources would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AES-3: Visual Character and Quality

As viewed from surrounding land uses, and by motorists and pedestrians along Lower Sacramento Road and Turner Roads, overall views toward the project site would change substantially from the existing views of the slatted perimeter fence and screened views of grass undergrowth and trees on the site to those of the proposed hotel and residential development.

Views from the residential development north of the project site are currently of the grass and trees that are partially screened by an existing six-foot masonry wall, along with the adjacent cellular telephone tower. This view would be substantially altered with the construction of the apartment complex. The project proposes a three-story structure that

would be a prominent visual feature from this development, although an on-site parking area, landscaping, and the existing cell tower would separate this apartment building from the northern site boundary. This structure would substantially block views to the south from the existing residential development. However, the quality of the existing views is limited, and the cellular tower and the existing six-foot masonry wall already encroach on these views.

Foreground views of the project site for those entering and exiting the Woodlake residential west of Lower Sacramento Road are currently of the slatted perimeter fence and screened views of grass undergrowth and trees on the site. After the project, views would be of the proposed residential area entrance and apartment buildings, the nearest row of hotel buildings, and the screening trees and landscaping along Lower Sacramento Road. From this perspective, as illustrated in the project elevations and perspective drawings (see illustrative figures, Chapter 3.0) views of the project are expected to be visually pleasing, particularly when compared with existing views of the slatted fence and overgrowth. As illustrated in Figure 3-5 in Chapter 3.0, the portion of the hotel located along Lower Sacramento Road would be one story with at-grade retail and with stepped down elevations to reduce massing. In addition, the apartments include sub-grade parking to reduce the scale and height of the buildings. Partial views of the apartment buildings would be possible from the two residences to the north; these views are expected to be consistent with these and other existing residential units in the project vicinity.

Public views from Turner Road, like those from Lower Sacramento Road, consist mainly of the slatted perimeter fence and screened views of grass undergrowth and trees. After the project, views would be of the proposed hotel buildings. From this perspective, views of the developed project are expected to be visually pleasing when compared with existing views of the slatted fence and overgrowth. As illustrated in Figure 3-4 in Chapter 3.0, the portion of the hotel located along Turner Road would be two-story; however, most of the hotel would be set back from the road to reduce massing.

Public views from Lodi Lake Park, including from trails surrounding the lake, would not be significantly affected by project development. As discussed under Impact AES-2, the project site is separated at least 600 feet from Lodi Lake, and there is intervening development and vegetation between the project site and park. Moreover, Lodi Lake Park is surrounded by trees, located mainly along the park trails. The trees would obscure views to the west, where the project would be developed. Landscaping on the project site would further obscure views of project structures from the park.

The proposed development would include design features that make the structures more aesthetically appealing, as illustrated by the figures in Chapter 3.0, Project Description. The project is designed to complement the character of the adjacent residential area with a traditional gable roof, articulation in massing, and inviting materials. The height and scale of the buildings would be mitigated through "layering" strategies, whereby the overall scale of the building would be broken down into smaller elements. With the incorporation of landscaping, the visual character of the project would be similar to much of the visual character north of Turner Road, which includes a landscaped residential subdivision and Lodi Lake Park. It also would reduce the prominence of the utility features in the area landscape.

The removal of trees and development of the project site as proposed would not substantially change, and to an extent be an improvement on, existing scenic character of the project vicinity. As shown in the proposed architectural elevations and perspective drawings in Chapter 3.0, the project would result in hotel and residential structures that are similar in scale, architectural detail, and effectiveness of landscaping with existing single-family residential areas to the west and north. Proposed development would be in beneficial contrast to the industrial nature of the nearby former General Mills facility and the adjacent NCPA station, cellular tower, and LEU substation facilities.

Continuous landscaping screening trees and a landscape buffer are proposed to be planted along the Lower Sacramento Road and Turner Road frontages. Landscaped courtyards, entrances, patios, and open spaces consisting of native trees, plants, flowers, and shrubs are incorporated throughout the design of the hotel and apartments. The addition of these project features together with the project as a whole would improve the visual landscape in the area.

All building design elements, landscaping, and site improvements are required to be designed and constructed to meet the aesthetic and visual standards of the City of Lodi as will be determined during the City's design review process, as well as with applicable provisions of the Lodi Municipal Code. The project can be expected to result in visually high-quality development that is compatible with the surrounding aesthetic environment. As a result, the proposed project would not substantially degrade the aesthetic character or quality of the project vicinity. Project impacts on visual character and quality are considered less than significant and may be beneficial.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AES-4: Light and Glare

Lighting impacts are evaluated in terms of a project's change in ambient lighting conditions and proximity to light sensitive land uses such as residential areas and school sites. As the project site currently has no existing night lighting, proposed development would involve an increase in night lighting and potential for light and glare impacts. Potential lighting effects would be associated with illumination of new internal access drives, parking areas, and driveway entrances, security lighting along buildings and sidewalks and signage.

Planned street, security, parking, and other lighting systems would be similar to lighting at existing development in the City of Lodi. It is anticipated that project lighting will be relatively subdued and consistent with the nature of the proposed uses. Access drives, parking and pedestrian ways would be lighted to provide adequate light to provide for safe driver and pedestrian movement and adequate security and visibility in parking areas. Security and accent lighting would be provided on buildings to enhance the aesthetics of nighttime views of the project. None of these lighting features would be installed in the immediate vicinity of adjacent residences, which are the only light-sensitive land uses near the project. Most of the residences fronting on Lower Sacramento Road have substantial existing decorative night lighting.

The project is not expected to result in any substantial glare effects. As required by the Lodi Municipal Code, all lights would be shielded to direct light and glare towards the ground. The City would require the project applicant to submit a photometric plan in accordance with California's 2019 Building Energy Efficiency Standards, Title 24, Part 6, the outdoor lighting requirements of CALGreen, and the City's design guidelines for lighting. The photometric plan would include lighting controls such as the use of LED light fixtures, time switches, and motion sensors for all exterior lighting. Pole-mounted light fixtures would be appropriately angled to minimize light exposure. The photometric plan would be submitted to the City prior to the issuance of any construction permits. Implementation of the photometric plan would reduce both generation of exterior light and the potential for light to indirectly affect surrounding areas.

With implementation of the approved photometric plan and compliance with applicable provisions of the Lodi Municipal Code, indirect illumination of properties adjacent to the project site would be minimized, along with potential glare. Project impacts from light and glare would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

5.0. AIR QUALITY

This chapter analyzes the project's impacts on air quality, specifically as they relate to pollutants regulated by the federal and California Clean Air Acts. Greenhouse gases (GHGs), gases that trap heat generated by the sun, are regulated separately from other air pollutants. Chapter 9.0, Greenhouse Gas Emissions, discusses the potential environmental impacts of the project as they relate to GHG emissions.

ENVIRONMENTAL SETTING

The project site is located within the northern portion of the San Joaquin Valley Air Basin (Air Basin). The Air Basin is bounded generally by the Coast Ranges to the west and the Sierra Nevada and foothills to the east. The prevailing winds are from the west and north, a result of marine breezes that enter the Air Basin primarily through the Carquinez Strait but also through the Altamont Pass. Surrounding topography results in weak air flow, which makes the Air Basin highly susceptible to pollutant accumulation over time. Summers are hot and dry, and winters are cool. Most of the annual precipitation falls from November through April. The Lodi area enjoys more than 260 days of sunshine annually, but fog and intermittently stormy weather reduce the amount of sunshine during the winter months. Inversions occur frequently during fall and early winter (SJVAPCD 2015a).

On some days, pollutants transported from the Bay Area impact the northern San Joaquin Valley, mixing with local emissions to contribute to State and federal violations at monitoring stations in Stockton and Modesto. Under certain conditions, pollutants from the San Joaquin Valley can be transported to Sacramento, and the Delta breeze typically carries polluted air from the valley to the Sierra Nevada and eastern foothills. Air Basin pollution can also significantly affect the Great Basin, Mojave Desert, and central California coast areas (ARB 2001).

Air Pollutants

Pollutants of concern for development projects typically include ozone, particulate matter, and carbon monoxide. Pollutants of concern also include what are called "toxic air contaminants" (TACs).

Ozone. Ozone is not directly produced; rather, it is a product of reactive organic gases (ROG) and nitrogen oxides (NO_x) reacting in the presence of sunlight. Automobile emissions represent the principal source of ROG and NO_x, referred to as "ozone precursors." To control ozone pollution, it is necessary to control emissions of these ozone precursors.

High concentrations of ground-level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments. More specifically, ground-level ozone may:

- Make it more difficult to breathe deeply and vigorously.
- Cause shortness of breath, and pain when taking a deep breath.
- Cause coughing and sore or scratchy throat.
- Inflame and damage the airways.
- Aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.
- Increase the frequency of asthma attacks.
- Make the lungs more susceptible to infection.
- Continue to damage the lungs even when the symptoms have disappeared.
- Cause chronic obstructive pulmonary disease.

People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. In addition, people with certain genetic characteristics, and people with reduced intake of certain nutrients, such as vitamins C and E, are at greater risk from ozone exposure (EPA 2018a). Ozone also damages natural ecosystems such as forests and foothill communities, agricultural crops, and some man-made materials such as rubber, paint, and plastics.

Particulate Matter and Fine Particulate Matter (PM_{10} and $PM_{2.5}$). Particulates include any solid matter suspended in air. Standards are applied to particulates 10 micrometers in diameter or less (PM_{10}), because these particles, when inhaled, are not filtered out prior to reaching the lungs, where they can aggravate respiratory diseases. Particulates originate from automobile traffic, urban construction, grading, farm tilling, and other activities that expose soil and dust. Dry summer conditions and daily winds can increase particulate concentrations. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including:

- Premature death in people with heart or lung disease.
- Non-fatal heart attacks.
- Irregular heartbeat.
- Aggravated asthma.
- Decreased lung function.

- Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

People with heart or lung diseases, children, and older adults are the most likely to be affected by particle pollution exposure (EPA 2018b).

Separate standards have been established for particulate matter that is 2.5 micrometers or less in size ($PM_{2.5}$), sometimes referred to as "fine particulate matter." The $PM_{2.5}$ standards reflect health concerns related to respiration of smaller particles. Fine particulates include sulfates, nitrates, organics, ammonium and lead compounds originating from some activities in urban areas.

Carbon Monoxide (CO). CO is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels. The main source of CO in the San Joaquin Valley is on-road motor vehicles. Other CO sources in the Valley include other mobile sources, miscellaneous processes, and fuel combustion from stationary sources. Because of its ability to readily combine with hemoglobin and displace oxygen in the human body, high levels of CO can produce hazardous conditions, especially for elderly people or individuals with respiratory ailments, including fatigue, headache, confusion, and dizziness.

In 2019, approximately 1,017 tons of ROG and 218 tons of NO_x were emitted each day from sources in the San Joaquin Valley Air Basin. Approximately 316 tons of PM_{10}, of which approximately 103 tons were $PM_{2.5}$, were emitted daily. Areawide sources account for most of the ROG emissions; major sources include farming operations, solvent evaporation, cleaning and surface coatings, and waste disposal. Major sources of PM_{10} emissions are also areawide; these include farming operations, road and fugitive windblown dust, and wildfires. Most of the NO_x emissions were caused primarily by motor vehicles. Wildfires were a major source of CO emissions in 2019, along with mobile sources (ARB 2020a).

Toxic Air Contaminants

TACs are air pollutants that cause or may cause short-term (acute) or long-term (chronic) adverse health effects. These health effects may include cancer (from carcinogenic TACs), birth defects, neurological and reproductive disorders, or chronic eye, lung, or skin irritation. TACs also may cause adverse environmental and ecological effects. The State's Air Toxics Inventory includes more than 250 substances considered TACs (ARB 2008). They include such substances as volatile organic compounds, chlorinated hydrocarbons, asbestos, dioxin, toluene, gasoline engine exhaust, particulate matter emitted by diesel engines, and metals such as cadmium, mercury, chromium, and lead compounds, among many others.

Most TACs are associated with industrial processes and are uncommon. However, diesel particulate matter is of concern because it is present at some concentration in all developed areas of the state. Diesel particulate matter is designated by the State of California as a TAC, as it is a potential source of both cancer and non-cancer health effects. The ARB has identified diesel particulate matter as a major contributor to ambient cancer risk levels; while it accounts for only about 4% of air toxic emissions in the state, it is associated with

more than 70% of the 2000 cancer risk associated with outdoor ambient levels of all TACs. General risks can be elevated with proximity to the source, which for diesel particulate matter includes freeways, ports and railyards, and distribution centers (ARB 2005).

REGULATORY FRAMEWORK

Federal

Federal air quality regulation stems from the Clean Air Act, as amended. The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to establish the air quality standards for criteria pollutants, known as the National Ambient Air Quality Standards, as shown in Table 5-1. There are six criteria pollutants: ozone, carbon monoxide, particulate matter, nitrogen dioxide and sulfur dioxide. Two types of standards are established: primary standards to protect human health, based on EPA medical research and specific concentration thresholds derived therefrom; and secondary standards to protect the public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage.

Regions of the country are classified with respect to their attainment of National Ambient Air Quality Standards. Areas where these standards are exceeded are considered "nonattainment" areas and are subject to more intensive air quality management and more stringent regulation. Table 5-2 shows the attainment status of the Air Basin for federal standards. For ozone, the Air Basin is designated Nonattainment/Extreme and Nonattainment for fine particulate matter ($PM_{2.5}$). The Air Basin meets all other pollutant standards.

The Clean Air Act requires the states to submit a State Implementation Plan for nonattainment areas. The State Implementation Plan for California is prepared by the ARB and is reviewed and approved by the EPA, subject to a determination of adequacy in demonstrating how the federal standards will be achieved. The local air pollution or air quality management districts are responsible for preparation of Air Quality Attainment Plans applicable to their districts. These Air Quality Attainment Plans become part of the State Implementation Plan.

State

California Clean Air Act

The California Clean Air Act provides the planning framework for California air quality. The act establishes the State's own set of ambient air quality standards for criteria pollutants, known as the California Ambient Air Quality Standards (see Table 5-1). The State standards cover four other pollutants besides the six criteria pollutants designated by the Clean Air Act. Additionally, the State standards are generally more stringent than the corresponding federal standards.

TABLE 5-1
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Air Pollutant	Averaging Time	California Standards	Primary National Standards[1]	Secondary National Standards[2]
Ozone	1 Hour	0.090 ppm	--	--
	8 Hour	0.070 ppm	0.070 ppm	0.070 ppm
PM_{10}	24 Hour	50 µg/m^3	150 µg/m^3	150 µg/m^3
	Annual Mean	20 µg/m^3	--	--
$PM_{2.5}$	24 Hour	--	35 µg/m^3	35 µg/m^3
	Annual Mean	12 µg/m^3	12 µg/m^3	15 µg/m^3
Carbon Monoxide	1 Hour	20 ppm	35 ppm	--
	8 Hour	9 ppm	9 ppm	--
Nitrogen Dioxide	1 Hour	180 ppb	100 ppb	--
	Annual Mean	30 ppb	53 ppb	53 ppb
Sulfur Dioxide	1 Hour	250 ppb	75 ppb	--
	3 Hour	--	--	0.5 ppm
	24 Hour	0.04 ppm	0.14 ppm*	--
	Annual Mean	--	0.030 ppm*	--
Lead	30 Day Avg.	1.5 µg/m^3	--	--
	Calendar Qtr.	--	1.5 µg/m^3	1.5 µg/m^3
	3 Month Average	--	0.15 µg/m^3	0.15 µg/m^3
Sulfates	24 Hour	25 µg/m^3	N/A	N/A
Hydrogen Sulfide	1 Hour	0.03 ppm	N/A	N/A
Vinyl Chloride	24 Hour	0.01 ppm	N/A	N/A
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer.	N/A	N/A

Notes: ppm – parts per million; ppb – parts per billion; µg/m^3– micrograms per cubic meter; N/A – not applicable

[1] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
[2] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
* For certain areas.
Source: ARB 2016.

Table 5-2 shows the attainment status of the Air Basin for California Ambient Air Quality Standards. For ozone, the Air Basin is designated Nonattainment/Severe by the State. The State also classifies the Air Basin as Nonattainment for both PM_{10} and $PM_{2.5}$. The Air Basin is in attainment of, or unclassified for, all other air pollutant standards. The California Clean Air Act requires areas that are designated nonattainment to achieve a 5% annual reduction in emissions until the standards are met. Responsibility for implementation of these requirements rests with the ARB.

TABLE 5-2
SAN JOAQUIN VALLEY AIR BASIN ATTAINMENT STATUS

Pollutant	Designation/Classification	
	Federal Primary Standards	**State Standards**
Ozone - One hour	No Federal Standard[a]	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme[b]	Nonattainment
PM_{10}	Attainment[c]	Nonattainment
$PM_{2.5}$	Nonattainment[d]	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

[a] Effective June 15, 2005, EPA revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the Air Basin as Extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan in 2010. Many applicable requirements for Extreme 1-hour ozone nonattainment areas continue to apply to the Air Basin.

b Though the Valley was initially classified as Serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to Extreme nonattainment in the Federal Register in 2010.

[c] In 2008, the U.S. Environmental Protection Agency (EPA) redesignated the San Joaquin Valley to attainment for the PM_{10} National Ambient Air Quality Standard (NAAQS) and approved the PM_{10} Maintenance Plan.

[d] The Valley is designated nonattainment for the 1997 $PM_{2.5}$ NAAQS. EPA designated the Valley as nonattainment for the 2006 PM2.5 NAAQS in 2009.

Source: SJVAPCD 2020.

Toxic Air Contaminants

The State regulates TACs primarily through the Tanner Air Toxics Act and the Air Toxics Hot Spots Information and Assessment Act of 1987. Under these programs, the State is responsible for an inventory of TACs, for analysis of exposure and risk and for planning to reduce risk. Like other federal and State air quality requirements, the various elements of the State air toxics program are implemented by the local air districts.

San Joaquin Valley Air Pollution Control District

Projects within the Air Basin are subject to the regulatory authority of the San Joaquin Valley Air Pollution Control District (SJVAPCD), which implements and enforces air

quality regulations in eight counties, from San Joaquin County in the north to western Kern County in the south. The District's responsibilities include air quality standard attainment planning, regulation of emissions from non-transportation sources, and mitigation of emissions from on-road sources.

Air Quality Attainment Plans

Air Quality Attainment Plans adopted by the SJVAPCD to meet Clean Air Act standards, including those designed to protect human health, are described below. All the plans include federal, State, and local measures that would be implemented through rule making or program funding to reduce air pollutant emissions in the Air Basin. Transportation control measures are part of these plans.

1-Hour Ozone Plan

Although the EPA revoked its 1979 1-hour ozone standard in June 2005, many planning requirements remain in place. The SJVAPCD's most recent 1-hour ozone plan, the 2013 Plan for the Revoked 1-hour Ozone Standard, demonstrated attainment of the 1-hour ozone standard by 2017. However, on July 18, 2016, the EPA published in the Federal Register a final action determining that the Air Basin has attained the 1-hour ozone NAAQS based on the 2012 to 2014 three-year period, allowing nonattainment penalties to be lifted under federal Clean Air Act Section 179b.

8-Hour Ozone Plan

The SJVAPCD's Governing Board adopted the 2007 Ozone Plan on April 30, 2007. This plan projects that the San Joaquin Valley will achieve the EPA's 1997 8-hour ozone standard for all areas of the Air Basin no later than 2023. CARB approved the plan on June 14, 2007. The EPA approved the 2007 Ozone Plan effective April 30, 2012. SJVAPCD adopted the 2016 Ozone Plan to address the federal 2008 8-hour ozone standard, which must be attained by end of 2031.

PM_{10} Plan

Based on PM_{10} measurements from 2003 to 2006, the EPA found that the Air Basin has reached federal PM_{10} standards. On September 21, 2007, the SJVAPCD's Governing Board adopted the 2007 PM_{10} Maintenance Plan and Request for Redesignation. This Plan demonstrates that the San Joaquin Valley will continue to meet the PM_{10} standard. The EPA approved the document and on September 25, 2008, the SJVAB was redesignated to attainment/maintenance.

2012 and 2015 $PM_{2.5}$ Plans

The SJVAPCD adopted the 2012 $PM_{2.5}$ Plan on December 20, 2012 and was approved by ARB on January 24, 2013. This plan will assure that the San Joaquin Valley will attain the 2006 $PM_{2.5}$ National Ambient Air Quality Standard. The Plan uses control measures to reduce NO_X, which also leads to fine particulate formation in the atmosphere. The Plan incorporates measures to reduce direct emissions of $PM_{2.5}$, including a strengthening of regulations for various Air Basin industries and the general public through new rules and

amendments. The Plan estimates that the Air Basin will reach the $PM_{2.5}$ standard by 2019. In addition, SJVAPCD adopted the 2015 $PM_{2.5}$ Plan for the 1997 $PM_{2.5}$ Standard on April 16, 2015 to achieve attainment of the EPA's 1997 annual and 24-hour $PM_{2.5}$ standards by the end of 2020. Furthermore, SJVAPCD adopted the 2016 Moderate Area Plan for the 2012 $PM_{2.5}$ Standard on September 15, 2016, which requests a new attainment deadline of 2025.

2018 $PM_{2.5}$ Plan

In November 2018, SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards, which consolidates previous $PM_{2.5}$ plans into a single plan that addresses attainment of the various $PM_{2.5}$ standards. This plan integrates a comprehensive strategy that contains new stationary source measures that will be applied throughout the San Joaquin Valley and measures focused on reducing emissions in areas with the most difficult attainment challenges. These measures include new stationary source measures to further strengthen NO_x and/or $PM_{2.5}$ requirements to achieve greater emissions reductions from various activities, incentive-based measures that accelerate the deployment of cleaner vehicles and technologies in a variety of sectors, a targeted "hot-spot" strategy that focuses additional regulatory and incentive-based measures for residential wood burning and commercial charbroiling operations, and a state mobile source strategy that reduces emissions from mobile sources under state and federal jurisdiction (SJVAPCD 2018b).

Rules and Regulations

SJVAPCD has adopted several regulations that are applicable to the project. These regulations are summarized below.

Regulation VIII (Fugitive Dust PM_{10} Prohibitions)

Rules 8011-8081 are designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, landfill operations, etc.

Rule 4101 (Visible Emissions)

This rule prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

Rule 4601 (Architectural Coatings)

Rule 4601 limits emissions of volatile organic compounds from architectural coatings by specifying storage, clean up and labeling requirements.

Rule 9510 (Indirect Source Review)

Rule 9510, also known as the Indirect Source Rule, is intended to reduce or mitigate emissions of NO_x and PM_{10} from new development in the SJVAPCD including construction and operational emissions. This rule requires specific percentage reductions in estimated on-site construction and operation emissions, and/or payment of off-site

mitigation fees for required reductions that cannot be met on the project site. Construction emissions of NO_x and PM_{10} exhaust must be reduced by 20% and 45%, respectively. Operational emissions of NO_x and PM_{10} must be reduced by 33.3% and 50%, respectively.

Rule 9510 applies to commercial development projects of at least 2,000 square feet and to residential projects of at least 50 units. Based on these criteria, both the hotel and residential components of the project would be subject to Rule 9510.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on air quality if it would:

- Conflict with or obstruct implementation of an applicable air quality plan,
- 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 [See Chapter 17.0, Cumulative Impacts, for an analysis of potential cumulative air quality impacts],
- Expose sensitive receptors to substantial pollutant concentrations, or
- Result in other emissions, such as those leading to odors, adversely affecting a substantial number of people.

CEQA Guidelines Appendix G states that, where available, significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make significance determinations. In 2015, the SJVAPCD adopted a revised Guide for Assessing and Mitigating Air Quality Impacts (SJVAPCD Guide). The SJVAPCD Guide defines methodology and thresholds of significance for the assessment of air quality impacts for projects within SJVAPCD's jurisdiction, along with mitigation measures for identified impacts.

Table 5-3 shows the significance thresholds established by SJVAPCD for projects, as set forth in the SJVAPCD Guide. The significance thresholds for criteria pollutants established by SJVAPCD are based on offset thresholds established under SJVAPCD Rule 2201 - New Source Review. Rule 2201 is a major component of the District's attainment strategy as it relates to growth and applies to new and modified stationary sources of air pollution. Under Rule 2201, all new permitted sources with emission increases exceeding two pounds per day for any criteria pollutant are required to implement best available control technology. Furthermore, all permitted sources emitting more than the Rule 2201 offset thresholds for any criteria pollutant must offset all emission increases above the thresholds.

TABLE 5-3
SJVAPCD SIGNIFICANCE THRESHOLDS AND
PROJECT AIR POLLUTANT EMISSIONS

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
SJVAPCD Significance Thresholds[1]	**10**	**10**	**100**	**27**	**15**	**15**
Construction Emissions[2]	1.00	1.76	1.93	<0.01	0.40	0.21
Above Threshold?	*No*	*No*	*No*	*No*	*No*	*No*
Operational Emissions (tons/year)	2.31	1.62	9.50	0.02	1.93	0.54
Above Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

[1] Applicable to both construction and operational emissions.
[2] Maximum emissions in a calendar year.
Sources: CalEEMod Version 2016.3.2, SJVAPCD 2015.

The SJVAPCD's attainment plans, developed to meet air quality standards designed in part to protect human health, demonstrate that project-specific emissions below the offset thresholds will have a less-than-significant impact on air quality. Thus, the SJVAPCD concludes that use of the New Source Review offset thresholds as the thresholds of significance for criteria pollutants is an appropriate and effective means of promoting consistency in significance determinations within the environmental review process and are applicable to both stationary and non-stationary emissions sources (SJVAPCD 2015a).

The SJVAPCD's thresholds of significance for criteria pollutants are applied to evaluate regional impacts of project-specific emissions of air pollutants. Regional impacts of a project can be characterized in terms of total annual emissions of criteria pollutants and their impact on SJVAPCD's ability to reach attainment (SJVAPCD 2015a).

The project's construction and operational emissions were estimated using the CalEEMod computer program, a modeling program recommended by SJVAPCD. The CalEEMod results are shown in Appendix B of this report and summarized in Table 5-3. Construction emissions are the maximum estimated for a calendar year during the construction period that extends approximately from 2021 to 2025, while operational emissions are estimates of ongoing annual emissions from the proposed development.

Environmental Concerns Not Discussed in this Analysis

The Northern California Power Agency (NCPA) electrical generation facility adjacent to the project site, and the City's Surface Water Treatment Facility, located further east and adjacent to Lodi Lake, are sources of air toxic emissions. Potential effects of these emissions on future residents, guests and employees of the project are not considered within the scope of CEQA analysis, as discussed in Section 1.3 of this EIR. The project

would not exacerbate the existing emissions generated by the NCPA plant. Potential health risks or hazards associated with these emissions, if any, will be considered by the City as necessary in its evaluation of the proposed project.

Impact AIR-1: Air Quality Plans and Standards – Construction Emissions

As indicated in Table 5-3, air pollutant emissions from project construction would be below the significance thresholds adopted by the SJVAPCD. As described above, project-specific emissions below SJVAPCD significance thresholds would not interfere with attainment plans that would bring SJVAPCD into consistency with national and State ambient air quality standards. Based on this, construction impacts of the proposed project regarding consistency with the applicable air quality plans would be less than significant.

Dust emissions would be reduced through the required implementation of SJVAPCD Regulation VIII, enforcement of which is the responsibility of the SJVAPCD. Conformance with plans and specifications is monitored by City building inspectors. Regulation VIII contains the following dust emission control measures:

- Air emissions related to the project shall be limited to 20% opacity (opaqueness, lack of transparency) or less, as defined in SJVAPCD Rule 8011. The dust control measures specified below shall be applied as required to maintain the Visible Dust Emissions standard.
- The contractor shall pre-water all land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and phase earthmoving.
- The contractor shall apply water, chemical/organic stabilizer/suppressant, or vegetative ground cover to all disturbed areas, including unpaved roads, throughout the period of soil disturbance.
- The contractor shall restrict vehicular access to the disturbance area during periods of inactivity.
- The contractor shall apply water or chemical/organic stabilizers/suppressants, construct wind barriers and/or cover exposed potentially dust-generating materials.
- When materials are transported off-site, the contractor shall stabilize and cover all materials to be transported and maintain six inches of freeboard space from the top of the container.
- The contractor shall remove carryout and trackout of soil materials daily unless it extends more than 50 feet from site; carryout and trackout extending more than 50 feet from the site shall be removed immediately. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden. If the project would involve more than 150 construction vehicle trips per day onto the public street, additional restrictions specified in Section 5.8 of SJVAPCD Rule 8041 would apply.

Conformance with SJVAPCD dust control standards would be facilitated by the City by the incorporation of dust control requirements in the project conditions of approval. Dust control provisions are also routinely included in site improvement plans and specifications.

Project construction would be subject to SJVAPCD Rule 9510, which as noted above requires construction emission reductions of NO_x and PM_{10} exhaust by 20% and 45%, respectively. In combination with the dust emission reduction measures, this would further reduce project construction emissions that are considered less than significant, based upon the SJVAPCD significance thresholds.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AIR-2: Air Quality Plans and Standards – Operational Emissions

As indicated in Table 3-3, project operational emissions would be below SJVAPCD significance thresholds. Project-specific emissions below SJVAPCD significance thresholds would not interfere with attainment plans that would bring SJVAPCD into consistency with national and State ambient air quality standards. Based on this, operational impacts of the proposed project regarding consistency with the applicable air quality plans would be less than significant.

As noted, SJVAPCD Rule 9510 requires development projects to reduce operational NO_x and PM_{10} emissions by 33.3% and 50%, respectively. Application of Rule 9510 would further reduce operational emissions of these pollutants that are considered less than significant, based upon the SJVAPCD significance thresholds.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AIR-3: Exposure of Sensitive Receptors to Criteria Pollutant Emissions

"Sensitive receptors" refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Land uses where sensitive individuals are most likely to spend time also may be called sensitive receptors; these include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (SJVAPCD 2015a). The land uses nearest the project site that may be considered sensitive receptors are residences to the north and west. As indicated in Table 5-3 above, the project would not generate any construction or operational emissions that would exceed SJVAPCD significance thresholds, and therefore would not have the potential to affect sensitive receptors.

In 2018, the California Supreme Court decided *Sierra Club v. County of Fresno*, also known as the Friant Ranch case. In its opinion, the court stated that an EIR prepared for a community plan update and specific plan inadequately described air quality impacts in part because, although it did explain the general health impacts of pollutants, it did not explain

the specific impacts the project's emissions would have on health. A brief filed in the case by the SJVAPCD, along with a brief filed jointly by the California Association of Environmental Professionals and the California Chapter of the American Planning Association, explained that the current state of air quality modeling does not allow for assessing the specific impacts of a project's air quality emissions on human health in an area. The joint brief noted that the Court of Appeals opinion in the Friant Ranch case focused on regional concentrations of pollutants, then stated:

The volumes of air contained in a regional air basin are immense, and even the largest project's emissions are the proverbial 'drop in the bucket.' The situation is further complicated by the fact that background concentrations of regional pollutants are not uniform either temporally or geographically throughout an air basin but are constantly fluctuating based upon meteorology and other environmental factors.

Under these circumstances, an analysis attempting to take "tons per year" regional mass emissions data and directly translate that into precise pollutant concentrations, and hence project-specific health effects, would not be practical or meaningful (AEP-APA 2018). In its brief, the SJVAPCD made the following observations:

Although these levels [of Friant Ranch emissions] well exceed the Air District's CEQA significance thresholds, this does not mean that one can easily determine the concentration of ozone or PM [particulate matter] that will be created at or near the Friant Ranch site on a particular day or month of the year, or what specific health impacts will occur. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration of ozone and PM.

Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like ozone and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level (SJVAPCD 2015b).

The California Supreme Court stated in its opinion that "if it is not scientifically possible to do more than has already been done to connect air quality effects with potential human health impacts, the EIR itself must explain why, in a manner reasonably calculated to inform the public of the scope of what is and is not yet known about the Project's impacts." Based upon the information presented above, a specific connection between the project's criteria pollutant emissions and health impacts cannot be reasonably drawn. Generalized health impacts of criteria pollutants for which the Air Basin currently is in nonattainment status are discussed in the Environmental Setting section above. It should be noted that, as discussed earlier, the SJVAPCD significance thresholds were developed in part to ensure attainment of primary federal ambient air quality standards, which were established to protect human health.

CO hotspots have the potential to expose receptors to emissions that violate State and/or federal CO standards, even if the broader air basin is in attainment. The SJVAPCD Guide

indicates that a project would create no violations of the CO standards if neither of the following criteria are met (SJVAPCD 2015b)::

- A traffic study indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or

- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity.

As discussed in more detail in Chapter 15.0 Transportation, LOS is no longer used to define significant traffic impacts. Nonetheless, a traffic study was prepared for the project, which evaluated potential impacts on LOS on intersections near the project site under Existing Plus Approved Projects (EPAP) Plus Project conditions and Cumulative Plus Project conditions. As discussed in this study, which is available for review at the Lodi city offices, under EPAP Plus Project conditions, all intersections would maintain a LOS above E. However, under Cumulative Plus Project conditions, LOS at the Turner Road/Lower Sacramento Road (North) intersection during the PM peak hour was predicted to be LOS E, thus failing one of the above criteria. Therefore, further analysis of potential carbon monoxide impacts was performed during preparation of this EIR.

The SJVAPCD Guide recommends the use of a protocol developed by the Institute of Transportation Studies at University of California Davis entitled Transportation Project-Level Carbon Monoxide Protocol (Institute of Transportation Studies 1997). This is a project-level protocol for use by agencies to evaluate the potential local level CO impacts of a project. The protocol, in turn, recommends the use of the CALINE4 air quality model to calculate the concentration of CO at an intersection to determine if it would exceed State ambient air quality standards for CO (20 parts per million for 1-hour concentration; 9 parts per million for 8-hour concentration). A CALINE4 run for the Turner Road/Lower Sacramento Road (North) intersection, available in Appendix B of this EIR, indicated that CO concentrations would not exceed State ambient air quality standards and would therefore have no adverse impact related to CO emissions.

Overall, sensitive receptors in the project vicinity would not be exposed to significant concentrations of criteria pollutants that could be generated by the project. Impacts related to exposure of sensitive receptors are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AIR-4: Exposure of Sensitive Receptors to Toxic Air Contaminants

Project construction emissions would include diesel particulate matter, which is classified as a TAC. This exhaust would under ordinary circumstances dissipate before reaching any sensitive receptors in the project area. These emissions would have adverse health effects only if the receptors experience long-term exposure; this would not be the case, because TAC emissions would cease once construction work is completed.

Diesel particulate matter emissions related to project operations are expected to be generated by diesel-engine vehicles, primarily delivery trucks. Emissions of exhaust PM_{10}, which includes diesel particulate matter, would be approximately 0.03 tons annually when project features and laws and regulations affecting emissions are taken into consideration (see Chapter 9.0, Greenhouse Gas Emissions). As with construction exhaust, operational exhaust would readily dissipate before reaching any sensitive receptors in the area. In summary, diesel particulate matter emissions associated with project construction and operations would not be substantial enough to constitute a threat to human health and impacts are considered less than significant.

In summary, project TAC emissions would be less than significant, based upon the SJVAPCD significance thresholds. Impacts on sensitive receptors related to the project's TAC emissions would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact AIR-5: Odors and Other Emissions

Odors are generally considered more of a "nuisance" than an environmental hazard. Nevertheless, the Environmental Checklist in CEQA Guidelines Appendix G regards objectionable odors as a potentially significant environmental impact. In accordance with this, the SJVAPCD Guide states that a project should be evaluated to determine the likelihood that it would result in nuisance odors (SJVAPCD 2015b).

Neither the hotel complex nor the apartments are considered significant sources of odors. Some minor odors may be generated by the restaurants, but these odors would be readily dissipated and would not likely be considered objectionable. Minor odors may be generated by vehicle traffic to and from the project site, which would readily dissipate.

The SJVAPCD was requested to provide records of any odor complaints from the NCPA station, the City's water treatment facility, and the General Mills facility. No records of complaints were found for the first two land uses. Four complaints were on file for the General Mills facility, all from 2009. No complaints had been filed against this facility since 2009, and General Mills operations closed in 2015. Project impacts related to odors would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

6.0 BIOLOGICAL RESOURCES

ENVIRONMENTAL SETTING

Information for this section was obtained from a Biological Assessment prepared by Moore Biological Consultants, available in Appendix C of this EIR. The assessment was based on searches of the California Natural Diversity Database (CNDDB) maintained by the California Department of Fish and Wildlife (CDFW), and of the Information for Planning and Consultation (IPaC) database maintained by the U.S. Fish and Wildlife Service (USFWS). It is also based on field surveys initially conducted on April 9 and May 14, 2019, with an updated survey on December 17, 2021. The fieldwork included an assessment of potentially jurisdictional Waters of the U.S. and wetlands as defined by the U.S. Army Corps of Engineers (Corps) and a search for special-status species and suitable habitat for special-status species, such as blue elderberry shrubs and vernal pools.

Existing Vegetation

Land uses in the project vicinity are residential, industrial, and recreational. The project site is surrounded by development on all sides. The site itself has two small storage sheds in the southwest part of the site, and a communication tower in the northeast corner. An unused railroad spur extends generally north to south through the project site.

Most of the site contains numerous rows of trees of various varieties, with ruderal grassland in between the trees. Due to the amount of disturbance from periodic mowing, spraying and/or disking for weed abatement, and goat grazing, vegetation on the project site is primarily non-native grass and weed species. Oats, ripgut brome, soft brome, and foxtail barley are the dominant grass species on the project site. Other grassland species are intermixed with the grasses, such as prickly lettuce, common sow-thistle, milk thistle, bull thistle, field bindweed, filaree, and fireweed. No blue elderberry shrubs, which are habitat for the valley elderberry longhorn beetle, were observed on or adjacent to the project site.

There are a variety of trees on the project site. Coast redwoods line the west and south edges of the site and are intermixed with other species on the site. These other tree species include almond, coast live oak, valley oak, black walnut, California fan palm, olive, and other ornamental varieties. There is also a large gum tree in the southwest part of the site. There are numerous relatively larger trees along the Mokelumne River and in Lodi Lake Park, just east of the project site. There are also some relatively large trees along Turner Road just south of the site, along with several large trees in residential areas adjacent to and surrounding the project site.

Existing Wildlife

A variety of bird species were observed during the field surveys. All of them are common species found in urban areas of San Joaquin County. American kestrel, American crow,

northern mockingbird, western bluebird, and European starling are representative of the avian species observed in the project site.

There are several trees within the project site that are potentially suitable for nesting raptors and other protected migratory birds, including Swainson's hawk. The most suitable trees are the row of relatively large oaks along the eastern edge of the site, north of the NCPA facility. There are also numerous large trees near the site that could be used for nesting by Swainson's hawk. Due to the presence of large trees on and near the project site and suitable raptor foraging habitat near the site, it is likely that one or more pairs of raptors nest in trees on and/or near the site during most years.

The trees on the project site also provide nesting habitat for a variety of songbirds. A mallard was observed nesting on the ground in the south part of the site during one of the 2019 surveys. Other ground-nesting songbirds, such as killdeer and red-winged blackbird, may nest in the grassland habitats in the site.

A limited variety of mammals common to urban areas are likely to occur on the project site. The only mammals observed during the surveys were a western gray squirrel and desert cottontail. Black-tailed hare, raccoon, striped skunk, and Virginia opossum are expected to occur on the project site occasionally. A few California ground squirrel burrows were observed in the site, primarily along the fence surrounding the NCPA facility.

Due to lack of suitable habitat, few amphibians and reptiles are expected to use habitats on the project site, and none were observed during the field surveys. Common species such as western fence lizard, Pacific chorus frog, and western terrestrial garter snake may occur on the site.

Waters of the U.S. and Wetlands

Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations 328 to include navigable waterways, their tributaries, and adjacent wetlands. More specifically, Waters of the U.S. encompass Territorial Seas, Tidal Waters, and Non-Tidal Waters. Non-Tidal Waters include interstate and intrastate rivers and streams, as well as their tributaries. Other jurisdictional wetlands and Waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages; lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. "Jurisdictional wetlands" are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the Corps' *Wetlands Delineation Manual* and Regional Supplement. Jurisdictional wetlands are usually adjacent to or hydrologically associated with Waters of the U.S. Isolated wetlands are outside federal jurisdiction, but they may be regulated by the Regional Water Quality Control Board (RWQCB) under the State Wetlands Program.

The U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers jointly regulate Waters of the U.S. The limit of federal jurisdiction of non-tidal waters of the U.S. extends to the "ordinary high-water mark." The ordinary high-water mark is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

For tidal waters, the limit of federal jurisdiction is high tide. For waters subject to federal jurisdiction, a permit under Section 404 of the Clean Water Act, issued by the Corps of Engineers, must be secured prior to the discharge of dredged or fill materials into these waters. Projects requiring a Section 404 permit also must obtain a Water Quality Certification in accordance with Section 401 of the Clean Water Act. For this project, the Central Valley RWQCB would issue the Section 401 certification.

The project site is leveled grasslands that are vegetated with upland grasses and weeds and with soils that appear well draining. No potentially jurisdictional Water of the U.S. or wetlands of any type were observed in the site. There are no areas within the site mapped as aquatic features in the National Wetlands Inventory maintained by the USFWS.

Special-Status Species

Special-status species includes plant and/or wildlife species that are in one or more of the following categories:

- Legally protected under the federal Endangered Species Act, the California Endangered Species Act, or other regulations.
- Designated rare, threatened, or endangered species and candidate species for listing by the U.S. Fish and Wildlife Service (USFWS).
- Considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly regarding protection of isolated populations, nesting or denning locations, communal roosts, and other types of essential habitat.
- Considered rare or endangered under the conditions of CEQA Guidelines Section 15380, such as species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California by the CNPS, and species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on List 3 in the CNPS Inventory.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is generally low. Table 6-1 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

TABLE 6-1
SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
Plants						
Succulent owl's clover	*Castilleja campestris ssp. succulenta*	T	E	1B	Vernal pools.	Unlikely: there are no vernal pools on the project site.
Legenere	*Legenere limosa*	None	None	1B	Vernal pools.	Unlikely: there are no vernal pools on the project site.
Mason's lilaeopsis	*Lilaeopsis masonii*	None	R	1B	Marshes, swamps, and riparian scrub.	Unlikely: there is no aquatic habitat on the project site.
Sanford's arrowhead	*Sagittaria sanfordii*	None	None	1B	Standing or slow-moving freshwater ponds, marshes, and ditches.	Unlikely: there is no aquatic habitat on the project site.
Suisun marsh aster	*Symphotrichum lentum*	None	None	1B	Marshes and swamps.	Unlikely: there is no aquatic habitat on the project site.
Birds						
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Nests in large trees along riparian corridors or in open areas. Requires adjacent suitable foraging habitats such as grasslands or alfalfa fields supporting rodents.	Unlikely: while relatively large trees in the area are potentially suitable for nesting, the project site does not provide suitable foraging habitat.
Tricolored blackbird	*Agelaius tricolor*	None	T	N/A	Open water and protected nesting substrate, usually cattails and riparian scrub with surrounding foraging habitat.	Unlikely: the project site does not provide suitable nesting habitat.
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	T	E	N/A	Nests in riparian forests, along the broad, lower flood-bottoms of larger river systems.	Unlikely: the project site does not provide riparian forest habitat.
Burrowing owl	*Athene cunicularia*	None	SC	N/A	Open, dry annual or perennial	Unlikely: no burrowing owls were

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
					grasslands, deserts and scrublands characterized by low-growing vegetation.	observed on the project site. The grasslands are highly disturbed and periodically maintained. Only a few ground squirrel burrows were observed on the site, none of which had evidence of burrowing owl occupancy.
Song sparrow ("Modesto" population)	*Melospiza melodia*	None	SC	N/A	Brackish water marshes. Inhabits cattails, tules, and tangles bordering sloughs.	Unlikely: the project site does not provide suitable aquatic habitat.
Yellow warbler	*Setophaga petechia*	None	SC	N/A	Nests in riparian areas, usually in willows, alders, and cottonwoods.	Unlikely: the project site does not provide suitable riparian forest habitat.
Mammals						
Riparian brush rabbit	*Sylvilagus bachmani riparius*	E	E	N/A	Riparian thickets in Stanislaus and southern San Joaquin Counties.	Unlikely: the project site does not provide riparian forest habitat.
Reptiles and Amphibians						
Giant garter snake	*Thamnophis gigas*	T	T	N/A	Freshwater marshes and low-gradient streams. Uses drainage canals and irrigation ditches, primarily for dispersal or migration.	Unlikely: the project site does not provide suitable habitat.
California red-legged frog	*Rana aurora draytonii*	T	SC	N/A	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation.	Unlikely: the project site does not provide suitable habitat. Species is presumed extinct on the Central Valley floor.
California tiger salamander	*Ambystoma californiense*	T	T	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) and grassland/	Unlikely: there are no potential breeding ponds on or near the project site. The disturbed grasslands

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
					woodland habitats with summer refugia (i.e., burrows).	on the site do not provide suitable aestivation habitat.
Western pond turtle	*Emys marmorata*	None	SC	N/A	Ponds, marshes, streams, and ditches with emergent aquatic vegetation and basking areas.	Unlikely: there is no aquatic habitat on the project site.
Foothill yellow-legged frog	*Rana boylii*	None	SC	N/A	Perennial water bodies (i.e., streams and ponds) with abundant riparian vegetation.	Unlikely: there is no aquatic habitat on the project site. Species is not known to occur on the Central Valley floor.
Fish						
Steelhead - Central Valley DPS	*Oncorhynchus mykiss irideus*	T	None	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	Unlikely: there is no aquatic habitat on the project site.
Delta smelt	*Hypomesus transpacificus*	T	E	N/A	Shallow lower Delta waterways with submersed aquatic plants and other suitable refugia.	Unlikely: there is no aquatic habitat on the project site.
Sacramento splittail	*Pogonichthysm acrolepidotus*	None	SC	N/A	Lower Sacramento-San Joaquin Delta in low to moderate salinities.	Unlikely: there is no aquatic habitat on the project site.
Invertebrates						
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools	Unlikely: there are no vernal pools or seasonal wetlands on the project site.
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools	Unlikely: there are no vernal pools or seasonal wetlands on the project site.
Valley elderberry	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs, usually in Central	None: there are no blue elderberry

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
longhorn beetle					Valley riparian habitats.	shrubs on the project site.
Monarch butterfly	*Danaus plexippus*	C	None	N/A	Variety of habitats in California; larvae dependent on milkweed.	Unlikely: there is no suitable habitat on the project site.

[1] E = Endangered; T = Threatened; C = Candidate for Listing.

[2] E = Endangered; T = Threatened; R = Rare; SC = Species of Special Concern.

[3] 1B = rare, threatened, or endangered in California and elsewhere.

"Critical habitat" is a term defined and used in the Endangered Species Act. It is specific geographic areas that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. It may also include areas that are not currently occupied by the species but will be needed for its recovery. The Mokelumne River has been designated critical habitat for Central Valley steelhead. Construction of the project would have no effect on the Mokelumne River nor its suitability for Central Valley steelhead; no portion of the river is on or adjacent to the site. The project site is not within critical habitat designated for other federally listed species.

REGULATORY FRAMEWORK

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

The San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) is a comprehensive program for assessing and mitigating the biological impacts of land development in San Joaquin County. The purpose of the SJMSCP is to accommodate the growing population of San Joaquin County and its incorporated cities while minimizing costs to project proponents and society at large.

The SJMSCP protects 97 wildlife species and 52 vegetative communities, many of which are listed or proposed for listing under the California and Federal Endangered Species Act as threatened or endangered. The SJMSCP also protects many birds covered by the Migratory Bird Treaty Act and other sensitive species that may be of concern pursuant to CEQA, or species that are included on one of the CNPS lists. The San Joaquin Council of Governments (SJCOG) implements the SJMSCP on a project-by-project basis. In implementing the SJMSCP, the SJCOG conducts a biological survey of the proposed development site, determines which special-status species may be impacted, if any, and makes a written determination of required SJMSCP fees based on the mapped fee zone.

The SJMSCP provides compensation for the conversion of open space to non-open space uses that affect plant, fish, and wildlife species covered by the plan. When open space or biologically significant lands are impacted or removed by a project, an applicant is permitted to use three compensation methods: preservation of existing sensitive lands,

creation of new comparable habitat on the project site, or payment of a fee that would be used to secure preserve lands outside the project site. SJMSCP fees, and preservation and re-creation ratios that are required, are established based upon the type and value of the land to be converted and are revised annually to correspond with current market values. Conversion of lands of higher biological values, such as wetlands, requires higher SJMSCP fees or higher preservation and creation ratios. The project site is mapped by the SJMSCP as "Multi-Purpose Open Space" lands, requiring payment of a per-acre fee of $8,682.00 as of 2021 (SJCOG 2021). With appropriate preservation, creation, or payment of fees, impacts to open space lands and to the species that use these lands are considered less than significant.

In addition to fee payments, the SJMSCP identifies and requires participants to abide by Incidental Take Minimization Measures (ITMMs), which are protection measures that avoid direct impacts of development on special-status species. Examples of ITMMs include prescriptions for protection of Swainson's hawk nest trees or timely tree removal, prevention of burrowing owl nesting or pre-construction surveys of nesting activity.

The SJMSCP has been adopted locally by San Joaquin County, the City of Lodi, and the other incorporated cities in San Joaquin County. As a SJMSCP participant, the City of Lodi has agreed to require new development projects, including the proposed project, to participate in the SJMSCP. The City and SJCOG approach the SJMSCP as a comprehensive plan to mitigate for the loss of open space and biological resource lands, and to provide for the long-term management of plant, fish, and wildlife species. The compliance process outlined in the SJMSCP has been adopted by federal and state agencies with jurisdiction or trusteeship over biological resources. These and the other participating agencies consider a project that complies with the plan to result in impacts on biological resources that are less than significant.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on biological resources if it would:

- 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 CDFW or USFWS,
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS,
- Have a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means,

- 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,
- Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or
- 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 BIO-1: Special-Status Species and Habitats

The project site was assessed for the existence of potential special-status plant and wildlife species or their habitat; the results are provided in Table 6-1 above. Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, seasonal wetlands, riparian scrub, and areas with unusual soils. The ruderal grasslands within the project site are highly disturbed and do not provide suitable habitat for any of the plants in Table 6-1 or any other special-status plants. Due to lack of suitable habitat, no special-status plant species are expected to occur on the project site.

The potential for intensive use of habitats within the project site by special-status wildlife species is low. While the project site may have provided habitat for special-status wildlife species at some time in the past, farming, development, and other human activities have substantially modified natural habitats in the greater project vicinity, including those within the project site. Of the wildlife species identified in Table 6-1, Swainson's hawk and burrowing owl are the only species with the potential to occur on the site on more than a transitory or very occasional basis. Other special-status birds may fly over or forage in the area occasionally but would not be expected to nest in or immediately adjacent to the project site.

Swainson's Hawk

Swainson's hawk is a migratory hawk listed as a threatened species under the California Endangered Species Act. It is found in the Central Valley primarily during its breeding season. The Migratory Bird Treaty Act and the California Fish and Game Code protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through September 15).

The site does not provide suitable Swainson's hawk foraging habitat. However, relatively large trees on and near the site could be used by nesting Swainson's hawks. No Swainson's hawks were observed on the project site during the 2019 surveys, which were conducted during the nesting season, but Swainson's hawks were observed nesting approximately one-half mile east of the site.

Project construction activities could disturb nearby nests, which would be a potentially significant impact. SJMSCP participation, as required by the City of Lodi as an SJMSCP plan participant, would mitigate for any potential impacts on Swainson's hawk by requiring

pre-construction surveys and through the required implementation of Incidental Take Minimization Measures (ITMMs) that establish required protective measures for Swainson's hawk. In addition, mitigation described below would further protect active Swainson's hawk nests. Implementation of these measures would reduce impacts on Swainson's hawk to a level that would be less than significant.

Burrowing Owl

Burrowing owls have been designated a State Species of Concern. They are year-long residents that inhabit a variety of grasslands as well as scrub lands that have a low density of trees and shrubs with low growing vegetation. The primary habitat requirement of the burrowing owl is small mammal burrows for nesting, usually in abandoned ground squirrel burrows. The Migratory Bird Treaty Act and California Fish and Game Code protect burrowing owls year-round, as well as their nests during the nesting season (February 1 through August 31).

No burrowing owls were observed on the project site during any of the surveys. Only a few ground squirrel burrows were observed, none of which had evidence of past or current burrowing owl occupancy. The intensity of development surrounding the project site, along with the numerous trees on the site, reduces the likelihood of burrowing owls using the site for nesting.

Although considered unlikely, burrowing owls may utilize habitats on the site in the future. As with Swainson's hawk, SJMSCP participation as required by the City of Lodi would mitigate for any potential impacts on burrowing owl through the implementation of ITMMs for this species. In addition, mitigation described below would further protect active burrowing owl nests. Implementation of these measures would reduce impacts on burrowing owl to a level that would be less than significant.

Overall, based on site conditions, the project is expected to have no significant impact on special-status species known to occur in and around the project site, other than for Swainson's hawk and burrowing owl. These potential impacts would be reduced to a less-than-significant level through required participation in the SJMSCP and mitigation described below.

Level of Significance: Potentially significant

Mitigation Measures:

BIO-1: The proposed project shall participate in the SJMSCP, including payment of any required fees specified by the SJCOG and implementation of Incidental Take Minimization Measures (ITMMs) specified by the SJCOG biologist.

BIO-2: In the event that the SJCOG does not prescribe Incidental Take Minimization Measures (ITMMs) for either Swainson's hawk or burrowing owl, then the project shall comply with equivalent alternative mitigation measures specified by a qualified biologist, including pre-construction surveys, establishment of construction setbacks, monitoring requirements and other protective measures as required to obtain regulatory agency approval.

Significance After Mitigation: Less than significant

Impact BIO-2: Riparian and Sensitive Natural Communities

The assessment did not identify any riparian areas on the project site. "Sensitive natural communities" are plant communities ranked high in terms of rarity and threat of loss. The CDFW has developed a list of sensitive natural communities, none of which were identified on the project site by the assessment. No specialized habitats for special-status species, such as elderberry shrubs or vernal pools, were identified on the project site. The project would have no impact on riparian or sensitive natural communities.

Level of Significance: No impact

Mitigation Measures: None required

Impact BIO-3: Waters of the U.S. and Wetlands

As noted, no Waters of the U.S., including wetlands, were observed on the project site nor identified in the National Wetlands Inventory. There are no lakes, streams, or other surface waters on or adjacent to the project site. The project would have no impact on wetlands or Waters of the U.S.

Level of Significance: No impact

Mitigation Measures: None required

Impact BIO-4: Fish and Wildlife Migration

The project site is not located on or near a stream; therefore, project development would not affect fish migration. The project site is not part of any known wildlife migration corridor. It is unlikely to have any substantial value as a wildlife movement corridor, given the distance to existing surface waters, the existing perimeter fencing, and the geographic separation of the site from undeveloped areas that might offer substantial wildlife habitat.

As noted, trees and grasslands on the project site may provide nesting habitat for songbirds. Some of these birds may be protected by the Migratory Bird Treaty Act; therefore, project construction that disturbs their nests would have a potentially significant impact. Participation in the SJMSCP, as required above for special status species in Mitigation Measure BIO-1 would reduce impacts on migratory birds and their nests, if any are found, to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures: As specified by Mitigation Measure BIO-1

Significance After Mitigation: Less than significant

Impact BIO-5: Local Biological Requirements

The City of Lodi does not have ordinances that specifically protect biological resources, other than provisions in Lodi Municipal Code Chapter 12.04 that prohibit removal, cutting, or trimming of trees on City street rights-of-way without a permit. The project would not result in the removal or alteration of any street trees. The project would not conflict with any local ordinances or policies that protect biological resources; therefore, it would have no impact on this issue.

Level of Significance: No impact

Mitigation Measures: None required

Impact BIO-6: Habitat Conservation Plans

As noted above, the project would be required to participate in the SJMSCP. There are no other habitat conservation plans applicable to the project site or to the City of Lodi. The project would have no impact on conflict with habitat conservation plans.

Level of Significance: No impact

Mitigation Measures: None required

7.0 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES

Background information for this chapter comes primarily from a cultural resources technical memorandum prepared by Solano Archaeological Services, except where otherwise cited. The memorandum (Appendix D) assessed potential impacts on cultural resources and tribal cultural resources based upon background research, a field survey, and outreach to Native American tribes. Background research involved a search of the California Historical Resources Information System conducted by the Central California Information Center at California State University Stanislaus, along with a review of historical resource lists. Historic USGS topographical maps, General Land Office plat maps, and historic aerial photographs were also reviewed. A field survey of the project site was conducted on June 19, 2018.

Federal and State law protects cultural resources in part by keeping the location of resources confidential and unavailable to the public. Since the Solano Archaeological Services memorandum contains information considered confidential, it is available at the office of the Lodi Community Development Department only to qualified reviewers, as indicated on the Appendix D cover. The California Office of Historic Preservation, in its guidelines for archaeological reports, indicates that confidential information on sites may need to be provided to review and regulatory agencies for management purposes (California Office of Historic Preservation 1990). Based on this guidance, the City defines a "qualified reviewer" as a member of a review or regulatory agency with a "need to know" related to its responsibilities on a project. The City Community Development Director shall determine who is a qualified reviewer on a project-by-project basis.

Assembly Bill (AB) 52, described later in this chapter, intends to foster participation by Native American tribes in the CEQA process for projects that may affect resources of cultural value to tribes. In accordance with AB 52, the City has contacted local tribes with a potential interest in the project. Their responses have been taken into consideration in the evaluation of the potential environmental impacts of the project, including proposed mitigation measures to avoid or minimize impacts on tribal cultural resources.

ENVIRONMENTAL SETTING

Prehistoric Setting

Due to the plentiful resources and temperate climate, the Central Valley was well populated prehistorically and served as the location for some of the more substantial village sites known in California. Little has been found archaeologically that dates to the Paleo-Indian or the Lower Archaic time periods (10,000-3,000 B.C.); however, archaeologists have recovered a great deal of data from sites occupied beginning in the Middle Archaic period

(3,000-1,000 BC). At this time, broad regional patterns of foraging subsistence strategies gave way to more intensive procurement practices.

The project site is situated in the ethnographic territory of the Northern Sierra Miwok, who once inhabited the lower regions of the Mokelumne and Cosumnes Rivers to as far as the Sacramento River to the west. The main political unit for the Miwok was the tribelet, which consisted of a primary village and several satellite villages settled around drainages. Being autonomous, the tribelet held a specific territory and was led by a headman who directed most of the economic and ceremonial activities. The Miwok typically lived in conically shaped brush or tule shelters, but sweat houses, acorn granaries, dance houses, and communal earth-covered houses were also common structures in villages. The Miwok commonly buried their dead adjacent to the village periphery.

Solano Archaeological Services reviewed historical references, maps, previous survey reports, and the Central California Information Center search results for the project site and vicinity. The results indicated that no previously documented cultural or archaeological resources were located within or adjacent to the project site. However, eleven prehistoric sites had been recorded within a half-mile radius of the site.

A search of the Sacred Lands File maintained by the Native American Heritage Commission (NAHC) indicated the presence of a sacred land on or near the project site. Two tribes contacted by Solano Archaeological Services during its outreach process have expressed concerns related to tribal cultural resources.

The field survey and records search of the project site did not find any archaeological resources that would be considered unique and could therefore involve significant effects under CEQA if disturbed during construction.

Historic Setting

Lodi

Various Spanish explorers, searching for sites for inland missions, visited the Central Valley and the present-day San Joaquin County area. These explorers were followed by trappers of the Hudson Bay Company, beginning with Jedediah Strong Smith in the late 1820s. However, little in the way of lasting settlement occurred in the Lodi region until the Gold Rush period. With the Gold Rush, settlement of the area increased due to the potential for crop production and cattle ranching. Towns such as Woodbridge, Stockton, and Lodi were created by railroad development in the area, which provided access to goods and employment.

When one group of families in the vicinity of what would become Lodi decided to establish a school in 1859, they settled on a site near present-day Cherokee Lane and Turner Road, thereby essentially marking the beginnings of a new town. Growth was apparently slow during this time, but in 1869, the Central Pacific Railroad was in the process of creating a new route, and pioneer Lodi settlers Ezekiel Lawrence, Reuben Wardrobe, A.C. Ayers, and John Magley offered a townsite of 160 acres to the railroad as an incentive to build a station there. The railroad received a "railroad reserve" of 12 acres in the middle of the nascent

town, and surveyors began laying out streets in the area between Washington and Church Streets and Locust and Walnut Streets.

The new settlement was initially named the Town of Mokelumne. However, to avoid confusion with the previously established towns of Mokelumne Hills and Mokelumne City, the name was changed to Lodi in 1874. The origin of this name was never recorded, but most likely the town took its name from Lodi, Illinois, which was the former home of some of the town's earliest settlers. In 1906, the City of Lodi was incorporated with a population of 1,946 (Lodi Historical Society 2016).

Lodi continued to grow in the early 20th century primarily due to agriculture, predominantly grapes and wine. Flame Tokay grapes were first planted in the area in the late nineteenth century and by 1900, Lodi had over two million grape vines. In 1907, the City held its first Tokay Carnival, which would later evolve into the Lodi Grape Festival In 1956, the federal government officially acknowledged Lodi as a wine grape growing district (City of Lodi 2009). By 1940, the population of the City was 11,000 residents and increased to 20,000 following World War II (City of Lodi 2010a). By the 1990s, the population was more than 50,000 residents.

Woodbridge

The unincorporated town of Woodbridge, located northwest of the City and approximately 700 feet north of the project site, is at the site of a ferry crossing that was later replaced by a bridge constructed by one of the town's earliest settlers, Jeramiah Woods. The town, originally platted in 1859, took its name from the bridge (San Joaquin County 2016b).

Woodbridge has been identified as a historic resource in the Lodi General Plan and has been designated a historic landmark by the California Office of Historic Preservation. The Woodbridge Masonic Lodge and the IOOF Hall are listed in both the National Register of Historic Places and the California Register of Historical Resources. Wood's Ferry and Wood's Bridge, Benson's Ferry, and the San Joaquin Valley College building are listed as California Historical Landmarks (San Joaquin County 2016b). The historical sites in Woodbridge are north of the project site and would not be affected by the project.

Historical Resource Review

A series of historic USGS topographic maps and historic aerial photographs were reviewed to gather information on past land use and historic development in the project area. According to the 1910 Woodbridge, California USGS 15-foot topographic map, a small structure existed just east of but outside the project site, and a 1937 aerial photograph shows an orchard in the southern half of the project site, likely associated with the structure. A 1967 aerial photo indicates that most of the orchard was removed.

During the field survey, the two storage buildings were recorded. Although renovated with modern metal siding and roofing, the structures were originally constructed some time before 1967, making the resource at least 51 years old. Also, a railroad spur was noted heading in a north-south direction that connects with the old Union Pacific spur line to the north. The old Union Pacific Railroad segment is a historic-era cultural resource, but it is outside the project site. The connecting spur is modern, as it does not appear on any of the

historic USGS topographic maps and aerial photographs. The spur is first seen on a 2003 aerial photograph and can still be observed on Google Earth imagery.

REGULATORY FRAMEWORK

CEQA Guidelines Section 15064.5

Criteria specified in CEQA Guidelines Section 15064.5 suggest that an "important historical or archaeological resource" is one which generally meets the criteria for listing in the California Register of Historical Resources (CRHR), including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage,
- Is associated with the lives of persons important in California's past,
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value, or
- Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, is not included in a local register of historical resources, or not identified in a historical resources survey, does not preclude a lead agency from determining that a resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

AB 52

In 2014, the California Legislature enacted AB 52, which focuses on CEQA consultation with Native American tribes on projects that could potentially affect resources of value to the tribes. The intent of this consultation is to avoid or mitigate potential impacts on "tribal cultural resources," which are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the CRHR, or
- Included in a local register of historical resources as defined in subdivision (k) of Public Resources Code Section 5020.1.

The tribal cultural resource must be a tangible resource for CEQA purposes, but the meaning or value attributed to that resource may be intangible. Only tribes that request to be on a CEQA lead agency's notice list shall be consulted on a project. The project must be within the geographic area that is traditionally and culturally affiliated with the tribes.

Under AB 52, consultation with tribes on a notice list shall be initiated prior to the release of the CEQA document for public review. When a tribe requests consultation, the lead

agency must provide the tribe with notice of a proposed project within 14 days either of a project application being deemed complete or when the lead agency decides to undertake the project if it is the agency's own project. The tribe has up to 30 days to respond in writing to the notice. In the response, if consultation is requested, the tribe must designate a lead contact person. If the tribe requests consultation, then the lead agency has up to 30 days to initiate formal consultation.

Matters which may be subjects of AB 52 consultation include the type of CEQA environmental review necessary, the significance of tribal cultural resources, and project alternatives or appropriate measures for preservation or mitigation of the tribal cultural resource that the tribe may recommend to the lead agency. The consultation process ends either (1) when the parties agree to mitigate or avoid a significant effect on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. Regardless of the outcome, a lead agency remains obligated under CEQA to mitigate any significant environmental effects, as explicitly noted in AB 52.

Under California Government Code Sections 6254(r) and 6254.10, and 14 California Code of Regulations 15120(d), any information on tribal cultural resources that is submitted by the tribe during the environmental review process shall not be included in the CEQA environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe. A confidential appendix to the CEQA document containing such information may be prepared by the lead agency and made available to qualified reviewers. Appendix D of this EIR is a confidential appendix.

Native American outreach consisted of contact with the NAHC requesting a search of its Sacred Lands File for records of the project site. In its response to the request, the NAHC provided a list of contacts for five tribes: Buena Vista Rancheria of Me-Wuk Indians, Ione Band of Miwok Indians, Northern Valley Yokuts, United Auburn Indian Community (UAIC) of the Auburn Rancheria, and the Wilton Rancheria. The City provided notice of the proposed project on May 22, 2018 to all five tribes on the contact list. Appendix E of this EIR contains AB 52 notification and related materials, and results of the outreach to the tribes are described later in this chapter.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5,
- Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5, or
- Disturb any human remains, including those interred outside of formal cemeteries.

Also, a project may have a significant impact on the environment if it would cause a substantial adverse change in the significance of a tribal cultural resource, defined in California Public Resources Code Section 21074 as a site, feature, place, sacred place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, or object with cultural value to a California Native American tribe, and that is:

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

Impact CULT-1: Historical Resources

As noted, the Solano Archaeological Services memorandum indicated no previously documented historical or archaeological resources within or adjacent to the project site. The orchard and probable associated structure seen in previous aerial photographs were not seen in a 1967 aerial photo and were assumed removed. As such, the mixed tree species that currently exist on the project site are not historic and are a product of later land uses. The two storage structures, although at least 51 years old, are not considered significant historic resources as they have been completely renovated and lack historic integrity. There are no historic-era components observable on either of the two structures.

The project site and existing structures are not listed in the CRHR or in any other federal, State, or local historic registries. The Lodi General Plan does not identify the project site or its associated structures as historic or having substantial historical value, and the cultural resources memorandum considered these structures ineligible for CRHR listing. Project impacts on historical resources would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact CULT-2: Archaeological Resources

As noted, no cultural resources have been recorded on the project site, but eleven sites have been recorded in the vicinity. Among these sites was a prehistoric burial and occupation site recorded in the general project vicinity in 1929. The Central California Information Center search found only one archaeological study that had been conducted previously in the project vicinity. The study included approximately 25% of the project site, on which no archaeological or historical sites were identified.

The field survey and records search of the project site did not find any archaeological resources that would be considered unique and could therefore involve significant effects under CEQA if disturbed during construction. However, the potential exists to inadvertently unearth buried or previously undiscovered archaeological resources during

construction work, especially since the area has been identified as sensitive for tribal cultural resources (see Impact CULT-4 below). Disturbance of such archaeological resources would be a potentially significant cultural resource impact.

In the event of an inadvertent discovery, mitigation measures described below would require notification of the City, County, and tribal representatives, as appropriate, and trigger inspection, significance evaluation, and recommendations for treatment of significant archaeological resources by qualified professionals. Compliance with these mitigation measures would ensure proper treatment of archaeological resources, thereby reducing potential archaeological resource impacts to a level that is less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

CULT-1: The applicant shall retain a qualified professional archaeologist to monitor ground-disturbing activities within the project site, to halt construction as required, and to take action to minimize the potential damage to undiscovered archaeological and/or tribal cultural resources. The City may determine, based on pre-construction testing that indicates the site is not culturally sensitive and, in consultation with the archaeologist, that further testing or construction monitoring is not necessary.

CULT-2: Unless the City determines that the site is not culturally sensitive as provided in Mitigation Measure CULT-1, Native American monitors from culturally affiliated Native American Tribes will be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American monitors shall have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area.

CULT-3: All construction personnel shall receive "tailgate" training by a qualified archaeologist in the identification of paleontological resources and buried cultural resources, including human remains, and in the notification protocol should such resources be discovered during construction work.

A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the project applicant shall notify the Lodi Community Development Department of the proposed earthwork start-date, in order to provide adequate time to contact Native American monitors, if they are needed. Unless the City determines that the site is not culturally sensitive as provided in Mitigation Measure CULT-1, a qualified Native American monitor shall be invited to inspect project excavation work, including any soil piles, trenches, or other disturbed areas. During the inspection, a site meeting of construction personnel shall also be held to afford the tribal representative the opportunity to provide tribal cultural resources awareness information.

CULT-4: If any subsurface archaeological or paleontological resources are encountered during project site construction, all construction activities within a 50-foot radius of the encounter shall be immediately halted until a qualified archaeologist or paleontologist, as appropriate, can examine these materials, evaluate their significance and, if significant, recommend further measures needed to reduce potential effects to a less than significant level, consistent with the requirements of CEQA. A tribal representative shall also be contacted in the event subsurface archaeological resources are encountered and shall be provided the opportunity to examine these resources for significance to local tribes. The Lodi Community Development Department shall be immediately notified in the event of a discovery, and the developer shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in written reports to the Community Development Department, consistent with the requirements of CEQA and the CEQA Guidelines.

Significance After Mitigation: Less than significant

Impact CULT-3: Human Burials

Cultural resource investigations to date have not revealed the presence of human burials on the project site. However, human remains potentially could be encountered during construction or other ground disturbing activities. As a result, the project has the potential to result in a significant cultural resources effect. Potential effects on Native American human remains would also involve the potential for significant impacts on tribal cultural resources. These impacts are discussed in more detail in the discussion under Impact CULT-4 below.

CEQA Guidelines Section 15064.5(e) describes the procedure to be followed when human remains are uncovered in a location outside a dedicated cemetery. All work in the vicinity of the find shall be halted and the County Coroner shall be notified to determine if an investigation of the death is required. If the County Coroner determines that the remains are Native American in origin, then the County Coroner must contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the most likely descendants of the deceased Native American, and the most likely descendants may make recommendations on the disposition of the remains and any associated grave goods with appropriate dignity. If a most likely descendant cannot be identified, the descendant fails to make a recommendation, or the landowner rejects the recommendations of the most likely descendant, then the landowner shall rebury the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance.

Compliance with CEQA Guidelines Section 15064.5(e) typically would ensure that impacts on any human remains encountered during project construction associated with the project would be less than significant. However, there is additional concern about Native American burials, particularly if grave goods are associated with a burial. Mitigation described below provides further instruction on the treatment of remains determined to be Native American, along with compliance with CEQA Guidelines Section 15064.5(e)

procedures. Implementation of this mitigation would reduce project impacts on human burials to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

CULT-5: If evidence of human burial or scattered human remains is encountered, all construction activity within a 50-foot radius of the encounter shall be immediately halted, and the County Coroner, the Lodi Community Development Department, and tribal representative(s) shall be immediately notified. The applicant will be responsible for compliance with the requirements of CEQA Guidelines Section 15064.5 as to the proper treatment of human remains as defined in CEQA Guidelines Section 15064.5, with California Health and Safety Code Section 7050.5, and as directed by the County Coroner. If the human remains are determined to be Native American, the County Coroner is required to notify the Native American Heritage Commission (NAHC), and the NAHC is required to notify and appoint a Most Likely Descendant. The Most Likely Descendant has the opportunity to work with the archaeologist to decide the proper treatment of the human remains and any associated funerary objects.

Significance After Mitigation: Less than significant

Impact CULT-4: Tribal Cultural Resources

As discussed above, a records search and field survey of the project site revealed no known archaeological resources on or near the project site, including resources of potential concern to tribes. No sites that are listed or eligible for listing in the CRHR or other historical resource registers were identified on the project site. However, one prehistoric site has been recorded in the vicinity, and a search of the NAHC's Sacred Lands File indicated the presence of a sacred land on or near the project site.

As noted, five tribes were contacted by letter to participate in AB 52 consultation (see Appendix E). Of these, only the UAIC responded to the City and requested AB 52 consultation on the project. UAIC representative Marcos Guerrero met with City Planner Craig Hoffman and BaseCamp Environmental representative Charlie Simpson on June 26, 2018 to walk the project site and discuss tribal cultural resource concerns. Although there are no documented cultural resources on or adjacent to the project site, the UAIC expressed concerns about the proximity of the site to the Mokelumne River and indicated that sites of potential tribal concern are in the general vicinity. These concerns were also made known to Solano Archaeological Services during its work. The UAIC indicated its preference that either subsurface testing of the site be performed to further determine the sensitivity of the site, or that Native American monitors be present to monitor construction. The UAIC followed up by providing the City with their recommended tribal cultural resource mitigations, which have been considered by the City in the preparation of this document.

The Northern Valley Yokuts representative, Katherine Perez, communicated informally with Solano Archaeological Services that the project site is archaeologically sensitive being

close to the Mokelumne River. Ms. Perez recommended that all ground disturbance be monitored. No other tribes contacted the City for AB 52 consultation.

The possibility of the inadvertent discovery of unknown resources, including tribal cultural resources, during project development was acknowledged during the AB 52 consultation. Mitigation measures that address inadvertent discoveries of cultural or tribal cultural resources during project construction have been identified. Mitigation Measure CULT-1 would require pre-construction training of construction workers in the identification of potential cultural resources. Mitigation Measure CULT-2 would require that construction be halted if there are inadvertent discoveries of resources and that these resources be evaluated by qualified professionals. Mitigation Measure CULT-3 prescribes actions to be taken if human remains are discovered. Additional mitigation measures pertaining specifically to tribal cultural resources, based upon the recommendations of the UAIC, are described below.

With consideration of tribal input during AB 52 consultation, the City proposes to provide tribal involvement in the project and in the activities prescribed by the mitigation measures. These measures are expected to reduce potential for impacts on tribal cultural resources to a level that is less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

> CULT-6: If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during implementation of Mitigation Measures CULT-1 through CULT-3, construction activities will cease within a 50-foot radius of the encounter. A qualified cultural resources specialist in consultation with invited Native American representatives will assess the significance of the find and make recommendations for further evaluation and treatment documented in a written report to the Lodi Community Development Department. The contractor shall implement any measures deemed by City staff to be necessary and feasible to avoid or minimize significant effects to the cultural resources.

Significance After Mitigation: Less than significant

8.0 GEOLOGY, SOILS, AND MINERAL RESOURCES

ENVIRONMENTAL SETTING

Geomorphology and General Geology

The project site is in the northern portion of the San Joaquin Valley in central California. The San Joaquin Valley constitutes the southern portion of the Great Valley Geomorphic Province, also known as the Central Valley. The Central Valley is a topographically flat, northwest-trending trough about 50 miles wide and 450 miles long. It is bordered by the Tehachapi Mountains on the south, the Klamath and Cascade Mountains on the north, the Sierra Nevada on the east, and the Coast Ranges on the west. The San Joaquin Valley extends from the Tehachapi Mountains to the Sacramento-San Joaquin Delta, which is immediately west of the City of Lodi.

The San Joaquin Valley is filled with thick sedimentary rock sequences that were deposited as much as 130 million years ago. The sediments that form the valley floor were derived largely from erosion of the Sierra Nevada. The smaller and steeper slopes on the west side of the Valley overlie sedimentary rocks more closely related to the Coast Ranges. Large alluvial fans have developed on each side of the valley. The larger and more gently sloping fans are on the east side of the valley and overlie metamorphic and igneous basement rocks. These basement rocks are exposed in the Sierra Nevada foothills and consist of metasedimentary, volcanic, and granitic rocks. The Geologic Map of the Sacramento Quadrangle (Wagner et al. 1981) designates the underlying geology of the project site as the Modesto Formation, consisting of Quaternary sediments.

Geological Conditions

Seismicity

There are several faults and potential fault traces located within the County, concentrated along its eastern and western margins; none of these faults are located in or near the City of Lodi. Faults are classified as to their potential for seismic activity based on evidence of past activity. An "active" fault is defined as one along which displacement has been demonstrated to occur within the past 11,700 years. A fault is considered "potentially active" if there is evidence of movement within the past 700,000 years and further movement is considered likely. An "inactive fault" shows no evidence of movement within the last 1.6 million years and renewal of activity is considered unlikely. Fault rupture is a potential hazard that occurs within active earthquake fault zones. A fault zone has significant width, ranging from a few feet to several miles (Bryant and Hart 2007).

According to the Lodi General Plan EIR, there are no active or potentially active faults in the Lodi vicinity. The nearest active fault is the Greenville Fault, approximately 34 miles to the south, which is considered capable of a maximum moment earthquake magnitude of 6.9. Other nearby faults rated as active within the last 200 years include the Concord-Green

Valley Fault approximately 45 miles to the west-northwest, and the Hayward Fault approximately 56 miles to the west (City of Lodi 2009).

Ground Shaking

The greatest geologic hazard in Lodi is ground shaking from earthquakes originating outside of the area, with the danger it poses to structures. The severity of seismic ground shaking depends on many variables, such as earthquake magnitude, hypocenter proximity, local geology, groundwater conditions, and topographic setting. In general, ground-shaking hazards are most pronounced in areas that are underlain by loosely consolidated soil/sediment. The project site, along with the rest of San Joaquin County, is subject to seismic shaking from active and potentially active faults east and west of the County. They not only include the three faults mentioned above, but also the Calaveras, West Napa, Monte Vista-Shannon, Ortigalita, and San Andreas faults (San Joaquin County 2016b).

Aside from magnitude, the strength of an earthquake can be described by its intensity, which is based on observed physical effects. The Modified Mercalli Intensity Scale measures the intensity of physical effects associated with earthquakes (Table 8-1). In the Lodi area, ground shaking equivalent to an intensity of VIII on the Modified Mercalli Scale may occur. During an Intensity VIII event, some damage would occur to well-made structures and chimneys; some towers would fall; and poorly constructed or weak structures would be heavily damaged. An Intensity VIII earthquake would be most probable in areas where the water table is most shallow – near the Mokelumne River. Where the water table is deeper than 30 feet, an Intensity VII earthquake would be more reasonably expected. In such an earthquake, damage in well-built structures would be slight (City of Lodi 2009).

Liquefaction

Soil compaction and settlement can result from seismic ground shaking. If the sediments that compact during an earthquake are saturated, soils may lose strength and become fluid – a process called liquefaction. Based on known information, areas of the County with groundwater less than 50 feet from ground surface in unconsolidated sediment are susceptible to liquefaction, including lands near river courses (San Joaquin County 2016b). County mapping indicates the depth to groundwater at the site is approximately 30 feet (San Joaquin County FCWCD 2019). However, according to the Lodi General Plan EIR, the potential hazard of soil liquefaction in the Planning Area is considered low to moderate, based on the substantial distance from the active Hayward and Calaveras Fault zones and the intensity of ground shaking expected to occur from those faults (City of Lodi 2009).

TABLE 8-1
MODIFIED MERCALLI INTENSITY SCALE

Intensity	Shaking	Description
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
XI	Extreme	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.
XII	Extreme	Damage total. Lines of sight and level are distorted. Objects thrown into the air.

Source: U.S. Geological Survey 1989.

Other Geological Hazards

Subsidence is the gradual settling or sinking of the earth's surface with little or no horizontal motion. Subsidence typically occurs in areas that overlie an aquifer where the

groundwater level is gradually and consistently decreasing. Additionally, subsidence may also occur in the presence of oil or natural gas extraction. Within the Delta region, subsidence can also be caused by oxidation, anaerobic decomposition, shrinkage, and wind erosion. The City of Lodi is located approximately five miles east of the Delta at an elevation of 30 feet above mean sea level or more and therefore is not anticipated to suffer the direct effects of regional subsidence. Subsidence from natural gas or groundwater withdrawals in the Lodi area is not considered to be a significant hazard (City of Lodi 2009).

Settlement is the consolidation of the underlying soil when a load, such as that of a building or new fill material, is placed upon it. When soil tends to settle at different rates and by varying amounts depending on the load weight, it is referred to as differential settlement. Settlement commonly occurs because of building construction or other large projects that require soil stockpiles. Portions of Lodi that contain fill material may be susceptible to settlement. If the fill materials are unconsolidated, they have the potential to respond more adversely to additional load weights, compared to adjacent native soils (City of Lodi 2009).

Soils and Soil Conditions

Most of the soils in the San Joaquin Valley consist of sand, silt, loamy clay alluvium, peat, and other organic sediments. These soils are the result of long-term natural soil deposition and the decomposition of marshland vegetation. Sand and gravel are found along waterways and the San Joaquin River, and fine-grained clays, silts, and peat deposits are present in the Delta. Silt, clay, and sandy loam soils are fertile and support agriculture within San Joaquin County for a wide variety of crops.

Soil survey data for the project site from the USDA Natural Resources Conservation Service Web Soil Survey indicates that the soil underlying the project site is Tokay-Urban land complex, 0 to 2 percent slopes (NRCS 2018). The Tokay component of the complex consists of Tokay fine sandy loam, which is a very deep, well-drained soil formed in alluvium from granitic rock sources. The permeability of Tokay soil is moderately rapid, runoff is slow, and its water-holding capacity is high. Water erosion hazard is slight, and the hazard of wind erosion is moderate. Urban land consists of areas covered by roads, driveways, sidewalks, parking lots, buildings, and other structures. The soil material under the impervious surface is similar to that of Tokay fine sandy loam (SCS 1992).

Rates of erosion can vary, depending on the soil material and structure, placement, and the general level of human activity. Soil containing high amounts of sand or silt can be easily eroded, while clayey soils are less susceptible (City of Lodi 2009). Potential erosion associated with construction and development and resulting potential impacts on water quality are addressed by State of California stormwater permit requirements and corresponding local implementation plans, ordinances, and standards, including those adopted by the City of Lodi. Storm water pollution prevention controls are addressed in detail in Chapter 11.0, Hydrology and Water Quality; soil erosion controls specific to construction work are described in the Regulatory Framework section below.

Several soil types in the Lodi area are considered “expansive soils”, which can change in volume depending on moisture content and could cause damage to structures and pavement

as a consequence. However, according to the San Joaquin County Soil Survey, project site soils are of the Tokay-Urban complex, which has low expansive potential (SCS 1992).

Paleontological Resources

Paleontological resources are fossils or groups of fossils that are unique, unusual, rare, uncommon, or important, and that add to an existing body of knowledge in specific areas. Surface examination of a study or project area often does not reveal whether paleontological resources are present. A record search of the Museum of Paleontology at the University of California in Berkeley indicated that 97 paleontological finds have been made in San Joaquin County. Most specimens from the County have been found in rock formations in the foothills of the Diablo Mountain Range. However, remains of extinct animals, such as mammoth, could be found virtually anywhere in the County, especially along watercourses such as the San Joaquin River and its tributaries (San Joaquin County 2016b).

The Modesto Formation has been associated with paleontological resource discoveries. Most of the Lodi area is located on the historic floodplain of the Mokelumne River on the sediments of the Modesto Formation. Fossils have the potential to occur within the sediment deposits, but any occurrences are likely to be encountered below the upper five to ten feet of sediment (San Joaquin County 2016b). There are no known existing paleontological resources on or near the project site.

Mineral Resources

The California Surface Mining and Reclamation Act of 1975 requires the State Geologist to classify land based on the known or inferred mineral resource potential of that land. The Mineral Land Classification process identifies lands that contain economically significant mineral deposits to ensure that the mineral resource potential of lands is considered in land-use planning. These lands are classified into one of four Mineral Resource Zones (MRZs):

- MRZ-1 is an area where geologic information indicates no significant mineral deposits are present.
- MRZ-2 is an area that contain identified mineral resources.
- MRZ-3 is an area of undetermined mineral resource significance.
- MRZ-4 is an area of unknown mineral resource potential.

Based on review of the California Geological Survey Mineral Land Classification interactive map and the Lodi General Plan, the project site is located within MRZ-1, which indicates that no significant mineral deposits are present or there is little likelihood of their presence (California Geological Survey 2015).

Oil, natural gas, and geothermal resource development is regulated by the California Department of Conservation, Division of Oil, Gas and Geothermal Resources. Based on Division online mapping, there are no oil or natural gas fields in the project vicinity, nor are there any geothermal areas (DOGGR 2018).

REGULATORY FRAMEWORK

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act, enacted in 1972 and subsequently amended, prohibits the location of most structures for human occupancy across the traces of active faults and to thereby mitigate the hazard of fault rupture. Under the Act, the State Geologist is required to delineate Earthquake Fault Zones along known active faults in California. Cities and counties affected by the zones must regulate certain development projects within the zones, withholding development permits for sites within the zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting (Bryant and Hart 2007).

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. This act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit is granted for a site within a seismic hazard zone, a geotechnical investigation of the site must be conducted, and appropriate mitigation measures incorporated into the project design.

California Building Code

The California Building Code is another name for the body of regulations known as the California Code of Regulations Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, by law responsible for coordinating all building standards.

Published by the International Conference of Building Officials, the Uniform Building Code is a widely adopted model building code in the United States. The California Building Code incorporates by reference the Uniform Building Code with necessary amendments applicable to conditions in California. About one-third of the text within the California Building Code has been tailored for California earthquake conditions (City of Lodi 2009). The City of Lodi has adopted the 2019 California Building Code by reference in Chapter 15.04 of the Lodi Municipal Code.

SWRCB Construction General Permit

Erosion control during construction activities that disturb one acre of soil or more is instituted in the Construction General Permit issued by the State Water Resources Control Board (SWRCB). Local compliance with the Construction General Permit is required by the City's Stormwater Management Program (SWMP). Chapter 11.0, Hydrology and Water Quality, discusses the SWMP in detail.

The Construction General Permit requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer to address potential water quality issues. The SWPPP includes a site map and description of

construction activities. It identifies potential construction pollution sources and the Best Management Practices (BMPs) that would be implemented to avoid or minimize adverse water quality impacts. Construction BMPs include provisions for erosion control including limitations on disturbance and temporary soil stabilization by using mulch, seeding, soil stabilizers, and fiber rolls and blankets. BMPs may also include filtration devices, silt fences, straw bale barriers and sediment traps or basins. Only BMPs applicable to the project would become part of the SWPPP. The SWPPP also specifies maintenance and monitoring activities needed to ensure compliance with applicable water quality standards.

The project is also required to incorporate post-construction storm water quality controls described in the City's Multi-Agency Post-Construction Stormwater Standards Manual in project plans and specifications. These requirements are discussed in more detail in Chapter 11.0, Hydrology and Water Quality.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on geology, soils, and mineral resources if it would:

- Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure (including liquefaction), or landslides.
- Result in substantial soil erosion or the loss of topsoil,
- 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,
- 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,
- 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,
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature,
- Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state, or
- 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.

Regarding the fifth bullet point, since the project proposes to connect to the City of Lodi's wastewater system, it would not use septic tanks or alternative wastewater disposal systems. Therefore, this issue is not analyzed in this EIR.

Environmental Concerns Not Discussed in this Analysis

The project is subject to the following existing environmental conditions related to geology and soils:

- Ground shaking from active faults outside San Joaquin County
- Moderate liquefaction hazard
- Expansive soils

Potential effects of these conditions on future residents, guests, and employees of the project are not considered within the scope of CEQA analysis, as discussed in Section 1.3 of this EIR. The project would not exacerbate these conditions. Potential health risks or hazards associated with these conditions, if any, will be considered by the City of Lodi as necessary in its evaluation of the proposed project. It should be noted that the City would require a geotechnical report as part of the project application. The results and recommendations of the report would be considered by the City in its ultimate decision on the project.

Impact GEO-1: Soil Erosion

The Tokay-Urban land complex soil on the project site has a moderate potential for wind erosion and low potential for water erosion. However, project construction activities such as grading and excavation would disturb the soil, creating a potential for wind and/or water erosion.

Compliance with SJVAPCD Regulation VIII, the dust control regulation discussed in Chapter 5.0, Air Quality, would reduce potential wind erosion impacts. Additionally, the project would be required to obtain a Construction General Permit, a condition of which is the preparation of an SWPPP that addresses erosion control during construction, as well as post-construction BMPs to be incorporated into the project. These requirements are restated in the mitigation measure below.

In addition, the project would be required to submit, for City review and approval, an erosion control plan that complies with the City's Storm Water Management Program prior to issuance of grading or construction permits. The erosion control plan shall identify the Best Management Practices that will be utilized to limit the erosion effects during and after construction of the proposed project. Measures could include, but are not limited to, placing an aggregate pad at construction site ingress/egress locations, using sand or biofilter bag sediment barriers on slopes, and the placement of straw bales or roll sediment barriers along slope contours and back-of-curb, among others.

Conformance with Construction General Plan Permit requirements, with implementation of Mitigation Measure GEO-1, and incorporation of the BMPs outlined in the City of Lodi's Storm Water Development Standards would control potential soil erosion during

and after construction, thereby reducing impacts to a level that would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact GEO-2: Paleontological Resources and Unique Geological Features

Geological materials underlying the site consist of mixed alluvial deposits. There are no unique geological features located on the project site that would be indicative of any special resources.

No known paleontological resources are located on the project site. Nevertheless, it is conceivable that excavation associated with project development could unearth paleontological materials, especially since the project site is underlain by the Modesto Formation. Mitigation Measures CULT-1 and CULT-2, described in Chapter 7.0, Cultural Resources, would require interruption of construction if a resource is encountered, inspection of the resource by a qualified paleontologist, and mitigation as recommended by the paleontologist, along with worker training. These mitigation measures would reduce potential impacts on paleontological resources to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures: Implementation of Mitigation Measures CULT-1 and CULT-2.

Significance After Mitigation: Less than significant

Impact GEO-3: Access to Mineral Resources

There are no identified mineral, petroleum, or natural gas resource areas on the project site, nor are there any active mining operations or petroleum/natural gas extraction activities on or near the site. The project would have no effect on the availability of or access to locally designated or known mineral resources, which are not in the area. The project would have no impact on mineral resources.

Level of Significance: No impact

Mitigation Measures: None required

9.0 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL SETTING

Global Climate Change and Greenhouse Gases

Global climate change is a change in the average weather conditions, such as temperature and rainfall, of the Earth over a long period of time. Recent scientific observations and studies indicate that global climate change, linked to an increase in the average global temperature that has been observed, is now occurring. There is a consensus among climate scientists that the primary cause of this change is human activities that generate emissions of greenhouse gases (GHGs) (CAPCOA 2009). GHGs are gases that trap heat in the earth's atmosphere. They include carbon dioxide, the most abundant GHG, as well as methane, nitrous oxide, and other less abundant gases. Although each GHG has heat-trapping properties, they vary in the amount of heat they can trap. Measurements of GHG emissions are commonly expressed in carbon dioxide equivalents (CO_2e), in which all GHG emissions are converted to equivalent carbon dioxide emissions, based on their heat-trapping properties.

GHG emissions in California in 2018, the most recent year for which data are available, were estimated at approximately 425 million metric tons CO_2e – a decrease of approximately 13% from the peak level in 2004. Transportation was the largest contributor to GHG emissions in California, with approximately 40% of total emissions. Other significant sources include industrial activities, with approximately 21% of total emissions, and electric power generation, both in-state and imported, with approximately 15% of total emissions (ARB 2020b).

It is estimated that the community of Lodi emitted 486,628 metric tons CO_2e of GHGs in 2008. Residential and non-residential energy consumption was the largest source of GHGs, accounting for 55.1% of total emissions. Transportation accounted for 30.5%, and solid waste accounted for 11.2%. The remaining emissions were generated by water consumption, wastewater treatment, and municipal operations (City of Lodi 2014).

Concerns related to global climate change include the direct consequences of a warmer climate, but also include indirect effects such as reduced air quality, reduced snowpack, higher-intensity storms, and rising sea levels. All these changes have implications for the human environment, as well as existing ecosystems and the species that depend on them. The United Nations Intergovernmental Panel on Climate Change has concluded that stabilization of greenhouse gases at a concentration of 400-450 parts per million CO_2e is required to keep mean global warming below 2° Celsius, which is considered necessary to avoid dangerous impacts of climate change (IPCC 2001). As of 2018, GHG concentration in the atmosphere was estimated at 457 parts per million CO_2e (European Environment Agency 2020).

The State of California, through a collaboration of three agencies, has prepared Climate Change Assessments that provide scientific assessments on the potential impacts of climate change in California and reports potential adaptation responses. The most recent report, issued in 2019, includes assessments of climate change impacts by region, including the San Joaquin Valley. Potential climate change impacts occurring in the San Joaquin Valley include the following (Westerling et al. 2018):

- Acceleration of warming across the region and state.
- More intense and frequent heat waves.
- Higher frequency of catastrophic floods.
- More intense and frequent drought.
- More severe and frequent wildfires.

The consequences of these impacts would fall on the following sectors in the San Joaquin Valley:

- Agriculture is one of the most vulnerable sectors due in part to more frequent and severe drought, as well as tighter water supply. Regulatory and physical constraints on water supply for agriculture, and environmental factors such as warmer temperatures and more variable precipitation, new pests, and reduced chill hours will affect agricultural decision-making and implementation.
- Ecosystems are highly vulnerable to climate change given existing anthropogenic stressors and the lack of organization of landscape-scale science, funding, and mitigation of adverse impacts within the region. This is particularly the case during prolonged droughts, when scarce water supply disproportionately impacts ecosystems.
- Water resources will be severely impacted by climate change. Regional climate trends are likely to reinforce naturally highly variable precipitation regimes, but with prolonged periods of drought and pronounced precipitation events. At higher elevations, more precipitation as rain and less as snow will result in a fundamental shift in the hydrologic regime, with greater surface water flows over shorter periods of time. In all, the increased variability in timing and magnitude of surface water will result in a cascade of downstream effects, including changes in reservoir operations for flood protection, less available surface water during summer when irrigation requirements are highest, and decreased water quality. Water quality will be degraded directly, from increased stream temperatures reducing management options for cold-water fisheries, or from the increase in concentration of contaminants given diminished flows.
- Infrastructure, including urban, water, and transportation systems, may face increased stress from higher temperatures and extreme precipitation events, including droughts and floods. Increasing urbanization in the San Joaquin Valley –

and uneven land use planning throughout the region – is likely to hinder efficient and cost-effective investments in regional infrastructure.

- Public health will be exacerbated by many negative impacts from climate change. Warmer temperatures will facilitate the spread of disease, worsen air quality from extended agricultural fallowing, and challenge food security in disadvantaged communities. At the same time, concentration of pollutants in drinking water, particularly in small community water systems and rural household drinking wells, may increase the incidence of waterborne diseases. Disadvantaged rural communities are likely to experience more intense impacts from extreme events compared to urbanized areas.

Potential impacts of climate change specific to Lodi would include intense heat waves, reduced precipitation, more frequent drought conditions, reduced snowfall and early melting of the snowpack in the Sierra Nevada and disrupted seasonal patterns that could affect farming practices and natural habitats in the area (City of Lodi 2014).

Unlike the criteria air pollutants described in Chapter 5.0, Air Quality, GHGs have no "attainment" standards established by the federal or State government. In fact, GHGs are not generally thought of as traditional air pollutants because their impacts are global in nature, while air pollutants mainly affect the general region of their release to the atmosphere (SJVAPCD 2015b). Nevertheless, the EPA has found that GHG emissions endanger both the public health and public welfare under Section 202(a) of the Clean Air Act, because of their impacts associated with climate change (EPA 2009).

REGULATORY FRAMEWORK

Federal

As noted above, the EPA has found that GHG emissions endanger both the public health and public welfare under Section 202(a) of the Clean Air Act. However, the federal government does not have a comprehensive GHG strategy.

Some GHG emission reduction actions have been adopted at the federal level. In coordination with the U.S. Department of Transportation, the EPA issued GHG emission and fuel economy standards for passenger vehicles and trucks that are intended to cut six billion metric tons of GHG emissions over the lifetimes of vehicles sold in model years 2012-2025. In 2010, the EPA set GHG emissions thresholds to define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2013, the EPA proposed standards to cut carbon emissions from new power plants, which were adopted in 2015. Also in 2015, the EPA adopted the Clean Power Plan, which established guidelines for states in limiting carbon dioxide emissions from existing power plants. However, the Trump administration did not implement either of these actions, and the U.S. Supreme Court ruled in 2022 that the Clean Power Plan exceeded EPA's authority. The EPA has taken no further action on this issue at this time.

In 2015, the Paris Agreement was reached among 196 countries, with each country pledging to take actions to decrease GHG emissions to reach the overall goal of limiting the increase in global temperature to no more than 2 degrees Celsius. The Paris Agreement does not set legally binding reduction targets to be met. However, it does require all parties to put forward their best efforts through "nationally determined contributions" and to strengthen these efforts in the years ahead. This includes requirements that all parties report regularly on their emissions and on their implementation efforts. Although the United States was a signatory, the Trump administration withdrew from the Paris Agreement. However, the United States rejoined the agreement after President Biden signed an executive order declaring that intention.

State

California has addressed climate change on its own initiative as early as 1988, when the California Energy Commission was designated as the lead agency for climate change issues. However, the most significant state activities have occurred from 2005 to the present, when various executive orders and State legislation established the current framework for dealing with climate change. Several of these are described below.

Executive Orders S-3-05 and B-30-15

Executive Order S-3-05, signed by Governor Schwarzenegger in 2005, established GHG emission reduction targets for California. Specifically, GHG emissions would be reduced to the level of emissions in the year 2000 by 2010, to the level of emissions in the year 1990 by 2020, and to 80% below the 1990 emissions level by 2050. The desired 2050 GHG emission reduction is consistent with the Intergovernmental Panel on Climate Change objectives for stabilizing global climate change. The 2020 reduction goal set forth by S-3-05 was codified by AB 32, which is described below.

On April 29, 2015, Governor Brown signed Executive Order B-30-15, which advances the goals of Executive Order S-3-05 by establishing a GHG reduction target of 40% below 1990 emission levels by 2030. The 2030 reduction goal set forth by B-30-15 was codified by Senate Bill (SB) 32, which also is described below.

To date, the 2050 reduction goal has not been codified in State law, and the State has not prepared any plans to achieve the 2050 goal. In its ruling on *Cleveland National Forest Foundation v. SANDAG* (2017), the California Supreme Court stated that the CEQA lead agency did not abuse its discretion by declining to explicitly engage in an analysis of the consistency of projected 2050 greenhouse gas emissions with the goals in the executive order, given the lack of reliable means to forecast how future technology and State legislative action will affect future emissions. The same condition applies to this project; therefore, an analysis of project consistency with the 2050 reduction goal in Executive Order S-3-05 will not be conducted in this EIR.

AB 32

AB 32, the Global Warming Solutions Act of 2006, is State legislation that sets goals of reducing GHG emissions to year 2000 levels by 2010 and to year 1990 levels by 2020. These specific goals are directly related to the Governor's overall objectives established in

Executive Order S-3-05. The State's initial planning efforts were oriented toward meeting the legislated 2010 and 2020 goals, while placing the State on a trajectory to eventual achievement of the 2050 goal set forth in Executive Order S-3-05.

The ARB has primary responsibility for AB 32 implementation. ARB adopted a Climate Change Scoping Plan (Scoping Plan) in 2008 with the purpose of meeting the AB 32 targets. The Scoping Plan details the various GHG reduction initiatives that will be undertaken by the State or passed down to local government, and it quantifies the GHG emission reductions associated with each of the initiatives. The 2008 Scoping Plan proposed to reduce GHG emissions from the State's projected 2020 "business-as-usual" emissions by approximately 29%. Under the Scoping Plan, nearly 85% of the GHG reductions would be achieved under a "cap-and-trade" program and "complementary measures," including expansion of energy efficiency programs, increase in the use of renewable energy sources, and low-carbon fuel standards, among others. The remaining 15% would include measures applicable to GHG sources not covered by the cap-and-trade program (ARB 2008).

The cap-and-trade program is the centerpiece of the GHG reduction program set forth in the Scoping Plan. In general, the program sets a "cap" on the total GHG emissions that would be allowed in California, which gradually decreases over time. Allowances for GHG emissions are sold at auction to industrial activities and utilities that emit large quantities of GHGs, which in turn can sell allowances that are unused to other activities that need more allowances (the "trade" component). In 2017, the State Legislature extended the cap-and-trade program from its original expiration in 2020 to 2030, as part of a strategy to meet GHG reduction targets set by SB 32 (see below).

In May 2014, the ARB approved the First Update to the Scoping Plan. The 2014 Update lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to the 2050 target set forth in Executive Order S-3-05. It recommends actions in nine sectors: energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green buildings, and the cap-and-trade program (ARB 2014).

Recently, the ARB released the California Greenhouse Gas Emission Inventory, with data from 2018. As noted above, total state GHG emissions in 2018 were approximately 425 million metric tons CO2e. This total was approximately six million metric tons CO_2e below the 2020 target established by AB 32 (ARB 2020b).

SB 32

In 2016, Senate Bill (SB) 32 was enacted. SB 32 extends the GHG reduction goals of AB 32 by requiring statewide GHG emission levels to be 40% below 1990 levels by 2030, in accordance with the target originally established by Executive Order B-30-15. The State has adopted an updated Scoping Plan that sets forth strategies for achieving the SB 32 target. The updated Scoping Plan continues many of the programs that were part of the previous Scoping Plans, including the cap-and-trade program, low-carbon fuel standards, renewable energy, and methane reduction strategies. It also addresses for the first time GHG emissions from the natural and working lands of California, including the agriculture

and forestry sectors (ARB 2017). As noted, the cap-and-trade program, a key component of meeting Scoping Plan reduction goals, has been extended to 2030.

Executive Order B-55-18

On September 10, 2018, Governor Brown signed Executive Order B-55-18. This executive order set a statewide goal of achieving carbon neutrality no later than 2045. "Carbon neutrality" refers to achieving net zero carbon emissions (i.e., GHGs) by balancing a measured amount of carbon released with an equivalent amount sequestered or otherwise offset. The executive order further states that, after 2045, California shall achieve and maintain net negative GHG emissions. The goals set by Executive Order B-55-18 were codified in part by SB 100, also signed by Governor Brown in 2018, which addresses sources of electricity. Chapter 16.0, Utilities and Energy, describes SB 100 in more detail.

Regional and Local

SB 375/Sustainable Communities Strategy

In 2008, the State enacted SB 375, which requires a metropolitan planning organization to include a Sustainable Communities Strategy in its Regional Transportation Plan (see Chapter 15.0, Transportation). The Sustainable Communities Strategy demonstrates an approach to how land use development and transportation can work together to meet GHG emission reduction targets for cars and light trucks. These targets, set by ARB, call for the region to reduce per capita GHG emissions. If a metropolitan planning organization is unable to meet the targets through the Sustainable Communities Strategy, then an Alternative Planning Strategy must be developed which demonstrates how targets could be achieved.

SJCOG is the metropolitan planning organization for San Joaquin County and its incorporated cities, including Lodi. The Sustainable Communities Strategy developed by SJCOG arises from land use assumptions used in the preferred land use and transportation scenario that is the basis for SB 375 planning. The assumptions in the preferred scenario are guided by general plans (SJCOG 2018). The ARB provided GHG reduction targets for the preparation of SJCOG's 2018 Regional Transportation Plan, setting the targets at a 5% per capita reduction by 2020 and a 10% per capita reduction by 2035, both relative to the 2005 per capita level (SJCOG 2018).

The adopted Sustainable Communities Strategy includes policies and supporting strategies designed to attain the GHG per capita reduction targets. It should be noted that SJCOG has no authority to enforce the policies and strategies in the Sustainable Communities Strategy; the ultimate decisions regarding land use driven by incentives and disincentives for the local governments.

SJVAPCD Climate Change Action Plan

The SJVAPCD adopted a Climate Change Action Plan in 2008 and issued guidance for development project compliance with the plan in 2009. The guidance adopted an approach that relies on the use of Best Performance Standards to reduce GHG emissions. Projects implementing Best Performance Standards would be determined to have a less than

cumulatively significant impact. For projects not implementing Best Performance Standards, demonstration of a 29% reduction in project-specific (i.e., operational) GHG emissions from business-as-usual conditions is required to determine that a project would have a less-than-significant cumulative impact (SJVAPCD 2009).

City of Lodi Climate Action Plan

The City of Lodi adopted a Climate Action Plan (CAP) in 2014. The CAP provides an inventory of Lodi's GHG emissions and describes how the City will achieve reductions through local actions that contribute to the statewide reduction target defined in AB 32, the CEQA Guidelines, and other State guidance. The primary objectives of the CAP process are to contribute to the State's climate protection efforts and to provide CEQA review streamlining benefits for development projects within the City limits (City of Lodi 2014).

The CAP defines the local strategies that will be implemented by the City to achieve its goal of reducing GHG emissions by 15% from their 2008 level by 2020, and 37% by 2030. The strategy covers five areas: energy efficiency, transportation, solid waste, water, and green infrastructure. Both local and applicable statewide reduction measures are considered. The largest GHG emission reductions from quantified local measures (43%) would come from building energy efficiency improvements and increased use of renewable energy. Transportation strategies, such as promotion of transit and greater travel efficiencies, would provide 37% of quantified local reductions. Waste reduction and management strategies would make up the remaining 20% (City of Lodi 2014). The CAP has no provisions specifically for new developments, although provisions related to energy efficiency, solid waste, and water conservation would be applicable to them.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact related to GHG emissions if it would:

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

This EIR conducts its GHG analysis in accordance with CEQA Guidelines Section 15064.4, which 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 greenhouse gas emissions resulting from a project. CEQA Guidelines Section 15064.4(b) states that a Lead Agency should consider the following factors, among others, when assessing the significance of impacts from GHG emissions on the environment:

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.

- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Some jurisdictions have established quantitative thresholds for determining the significance of project GHG emissions from construction activities and project operations. Neither the City, San Joaquin County, nor SJVAPCD has established such quantitative significance thresholds.

Impact GHG-1: Project GHG Construction Emissions and Consistency with Applicable Plans and Policies

The CalEEMod model was used by BaseCamp Environmental, the EIR preparer, to estimate the total construction and operational GHG emissions associated with the proposed project development (see Appendix B). Table 9-1 presents the results of the CalEEMod run (see Impact GHG-2 below for an explanation of "mitigated" emissions).

TABLE 9-1
PROJECT GHG EMISSIONS

GHG Emission Type	Unmitigated Emissions (metric tons CO_2e)	Mitigated Emissions (metric tons CO_2e)
Construction[1]	407	407
Operational[2]	2,382	1,479

[1] Maximum GHG emissions for calendar year.
[2] Annual emissions.
Source: California Emissions Estimator Model v. 2016.3.1.

Based on results from the CalEEMod run, maximum project construction GHG emissions for a calendar year would be approximately 407 metric tons CO_2e for an assumed construction period of approximately two years. Construction emissions would occur only during construction work and would cease once work is completed. In addition, implementation of SJVAPCD Regulation VIII, Rule 9510 and other District rules described in Chapter 5.0, Air Quality, is expected to reduce incrementally the amount of GHGs generated by project construction. Project GHG construction emissions are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact GHG-2: Project GHG Operational Emissions and Consistency with Applicable Plans and Policies

Operational GHG emissions resulting from project site development would be approximately 2,382 metric tons CO_2e annually under "unmitigated" conditions (i.e., without implementation of any reduction measures). "Mitigated emissions" are the result of project compliance with applicable laws and installation of project features. The CalEEMod run incorporated the following assumptions into its "mitigated" estimate of operational GHG emissions:

- Installation of sidewalks on the project site and connection to existing sidewalks in the project vicinity.
- Increased density of residential development.
- Increased diversity of development.
- Proximity to downtown Lodi services (approximately 1.75 miles from project site).
- Access to existing Lodi Grapevine transit routes and stops (one at the corner of Turner Road and Lower Sacramento Road).
- SB X7-7 in 2009 set an overall goal of reducing per capita urban water use by 20% by December 31, 2020. The California Green Building Code mandates a 20% reduction in indoor water use. The provision of water (i.e., supply, treatment, and distribution) typically involves the use of electricity, the supply of which generates GHGs. Thus, the water conservation objectives of SBX7-7 would lead to reduced electricity consumption, and consequently reduced GHG emissions.
- AB 341 establishes the goal of diverting 75% of California's waste stream from landfills by 2020. GHG emissions are generated by solid waste disposed of at landfills. Thus, a reduction in solid waste sent to landfills would reduce GHG emissions generated from landfills.

As shown in Table 9-1, "mitigated" operational emissions from the project would be approximately 1,479 metric tons CO_2e – approximately 37.9% less than under business-as-usual (unmitigated) conditions. This exceeds the Lodi CAP 2020 GHG reduction target of 15%, and the 2030 target of 37%. The GHG reduction also would exceed the 29% reduction standard of the SJVAPCD's Climate Change Action Plan, so the project would have a less-than-significant impact by that standard. The reduction also would meet the goals of the Sustainable Communities Strategy, in that per capita reduction would be equivalent to overall GHG reduction.

The CAP indicates that local measures would account for approximately 29.5% of the numerical GHG emission reductions for 2020, and 28.2% for 2030. The remainder would be the result of statewide reduction measures (City of Lodi 2014). If these percentages are applied to the 2020 and 2030 reduction targets, then local measures would account for a total 4.4% GHG reduction from the 2008 level in 2020, and 10.4% reduction in 2030. It can be reasonably assumed that a development project meeting or exceeding these local

shares of GHG reduction would comply with the objectives of the CAP. The proposed project would exceed both local share percentages; therefore, it would meet CAP reduction objectives.

As discussed in Chapter 16.0, Utilities and Energy, the project would be required to comply with both the 2019 California Green Building Standards Code and the building energy efficiency standards of California Code of Regulations Title 24, Part 6 in effect at the time of project approval. Compliance with these standards would further reduce the amount of GHG emissions associated with the project from business-as-usual conditions, although reductions from compliance cannot be readily quantified. In addition, as also described in Chapter 16.0, the project proposes to incorporate a range of sustainability components in construction and operation of the proposed housing, hotel, and retail uses. These sustainability components also would contribute to GHG emission reductions from business-as-usual levels, although specific reductions cannot be quantified.

Overall, project impacts related to GHG operational emissions are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

10.0 HAZARDS AND HAZARDOUS MATERIALS

This chapter focuses on health and safety issues associated with hazardous materials, proximity to airports, and wildfires. Chapter 5.0, Air Quality, addresses hazards from TAC emissions; Chapter 8.0, Geology, addresses geologic and soil hazards; and Chapter 11.0, Hydrology and Water Quality, addresses potential flooding hazards.

ENVIRONMENTAL SETTING

Project Site

The project site is a former orchard area. Agricultural chemicals may have been used as part of orchard operations, thereby potentially contaminating the soil. Also, the project site is adjacent to the NCPA station and the LEU substation, both of which use or have used hazardous materials. Hazardous materials associated with these land uses are described later in this chapter.

In 2018, GeoSearch conducted an in-depth database and environmental records review to find any records of potential environmental contamination sites on and within up to one mile of the project site. These included federal and state databases such as the GeoTracker database, maintained by the SWRCB, and the EnviroStor database, maintained by the California Department of Toxic Substances Control (DTSC). The review also included property records, historical aerial photographs, and topographic maps. The GeoSearch reports are available in Appendix F of this EIR.

The results of the GeoSearch report indicate that there are no state or federally listed hazardous material sites on or near the project site, and no known hazardous materials are currently being used on the site. The report identified the following leaking underground storage tank sites:

- Two leaking underground storage tank clean-up sites are located on the General Mills property to the south. Both these sites experienced diesel fuel leaks in 1999; their cases were closed in 2015 after the sites were remediated.
- Another leaking underground storage tank clean-up site is the Shell gas station along Turner Road, approximately 820 feet west of the project site. This site also involved a diesel fuel leak, which occurred in 1997; this case was closed in 2013 after the site was remediated.
- A fourth leaking underground storage tank site, associated with a BP gas station, is approximately 0.4 miles north of the project site in the community of Woodbridge. A gasoline leak was discovered in 2016. At the time the GeoSearch report was published, soil gas and groundwater sampling were taking place on this site. However, a search of GeoTracker indicates the case for this site was closed in 2019 after remediation was completed (GeoTracker 2021).

The EnviroStor database mapped a clean-up site in the southwest portion of the project site. However, the information associated with the mapping was for a site in a different location, so the EnviroStor mapping is likely an error.

A power station operated by the NCPA is adjacent to and east of the site. The station is run intermittently during periods of peak electricity demand, up to 200 hours per year. Components of the substation include gas compressors, gas receivers, a 120,000-gallon aboveground fuel oil storage tank and containment berm, circuit breaker, three small storage sheds, electrical room, and transformer. Hazardous materials on site consist of waste oil, insulating oil, diesel fuel, and battery acid (San Joaquin County EHD 2017). No record of hazardous materials contamination on this site was revealed by the 2018 GeoSearch study.

A 1.8-acre electrical substation operated by LEU is southeast of the project site. Components of the substation include transformers, circuit breakers, switches, supply lines, distribution feeders, and fuses. Potential hazardous materials used include mineral oil and battery acid (San Joaquin County DHS 2018). The Safety and Enforcement Division of the California Public Utilities Commission has oversight of safety issues associated with the substation. Additional details regarding the power station and the electrical substation are provided in Chapter 12.0, Land Use, and Chapter 13.0, Noise.

Airport Hazards

There are five public-use airports in the general vicinity of Lodi, most of which are privately owned. The closest public-use airport to the project site is the Lodi Airpark, approximately 4.2 miles to the south. The closest airport with passenger service is Stockton Metropolitan Airport in Stockton, a County-managed facility approximately 17.5 miles southeast of the project site. The project site is not within two miles of an existing airport or within a compatibility zone or an Airport Influence Area as defined in an Airport Land Use Compatibility Plan.

Wildfire Hazards

Wildfire hazards have become an issue of major concern in California, particularly in areas identified as the "wildland-urban interface" – an area where urban development is within or adjacent to natural lands.

The nearby Lodi Lake park, in particular the "wilderness" area along the Mokelumne River, contains extensive areas of riparian forest. The northern portion of the site is less than 100 feet from the park at its nearest point but is separated from the "wilderness" area by an undeveloped, mowed open space area and the open water lake. According to the San Joaquin County Local Hazard Mitigation Plan, high wildland fire hazard areas include outlying residential parcels, open lands adjacent to residential areas, and un-irrigated parklands. The grass-covered, dry grazing lands of the eastern and southwestern foothills in the County have a high potential for large-scale fires. The degree of hazard in these areas depends on temperature, moisture, wind, the amount of vegetation, slope steepness, accessibility to human activities, and accessibility of firefighting equipment (San Joaquin County 2011).

The Safety Element of the Lodi General Plan indicates that the General Plan Planning Area is not characterized by significant areas of wildlands. Less than one percent of the City's land area is identified as Native Riparian and four percent is identified as Native Vegetation (City of Lodi 2010a). Additionally, the topography of the area is relatively flat; steep slopes that can make controlling wildland fires difficult are not common.

The Fire and Resource Assessment Program, managed by the California Department of Forestry and Fire Protection (Cal Fire), identifies fire threat based on a combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). These two factors are combined in determining the following Fire Hazard Severity Zones: Moderate, High, Very High, Extreme. These zones are mapped for two separate areas: State Responsibility Areas are where the State of California is financially responsible for the prevention and suppression of wildfires, while Local Responsibility Areas are where fire protection is typically provided by city fire departments, fire protection districts, counties, or by Cal Fire under contract to local government. The City of Lodi is not within a State Responsibility Area.

Information from the Fire and Resource Assessment Program indicates that the few areas within the Lodi General Plan Planning Area that are listed as "High" fire threat are in areas containing brush as the groundcover (City of Lodi 2009). A draft Fire Hazard Severity Zone by CalFire prepared for Local Responsibility Areas indicates that the project site is within an area designated as having a Moderate fire hazard (CalFire 2009).

REGULATORY FRAMEWORK

Federal Hazardous Material Regulations

At the federal level, the principal agency regulating the generation, transport and disposal of hazardous substances is the EPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The RCRA established a federal hazardous substance "cradle-to-grave" regulatory program that regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. Under RCRA, individual states may implement their own hazardous substance management programs if they are consistent with, and at least as strict as, the RCRA and if they receive EPA approval.

The EPA regulates hazardous substance sites under the Comprehensive Environmental Response Compensation and Liability Act, commonly referred to as Superfund. The purpose of Superfund is to provide authorities the ability to respond to uncontrolled releases of hazardous substances from inactive hazardous waste sites that endanger public health and the environment. The Superfund Amendments and Reauthorization Act expanded EPA's response authority, strengthened enforcement activities at Superfund sites, and broadened the application of the law to include federal facilities. In addition, new emergency planning and community right-to-know provisions were added.

The U.S. Department of Transportation regulates the interstate transport of hazardous materials and wastes through implementation of the Hazardous Materials Transportation Act. This act specifies driver-training requirements, load labeling procedures, and

container design and safety specifications. Transporters of hazardous wastes must also meet the requirements of additional statutes such as RCRA.

The Occupational Safety and Health Administration (OSHA) is the federal agency responsible for ensuring worker safety. OSHA regulations provide standards for safe workplaces and work practices, including those relating to hazardous materials handling.

State Hazardous Material Regulations

Several state agencies regulate the transportation and use of hazardous materials to minimize potential risks to public health and safety, including the California Environmental Protection Agency (CalEPA) and the Office of Emergency Services. The California Highway Patrol and Caltrans enforce regulations related to hazardous materials transport.

Within CalEPA, the DTSC has primary authority to enforce hazardous materials regulations for the generation, transport, and disposal of hazardous substances under the authority of the Hazardous Waste Control Law, with delegation of enforcement to local jurisdictions that enter into agreements with the agency. Regulations implementing the Hazardous Waste and Control Law list 791 hazardous chemicals and 20 or 30 more common substances that may be hazardous; establish criteria for identifying, packaging, and labeling hazardous substances; prescribe management of hazardous substances; establish permit requirements for hazardous substances treatment, storage, disposal, and transportation; and identify hazardous substances that cannot be deposited in landfills.

Under both RCRA and the Hazardous Waste Control Law, the generator of a hazardous substance must complete a manifest that accompanies the waste from the point of generation to the ultimate treatment, storage, or disposal location. The manifest describes the waste, its intended destination, and other regulatory information about the waste. Copies must be filed with the DTSC. Generators must also match copies of waste manifests with receipts from the treatment, storage, or disposal facility to which it sends waste.

The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials. Among other responsibilities, Cal/OSHA requires many entities to prepare injury and illness prevention plans and chemical hygiene plans, and it issues specific regulations that limit exposure of construction workers to hazardous materials. Contractors will be required to comply with the handling and use requirements of Cal/OSHA, which would increase worker safety and reduce the possibility of spills, and to prepare an emergency response plan to respond to accidental spills.

Local Hazardous Material Regulations

Certified Unified Program Agency

The Unified Hazardous Waste and Hazardous Management Regulatory Program, enacted in 1993, is a state and local effort to consolidate, coordinate, and make consistent existing programs regulating hazardous waste and hazardous materials management. CalEPA adopted implementing regulations for the Unified Program in 1996. The Unified Program

is implemented at the local level by a Certified Unified Program Agency. The San Joaquin County Environmental Health Department was approved by the State as the Certified Unified Program Agency for the county, including incorporated cities.

The County Environmental Health Department provides the management and record keeping of hazardous materials and underground storage tank sites for San Joaquin County, including those in the City of Lodi. Through the Hazardous Materials Program, the County Environmental Health Department inspects businesses for compliance with the Hazardous Waste Control Law. It also issues hazardous materials/waste permits to businesses that handle quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at any time. Businesses issued these permits are required to submit a Hazardous Materials Business Plan to the Department. The Hazardous Materials Business Plan includes an inventory of hazardous materials and hazardous wastes, and an emergency response plan for incidents involving hazardous materials and wastes.

The NCPA power station is required to comply with programs administered by the San Joaquin County Environmental Health Department, including the Hazardous Material Business Plan, California Accidental Release Prevention, Aboveground Petroleum Storage Act, and the Hazardous Waste Generator programs. The requirements imposed by these programs include an inventory of hazardous materials, an emergency plan addressing the potential release of hazardous materials, and a training program for employees to minimize potential risks to public health and safety. The NCPA has prepared a Spill Prevention, Control, and Countermeasures Plan in compliance with the Aboveground Petroleum Storage Act, along with an Emergency Response Plan to communicate emergency or hazardous conditions to personnel.

San Joaquin County Emergency Operations Plan

An update to the San Joaquin County Emergency Operations Plan is being presented to the County Board of Supervisors for adoption. The primary purpose of the plan, prepared by the County Office of Emergency Services, is to outline the County's all-hazard approach to emergency operations to protect the safety, health, and welfare of its citizens throughout all emergency management mission areas The plan is an all-hazards document describing the County's incident management structure, compliance with relevant legal statutes, other relevant guidelines, whole community engagement, continuity of government focus, and critical components of the incident management structure. Hazards include natural hazards such as floods, earthquakes, and extreme heat, along with technological hazards such as dam and levee failure and hazardous material releases and human-caused hazards such as civil disturbances and terrorism. (San Joaquin County OES 2019a).

As part of the preparation of the Emergency Operations Plan, evacuation routes have been designated in various parts of the County, including Lodi. Within an area designated as the Lodi River Evacuation Zone, Lower Sacramento Road and Turner Road have been designated as evacuation routes (San Joaquin County OES undated).

California Fire Code

The California Fire Code is found in California Code of Regulations Title 24, Part 9 and is revised and published approximately every three years by the California Building Standards Commission. It incorporates, by adoption, the International Fire Code of the International Code Council, with California amendments. This is the official Fire Code for the State and all political subdivisions. The City of Lodi has incorporated the 2019 California Fire Code by reference in Chapter 15.20 of the Lodi Municipal Code.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials,
- 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,
- Emit hazardous emissions or handle hazardous or acutely hazardous materials within one-quarter mile of an existing or proposed school,
- Be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5, and as a result create a significant hazard to the public or the environment,
- For a project located within an airport land use plan or within two miles of a public or public-use airport if no plan has been adopted, result in a safety hazard or excessive noise for people residing or working in the project area,
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan, or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Environmental Concerns Not Discussed in this Analysis

The project is subject to the following existing environmental conditions related to hazards and hazardous materials:

- Nearby hazardous material sites and users of hazardous materials
- Contamination from residual agricultural chemicals
- Exposure to wildland fires

Potential effects of these conditions on future residents, guests and employees of the project are not considered within the scope of CEQA analysis, as discussed in Section 1.3 of this EIR. The project would not exacerbate these conditions. Potential health risks or hazards associated with these conditions, if any, will be considered by the City of Lodi as necessary in its evaluation of the proposed project.

Impact HAZ-1: Hazardous Material Transportation and Storage

Residential land uses do not use hazardous materials in quantities requiring special regulation of their transport and storage. It is not anticipated that hotel operations would involve any substantial transport, use, or disposal of hazardous materials. Consumer products such as cleaning materials would be used in relatively small quantities, stored in approved containers, and used in accordance with the manufacturer's recommendations and/or applicable regulations.

Businesses that use and store known hazardous materials above certain thresholds would be required to submit a Hazardous Materials Business Plan that includes emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material, along with a plan to train employees in safety procedures. It is not anticipated that the proposed hotel would use or store hazardous materials in reportable quantities. In any event, compliance with existing hazardous material regulations and Hazardous Materials Business Plan provisions would reduce impacts related to routine transport, use, and storage of hazardous materials to a level that would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HAZ-2: Hazardous Material Releases

Construction activities on the project site may involve the use of hazardous materials such as fuels and solvents, and thus create a potential for hazardous material spills. Construction and maintenance vehicles would transport and use fuels in ordinary quantities. Fuel spills, if any occur, would be minimal. Other substances used in the construction process would be stored in approved containers and used in relatively small quantities, in accordance with the manufacturers' recommendations and/or applicable regulations. Hazardous materials spills during construction would be addressed in the project's SWPPP, which is described in Chapter 8.0, Geology, and would be required as part of the Construction General Permit. The SWPPP outlines BMPs for the handling and storage of hazardous materials to prevent spills and mitigation measures that should be implemented in the event of a spill. In accordance with SWPPP requirements, contractors have absorbent materials at construction sites to clean up minor spills.

Project construction also has the potential to require the use of potentially hazardous chemicals, or products containing such chemicals, that can harm human health with exposure, including paints, cleaning materials, vehicle fuels, resins in composite wood products, and other compounds. The use of these materials would be short-term and would occur in accordance with standard construction practices; manufacturer guidelines;

applicable federal, State, and local regulations; and the safety requirements of OSHA and Cal/OSHA. For example, employees who work with hazardous materials would be required to wear appropriate protective equipment, and safety equipment would be routinely available in all areas where hazardous materials are used. During construction, hazardous materials would be stored, disposed of, and/or transported off the project site in accordance with federal and State laws to eliminate or reduce the risk of hazardous materials exposure. It should be noted that both the ARB and the EPA have issued rules limiting emissions of potentially toxic substances, such as formaldehyde, used in construction materials and products for the purpose of protecting health. With adherence to applicable laws and regulations, construction impacts with respect to worker exposure to hazardous materials would be less than significant.

As noted in a) above, hazardous materials transportation and storage on the project site would be subject to federal, State, and local regulations that would prevent release of hazardous materials to the soil and/or groundwater and the creation of new hazardous material or waste sites. These requirements would include registration in the California Environmental Reporting System and preparation and implementation of a Hazardous Materials Business Plan. Also, the City and County have emergency response teams that would handle any incident involving hazardous materials.

A project may have significant impacts if it would emit hazardous emissions or handle hazardous or acutely hazardous materials within one-quarter mile of an existing or proposed school. The nearest school to the site is Woodbridge Elementary School, approximately 730 feet northwest of the project site along Lower Sacramento Road. Neither the apartment or hotel operations would require the handling of hazardous or acutely hazardous materials or hazardous waste in amounts that would endanger the public in general, or school students in particular. Hazardous materials use during project construction would be limited to the project site, which would be substantially separated from the school.

In summary, with the relatively low levels of hazardous materials use, storage and transportation associated with the project, and the degree to which nearby hazardous materials uses are subject to applicable state, federal, and local hazardous materials requirements, project impacts related to hazardous materials releases would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HAZ-3: Hazardous Material Sites and Contamination

As noted, the GeoSearch report contains no record of a hazardous material site at the project site. The proposed project would involve the demolition of two prefabricated steel storage buildings. Demolition of the buildings, or excavation of soils under and around the buildings, could involve worker safety concerns and potential for releases of hazardous materials to the environment, due to their age and potential past uses. Demolition of the existing storage buildings would occur in accordance with a City Demolition Permit and a

Demolition Plan reviewed and approved by the Building Official. The Demolition Plan is required to include the required qualifications of demolition contractors, demolition procedures, safety requirements, testing, waste disposal worker and public health, and environmental protections. Implementation of the approved Demolition Plan and the conditions of the Demolition Permit would minimize any release of potential hazardous materials associated with demolition activities. Project impacts related to hazardous material sites would be less than significant.

Removal of portions of the existing rail spur within the site has the potential to release any hazardous material contamination that may exist along this alignment from past railroad use. Soils along this alignment should be tested prior to or in conjunction with track removal to ensure that any associated potential release of hazardous materials is consistent with applicable State health standards. Mitigation described below would reduce any such potential to a level that is less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

HAZ-1: Prior to or in conjunction with removal of the existing rail spur, the applicant shall retain a qualified environmental professional to inspect and obtain soil samples along the railroad spur alignment and determine through testing whether soil removal, treatment or other measures are required to avoid releases of hazardous materials inconsistent with State standards for the proposed land uses. The applicant shall implement the recommendations of the environmental professional, subject to City approval.

Significance After Mitigation: Less than significant

Impact HAZ-4: Public Airport Hazards

As noted, there are no airports operating near the project site, and the site is not within a land use compatibility zone or an Airport Influence Area of an Airport Land Use Compatibility Plan. Project construction and operations would not be exposed or contribute to any aviation-related safety hazards. The project would have no impact related to public airport hazards.

Level of Significance: No impact

Mitigation Measures: None required

Impact HAZ-5: Interference with Emergency Vehicle Access and Evacuations

Direct public and emergency access to the project site is provided by Lower Sacramento Road and Turner Road, both of which are multi-lane urban arterial streets (see Chapter 15.0, Transportation). As noted, these two streets are identified in San Joaquin County emergency action plans as potential evacuation routes.

Project construction traffic and operational truck and vehicle traffic would use the adjacent streets. Project construction would involve limited encroachment into these streets for the

purpose of connecting to existing utilities. This encroachment would not result in any substantial or lengthy interference with traffic on these streets, and these limited impacts would cease when utility construction work is completed. Project-related traffic generated by the project is not expected to substantially affect or interfere with the use of Lower Sacramento Road or Turner Road for emergency response or evacuation purposes.

The proposed project would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Project impacts would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

11.0 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL SETTING

Surface Waters and Water Quality

There are no surface water resources located on the project site. The project site is near two substantial surface waters: the Mokelumne River, approximately 800 feet northeast at its closest to the project site, and Lodi Lake, which is connected to and supplied by the River, approximately 600 feet east at its closest.

The Mokelumne River is approximately 95 miles in length and flows west from its headwaters in the Sierra Nevada to the Sacramento-San Joaquin Delta, where it joins the Cosumnes River. The Mokelumne River is a perennial stream, with peak sustained flows typically occurring from April through June. Data from the U.S. Geological Survey indicate that average annual discharge in the Mokelumne River near the Woodbridge Irrigation District (WID) dam ranged from 21.8 to 2,176 cubic feet per second (USGS 2020).

The Mokelumne River watershed encompasses approximately 578 square miles (UC Davis 2019). The watershed is subdivided into the Upper Mokelumne Watershed and the Lower Mokelumne Watershed, with the dividing point being the base of Camanche Dam. The Lower Mokelumne Watershed, of which Lodi is a part, is approximately 82.3 square miles (Lower Mokelumne River SSC 2012). The Camanche Dam, owned by the East Bay Municipal Utility District and located approximately 20 miles east of Lodi, regulates Mokelumne River flows for downriver water supply, flood control, and fisheries habitat management.

Lodi Lake is an impoundment created by a diversion of water from the Mokelumne River by the Woodbridge Diversion Dam, approximately 0.6 miles north of the project site. The dam is operated by the WID, which supplies water for agricultural and domestic use through a system of approximately 100 miles of canals and pipelines. Lodi Lake has a capacity of approximately 1,400 acre-feet (Woodbridge Irrigation District 2016). The City's SWTP draws upon Lodi Lake for the surface water it receives and treats (see Chapter 16.0, Utilities and Energy).

The SWRCB, in compliance with the federal Clean Water Act Section 303(d), has prepared a list of impaired water bodies in the State of California. The list was updated by the SWRCB and submitted to the EPA for approval in 2010. According to the Section 303(d) list, the Lower Mokelumne River is listed as being impaired by chlorpyrifos, copper, dissolved oxygen, mercury, and zinc, along with an unknown toxicity. Chlorpyrifos, a pesticide, likely comes from agricultural activities. Several potential sources have been identified for mercury, such as municipal and industrial wastewater, agriculture, and resource extraction. Dissolved oxygen in water typically decreases with excess organic

materials, such as large blooms of algae. Sources for copper and zinc are unknown (RWQCB 2018).

Groundwater and Groundwater Quality

The project site is within the boundaries of the Eastern San Joaquin Subbasin of the San Joaquin Valley Groundwater Basin. Groundwater levels may fluctuate over time depending on precipitation, aquifer recharge, and pumping demands. According to the most recent available groundwater report, groundwater levels in the vicinity of the project site are approximately 30 feet below ground surface (San Joaquin County FCWCD 2019). The City uses 28 groundwater wells spaced throughout the City to supply approximately half of the City's water (City of Lodi 2016c). Chapter 16.0, Utilities and Energy, describes the City's water system and supplies in more detail.

The Eastern San Joaquin Subbasin is critically over drafted, as evidenced by decreasing groundwater levels, as a result of increased agricultural and municipal pumping over the years that has not been replaced by recharge. The average annual decrease in groundwater levels was estimated at approximately 0.4 feet between 1930 and 2010 (City of Lodi 2016c). Due to the continued overdraft of groundwater within the subbasin, significant groundwater level depressions are present east of Stockton, west of Linden, and east of Lodi. The City is involved with other local agencies in groundwater management activities, including preparation of the recently adopted Groundwater Sustainability Plan for the subbasin and other activities related to the 2014 Sustainable Groundwater Management Act (SGMA). The Regulatory Framework section below contains a discussion of SGMA and its groundwater planning requirements.

Groundwater quality concerns in the project region include saltwater intrusion from groundwater overdraft as well as pollutants associated with pesticides, fertilizers, and animal waste. The four primary contaminants of concern are dibromochloropropane (DBCP), methyl-tert-butyl-ether (MTBE), perchloroethylene (PCE), and trichloroethylene (TCE) (City of Lodi 2016a). The widespread occurrence of nitrate and pesticides in groundwater at elevated concentrations affects rural and public drinking water supplies in the Eastern San Joaquin Valley. Areas with high levels of nitrate associated with fertilizer use exist southeast of Lodi, among other places (DWR 2006).

Flooding

The standard assessment of flooding hazards evaluates the potential exposure of a project site to a 100-year flood (i.e., the flood that may be expected to occur once every 100 years on average). Based upon maps prepared by the Federal Emergency Management Agency (FEMA) and the San Joaquin County Flood Zone Viewer, the project site is located within FEMA Zone X (Figure 11-1). Zone X areas have a 0.2% annual chance (500-year) flood; or areas of 1% annual chance (100-year) flood with average depths of less than one foot or within drainage areas less than one square mile (FEMA 2017). The project site has a low susceptibility to major flooding but could be inundated during a 500-year flood event.

In 2007, the State Legislature approved SB 5 and a series of related bills intended to set a new 200-year flood protection standard for urban areas in the Central Valley. SB 5 is

described in more detail in the Regulatory Framework section of this chapter. According to preliminary mapping conducted by the City of Lodi, there are isolated areas within the project site that are potentially exposed to 200-year flooding more than three feet deep (Lodi City Council 2019).

Levees or berms have been constructed along the Mokelumne River. These structures were privately built and vary in height. Levees west of State Route 99 are higher and provide protection from flows slightly greater than the 100-year event (City of Lodi 2009). There are no levees within the City limits.

Dams in San Joaquin County are regulated by the California Division of Safety of Dams, which provides oversight to the design, construction, and maintenance of dams to ensure their safety. The Division requires dam owners to submit inundation maps to the State Office of Emergency Services and the Department of Water Resources for dams whose failure could result in loss of life or injury. Camanche Dam has the potential to flood the City of Lodi were it to fail. The San Joaquin County Department of Emergency Services has created a Dam Failure Plan to address emergencies and evacuation if dam failure occurs (San Joaquin County OES 2019b).

REGULATORY FRAMEWORK

State

Water Quality Control Plan (Basin Plan)

The Central Valley RWQCB has prepared a Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins. The Basin Plan identifies water quality standards that are based on identified beneficial uses and water quality objectives based on those uses. Beneficial uses listed for surface water bodies in the vicinity of the project site include municipal and domestic supply, agriculture supply, wildlife habitat, warm and cold freshwater habitat, contact and non-contact recreation, warm and cold-water migration of aquatic organisms, warm and cold-water spawning, industrial process and service supply, and groundwater recharge (RWQCB 2015).

NPDES MS4 Permit

The SWRCB has the responsibility under the federal Clean Water Act through the National Pollutant Discharge Elimination System (NPDES) program for the regulation of storm water quality. Local control over storm water quality is established in the NPDES Phase II Municipal Separate Storm Sewer System (MS4) General Permit system (Order 2003-0005-DWQ) administered by the SWRCB. The permit requires the City to develop and implement a SWMP for the City's storm drainage system. The SWMP is described later in this chapter. Additionally, the permit requires the City's system to reduce its discharge of pollutants to the maximum extent practicable and to perform inspections and monitoring (City of Lodi 2012a).

Construction General Permit

The principal mechanism for maintaining storm water quality during construction activities is the SWPPP. As noted in Chapter 8.0, Geology, discharges subject to the Construction General Permit must develop and implement a SWPPP, which identifies the BMPs that will be employed to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Modifications to the Construction General Permit in 2010 established BMP and monitoring requirements through a "risk-based" approach; that is, construction activities would be assessed for the risk that erosion and sedimentation generated by the activity would pose to water quality in the area, based on potential rainfall likelihood and intensity, and on the pollution sensitivity of waters receiving runoff from the construction site.

Sustainable Groundwater Management Act

In 2014, the California Legislature passed the Sustainable Groundwater Management Act (SGMA), the purpose of which is to give local agencies greater authority to manage groundwater supplies. The legislation requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local groundwater basins and adopt management plans for the basins. Local groundwater sustainability agencies were to be formed by June 30, 2017. Several agencies in the Eastern San Joaquin Subbasin are cooperating as the Eastern San Joaquin Groundwater Authority with responsibility for groundwater planning for the Subbasin. Along with the City, participating agencies include San Joaquin County, the WID, and the NSJWCD. The City now manages the portion of the Subbasin that lies within the boundaries of the City.

Under SGMA, groundwater sustainability plans for critically over drafted basins must be adopted by January 31, 2020, while high- and medium-priority groundwater basins must adopt plans by January 31, 2022. The Eastern San Joaquin Subbasin has been designated a critically over drafted basin. A Groundwater Sustainability Plan for the Subbasin, which was prepared by the Eastern San Joaquin Groundwater Authority, was first submitted to the California Department of Water Resources (DWR) on January 29, 2020. The DWR recommended approval of the GSP in March 2023.

The Groundwater Sustainability Plan follows the method prescribed by SGMA to measure undesirable results, which involves setting minimum thresholds and measurable objectives for a series of representative wells. A total of 20 representative wells were identified for measurement of groundwater levels in the Subbasin, and 10 representative wells were identified for groundwater quality monitoring. Minimum thresholds and measurable objectives for groundwater levels and for water quality were developed for each of the representative wells. Groundwater evaluations conducted as a part of plan development have provided estimates of the historical, current, and projected groundwater budget conditions. Based on these analyses, at projected groundwater pumping levels, the long-term groundwater pumping offset and/or recharge required for the Subbasin to achieve sustainability is approximately 78,000 acre-feet per year (ESJGA 2019).

Achieving sustainability in the Subbasin will require implementation of projects and management actions. The Subbasin will achieve sustainability by implementing water

supply projects that either replace groundwater use or supplement groundwater supplies to attain the current estimated pumping offset and/or recharge need. The Groundwater Sustainability Plan contains a list of 23 potential projects representing a variety of types, including direct and in-lieu recharge, intrabasin water transfers, demand conservation, water recycling, and stormwater reuse. Two of these projects would be implemented by the City of Lodi: the SWTF expansion and delivery pipeline for in-lieu recharge, and the White Slough Water Pollution Control Facility (WPCF) expansion for in-lieu recharge and water recycling (ESJGA 2019).

SB 5 Bills

As noted, the State Legislature approved SB 5 and a series of related Senate and Assembly bills intended to set new flood protection standards for urban areas. These bills, referred to collectively as "the SB 5 Bills," establish the State standard for flood protection in Central Valley urban areas as protection from the 200-year frequency flood. Under the SB 5 Bills, urban and urbanizing areas must be provided with 200-year flood protection no later than 2025. After July 2, 2016, new development in areas potentially exposed to 200-year flooding more than three feet deep is prohibited unless the local land use agency certifies that 200-year flood protection has been provided, or that "adequate progress" has been made toward provision of 200-year flood protection by 2025.

The DWR has drafted Best Available Maps depicting 200-year floodplains in areas covered by SB 5. Lodi is not protected by State Plan of Flood Control facilities in the Central Valley, so DWR did not prepare 200-year floodplain maps for Lodi. The City is in the process of determining the 200-year flood protection boundary and developing the 200-year flood protection map. The finalized map will be used by the City to establish findings for new developments relating to the 200-year flood protection level pursuant to SB 5. A preliminary map has been prepared identifying areas potentially subject to a 200-year flood that is three feet or greater in depth. This map indicates isolated areas within the project site could potentially be subject to a 200-year flood of more than three feet in depth (Lodi City Council 2019).

Regional and Local

Storm Water Management Program

The City of Lodi SWMP, revised in 2012, is intended to minimize the potential storm water quality impacts of development, including both construction and post-construction activity. The SWMP describes BMPs, measurable goals, and timetables for implementation in six program areas: public education and outreach, illicit discharge detection and elimination, public participation/involvement, construction site runoff control, post-construction runoff control, and pollution prevention/good housekeeping (City of Lodi 2012a).

SWMP elements most applicable to land development include construction storm water discharge requirements and the incorporation of post-construction BMPs. Post-construction BMPs are specified in the City's Multi-Agency Post-Construction Stormwater Standards Manual, adopted by several agencies in 2015, including the City. The Manual was prepared to assist the development community in complying with the requirements of

the MS4 Permit. It establishes specific development requirements intended to minimize the amount of contiguous paved surfaces, improve storm water quality, reduce or eliminate stormwater discharge volume, and control peak flows. It outlines measures related to site assessment/site design, source control, and stormwater treatment control that may be incorporated within projects to achieve stormwater quality and quantity objectives (Larry Walker Associates 2015).

One of the requirements of the Post-Construction Stormwater Standards Manual is the preparation of a Project Stormwater Plan to be submitted with the project application. For small projects, the Project Stormwater Plan must include basic project information, proposed site design measures, and results from the Post-Construction Stormwater Runoff Calculator showing the change in pre-project and post-project stormwater runoff. Proposed site design measures may include stream setbacks and buffers, soil quality improvement and maintenance, tree planting and preservation, rooftop and impervious area disconnection, porous pavement, vegetated swales, and rain barrels and cisterns.

For larger projects that are designated Regulated Projects, the Project Stormwater Plan must include additional information, such as a site assessment, proposed source control measures to be implemented, proposed stormwater treatment control measures, and a proposed Operations and Maintenance Plan. For projects designated Hydromodification Management Projects, which create and/or replace one acre or more of impervious surface, the Project Stormwater Plan must include, in addition to the information required for Regulated Projects, proposed hydromodification control measures and modeling results (Larry Walker Associates 2015). The proposed project meets the criteria for a Hydromodification Management Project.

Northeastern San Joaquin Groundwater Banking Authority

The Northeastern San Joaquin Groundwater Banking Authority was a joint powers agency established in 2001 that included the City of Lodi. Its purpose was to collectively develop locally supported projects to strengthen water supply reliability in eastern San Joaquin County. An Eastern San Joaquin Groundwater Basin Groundwater Management Plan was issued by the San Joaquin County Public Works Department in 2004. This plan set forth groundwater management options to elevate groundwater levels and to maintain or enhance both groundwater and surface water quality (NSJGBA 2004). In 2017, an adopted joint powers agreement between the Groundwater Banking Authority members and other local agencies created the Eastern San Joaquin Groundwater Authority, described above.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality,

- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin,

- Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site, impede or redirect flood flows, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff,

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

- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Environmental Concerns Not Discussed in this Analysis

The project is subject to the following existing environmental conditions related to hydrology and water quality:

- A portion of the project site is within a 200-year flood area
- Exposure to flooding from levee or dam failure
- Exposure to seiche or tsunami hazards

Potential effects of these conditions on future residents, guests and employees of the project are not considered within the scope of CEQA analysis, as discussed in Section 1.3 of this EIR. The project would not exacerbate these conditions. Potential health risks or hazards associated with these conditions, if any, will be considered by the City of Lodi as necessary in its evaluation of the proposed project.

Impact HYDRO-1: Surface Water Resources and Quality

There are no lakes, rivers, streams, or other surface waters located on the project site, so the project would have no direct effect on surface waters. However, the project would involve grading, excavation, and other construction-related ground disturbance. Additional minor disturbance would occur in the adjacent streets in association with underground utility connections. Soil disturbance would involve potential for erosion and discharge of sediment to the surrounding storm drainage system during storm events. Once constructed, storm drainage collected from the project site may contain motor vehicle oils and fluids from parking areas and pesticides and herbicides from landscaping. As the storm drainage facilities in the area discharge collected runoff to the surface waters in the vicinity, project construction and operations would involve the potential for adverse effects on surface water quality.

Under the City's SWMP, the project will be required to comply with Construction General Permit requirements, including preparation of a SWPPP. Mitigation Measure GEO-1 in Chapter 8.0, Geology, sets forth this requirement. In addition, the project would be required to submit for City review and approval a Project Stormwater Plan for a Hydromodification Management Project, which would address stormwater quality issues. The Project Stormwater Plan would be required to meet all applicable requirements of the City's Multi-Agency Post-Construction Stormwater Standards Manual for a Hydromodification Management Project, including detailed assessment of the site, site design, design flow, source control and hydromodification measures and stormwater quality control measures, including post-construction BMPs, and storm water maintenance and operations. Implementation of the City's existing construction and post-construction requirements, along with SWPPP compliance, would reduce potential construction and post-construction impacts on surface water quality to a level that would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HYDRO-2: Groundwater Supply

Sufficient water supplies are available to serve the project from the City's existing groundwater wells and surface water supplies. As noted, City groundwater wells could pump a maximum of more than 62,000 acre-feet per year. In addition, the City has access to 7,000 acre-feet of purchased water each year and to water supplies from the Lodi SWTF, which has the capacity to expand its surface water processing in the future if needed (see Chapter 16.0, Utilities and Energy). The City's current water supply can accommodate the proposed project. The project would involve new development and pavement; as such, it would reduce existing groundwater recharge area. However, substantial recharge areas exist in the Lodi area for the underlying groundwater aquifer, and project site development would not substantially reduce the overall recharge area. Impacts on groundwater would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact HYDRO-3: Drainage Patterns and Runoff

Development of the project site and construction of a new storm drainage collection system consisting of pipelines, inlets, gutters, and curbs would increase the amount of impervious surface and alter the existing drainage pattern on the site. The volume of surface runoff would also increase. However, the alteration of the drainage and increase in runoff would not cause substantial erosion or siltation on-or off-site with implementation of Mitigation Measure GEO-1, which would require measures that would control erosion and runoff. As noted, the project would be required to prepare a Project Stormwater Plan that meets the requirements of the City's Multi-Agency Post-Construction Stormwater Standards Manual applicable to the project. This would reduce water quality impacts of the runoff collected on the project site and reduce the volume of runoff discharged to the municipal storm drainage system, offsetting project-related reductions in recharge.

Stormwater on the project site would be collected and discharged to the City's existing 42-inch diameter storm drain pipeline along Turner Road and 30-inch diameter pipeline along Lower Sacramento Road. The City's existing storm drainage system has adequate capacity to accommodate the increase in stormwater from the project; new stormwater drainage structures would not be required. Therefore, impacts would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures: Implementation of Mitigation Measure GEO-1.

Significance After Mitigation: Less than significant

Impact HYDRO-4: Flood, Tsunami, and Seiche Hazards

The project site is not within the 100-year floodplain. The project is not located within a designated floodway or flood hazard area, so it would not impede or redirect flood flows. The project also would not place any structures or other facilities containing pollutants that potentially could be released in the event of a flood, which in any case would have been limited (see Chapter 10.0, Hazards and Hazardous Materials). Overall, project impacts related to 100-year flood hazards are considered less than significant.

The proposed project would involve development within an area that is potentially exposed to 200-year flooding of three feet or more in depth. Chapter 15.60 of the Lodi Municipal Code restricts or prohibits new development in areas identified as being within the 200-year floodplain. More specifically, the Code requires the City to

> D. Review development applications to determine whether a proposed project is within the two hundred year floodplain. No development or physical changes requiring a development permit required by this Title shall be allowed within the two hundred year floodplain unless it has first met one or more of the following findings; these findings shall be made by the floodplain administrator.
>
> > 1. The project has an urban level of flood protection from flood management facilities that is not reflected in the most recent map of the two hundred year floodplain;
> >
> > 2. Conditions imposed on the project will provide for an urban level of flood protection;
> >
> > 3. Adequate progress has been made toward construction of a flood protection system to provide an urban level of flood protection for the project, as indicated by the Central Valley Flood Protection Board for State projects, or by the floodplain administrator for local projects; or
> >
> > 4. The project is a site improvement that would not result in the development of a new habitable structure and would not increase risk of

damage to neighboring development or alter the conveyance area of a watercourse in the case of a flood.

The urban level of flood protection could be achieved for proposed residential development by elevating proposed residential structures, or by increasing the ground elevation of the site with fill such that finished flood elevations are at or above the prescribed 200-year flood elevation. Non-residential structures can be flood-proofed by other means as described in the code. In any event, compliance with the requirements of the LMC must be certified by a registered civil engineer or licensed land surveyor, verified by the building inspector and submitted to the Director of Public Works. Project exposure to 200-year flooding is considered a potentially significant effect.

Level of Significance: Potentially significant

Mitigation Measures:

HYDRO-1: Finished floor elevations of proposed residential structures shall be elevated to or above the prescribed 200-year floodplain elevation, or proposed non-residential structures shall be floodproofed as required by Lodi Municipal Code Chapter 15.60. Code compliance shall be documented in materials prepared by licensed professionals and submitted to the Public Works Director.

Significance After Mitigation: Less than significant

Impact HYDRO-5: Consistency with Water Quality and Groundwater Management Plans

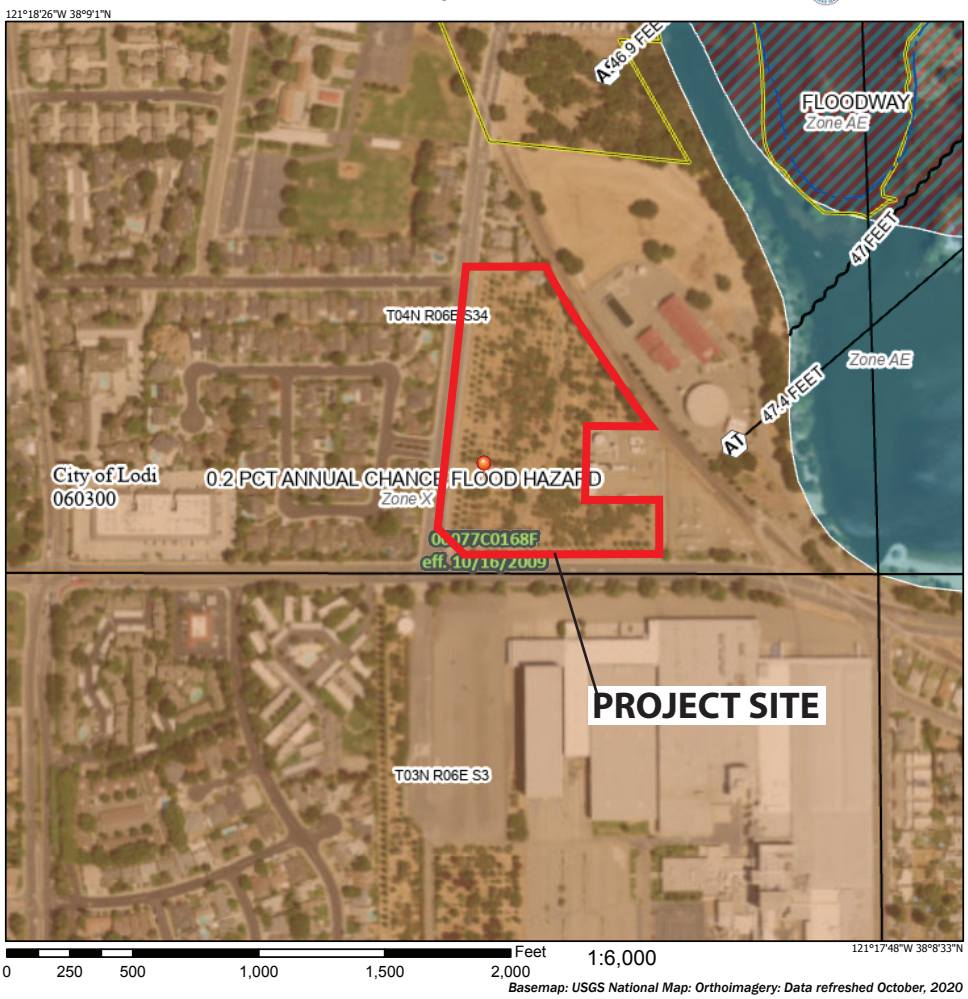
As described in a) above, the project would not directly affect surface waters. Stormwater would be collected and conveyed to the City's stormwater system, in accordance with the City's SWMP and NPDES MS4 permit. The project is not expected to conflict with water quality plans applicable to the City.

A Groundwater Sustainability Plan has been prepared for the Eastern San Joaquin Groundwater Subbasin and is recommended for approval by DWR. As noted, the project is not expected to place significant demands on groundwater supplies, and a previous plan related to groundwater management had already been implemented. The project would not affect implementation of the projects planned by the City to enhance groundwater sustainability, and, because of this, would not interfere with the objectives of the Groundwater Sustainability Plan. Project impacts related to water quality and groundwater management plans would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS
  - Without Base Flood Elevation (BFE) *Zone A, V, A99*
  - With BFE or Depth *Zone AE, AO, AH, VE, AR*
  - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD
  - 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
  - Future Conditions 1% Annual Chance Flood Hazard *Zone X*
  - Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
  - Area with Flood Risk due to Levee *Zone D*
- OTHER AREAS
  - NO SCREEN Area of Minimal Flood Hazard *Zone X*
  - Effective LOMRs
  - Area of Undetermined Flood Hazard *Zone D*
- GENERAL STRUCTURES
  - Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- OTHER FEATURES
  - 20.2 Cross Sections with 1% Annual Chance
  - 17.5 Water Surface Elevation
  - Coastal Transect
  - Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- MAP PANELS
  - Digital Data Available
  - No Digital Data Available
  - Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

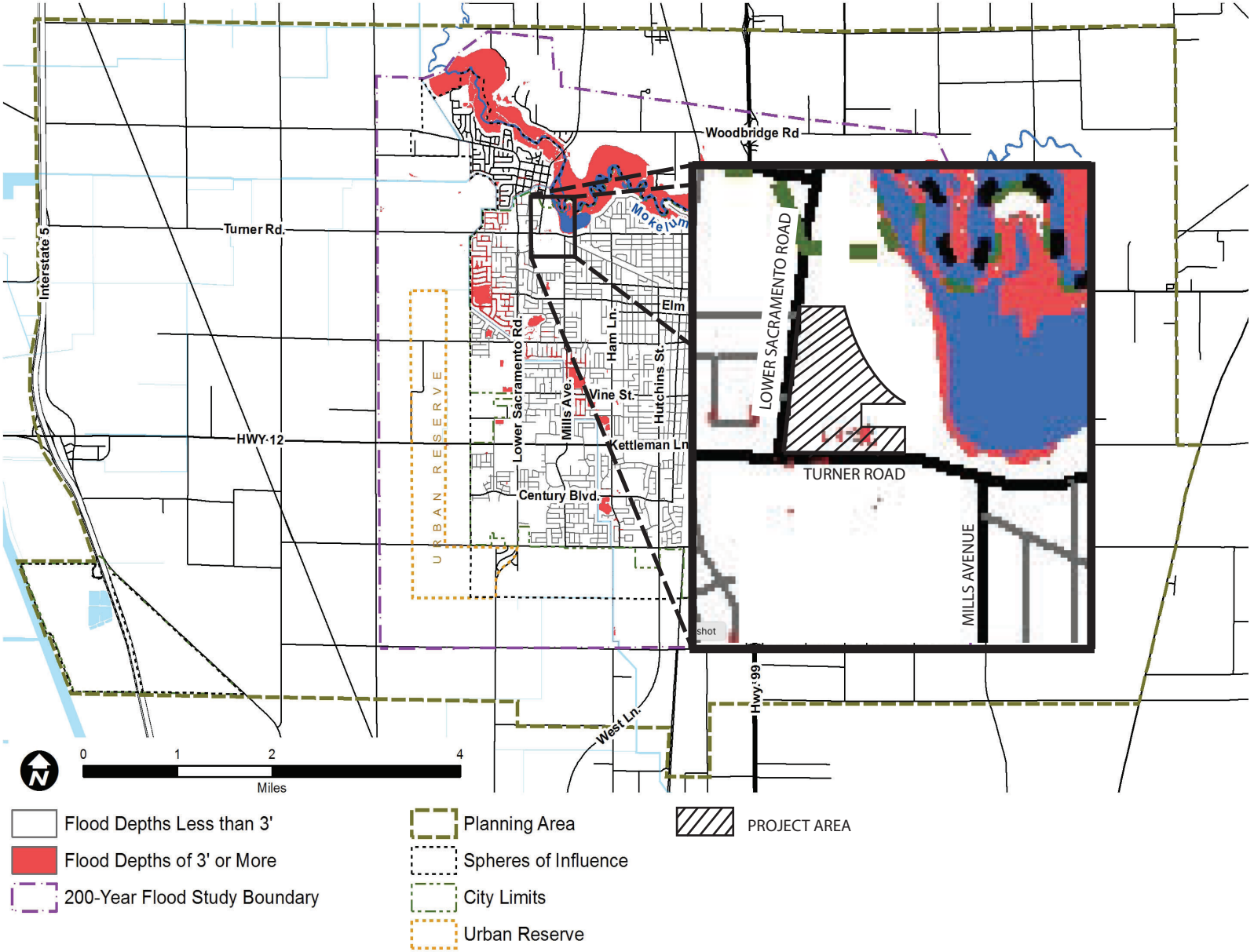
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/19/2021 at 5:04 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Figure 11-1
FEMA FLOOD HAZARD AREA

FIGURE 8-2: 200-YEAR FLOOD ZONES



SOURCE: LODI GENERAL PLAN SAFETY ELEMENT

12.0 LAND USE, POPULATION, AND HOUSING

ENVIRONMENTAL SETTING

Existing Land Uses

The project site is in northern Lodi, south of the unincorporated community of Woodbridge. The site has historically been used as an orchard, and it currently contains a few remnant trees intermixed with numerous planted native and ornamental trees, shrubs, weeds, and grasses. There are two corrugated steel utility buildings in the western portion of the site, as noted in Chapter 7.0, Cultural Resources. A cellular telephone tower and adjacent utility building are in the northeastern corner within an existing utility easement. A Union Pacific Railroad spur runs along the eastern boundary of the project site. An additional branch spur once serving the General Mills facility to the south passes through the central portion of the project site to its terminus immediately north of Turner Road. No other development is on the site.

The project site is in an urban setting and is surrounded by arterial streets and a variety of land uses: residential, retail, commercial, industrial, open space, and public. Notable land uses in the area include Woodbridge Elementary School; Woodbridge Masonic Cemetery; Lodi Lake Mobile Home Park; Woodlake Plaza with offices, restaurants, and retail shops; the former General Mills industrial facility; Lodi Lake Park; Lodi utility facilities and several residential houses and apartments. Land uses adjacent to the project site, along with their City zoning, are described below:

- Woodlake Circle is a single-family residential development of approximately 100 homes located immediately west of the project site across Lower Sacramento Road. An additional five single-family homes are located immediately north of the site, frontage on Lower Sacramento Road. Both areas are zoned by the City as Low Density Residential.

- The six-acre Lodi SWTF is approximately 100 feet northeast of the project site. The SWTF was constructed in 2012 and is owned and operated by the City. The facility includes treatment facilities, a 3,000,000-gallon storage tank, and administrative offices. The SWTF site is zoned by the City as Public/Quasi-Public.

- The one-acre NCPA power station borders of the project site to the east. The natural gas-fueled station runs intermittently during peak electricity demand and is permitted to run up to 200 hours per year, frequently during the early evening hours (Michael DeBortoli, pers. comm.). The station is equipped to run on diesel fuel when needed. Components of the power station include gas compressors, gas receivers, electrical equipment, transformers, a 120,000-gallon aboveground fuel oil storage tank with containment berm, and storage sheds. Access is provided by an existing 15-foot-wide driveway from Turner Road. The power station site is zoned by the City as Public/Quasi-Public.

- An electrical substation, owned and operated by the LEU, is located 70 feet east of the project site along Turner Road. The substation site is zoned by the City as Industrial.

- The 66-acre former General Mills facility, south of Turner Road, is zoned Industrial by the City. Former industrial uses consisted of heavy manufacturing, warehousing, general service, storage, and distribution activities. The cereal production facility opened in 1947 and closed in 2015. Bond Manufacturing currently occupies approximately 200,000 square feet of existing building space used for distribution recreational product and manufacturing operations. The remaining building space and most of the site is available for sale or lease.

The project site is designated as Industrial under the General Plan land use map (Figure 12-1). The Industrial classification includes a mix of heavy manufacturing, warehousing, general service, storage, and distribution activities. As described in Chapter 3.0, Project Description, the project applicant proposes a General Plan amendment to change the designation on the project site to Mixed Use Center, which is described below.

> Mixed Use Center. This classification identifies new mixed-use neighborhood centers in the new growth areas of the General Plan. This category provides for a variety of residential, office, neighborhood commercial, and public uses. A minimum of 10% of the building area in each Mixed-Use Center shall be composed of non-residential uses. Section 2.3: Development Potential identifies "Mixed Use Residential" units, which comprise medium- and high-density housing. Each of the three Mixed Use Centers identified in the Land Use Diagram are located near a park and school site, creating a true neighborhood center. The maximum FAR is 1.0 and the maximum height is 40 feet.

The project site is currently zoned Industrial (M), which is consistent with the Industrial designation of the Lodi General Plan (Figure 12-2). The M zoning district allows hotels and motels with approval of a Use Permit, but it does not allow for residential uses other than temporary shelters. As noted in Chapter 3.0, Project Description, the project applicant proposes a rezoning of the project site to Mixed Use Center (MCE), which allows for a mix of land uses that include hotels and residential units.

Agricultural Resources

Agriculture plays a significant role in Lodi's economy, culture, and identity. The City is surrounded by approximately 100,000 acres of vineyards, fruit and nut orchards, dairy farms, and cattle ranches. Grapes, nuts, fruit, and milk are the major commodities in Lodi, with established national and international markets. Grape growers in the area produced a 2017 crop with an estimated value of $5 billion. The City and surrounding area are home to numerous wineries, which have made Lodi an increasingly important destination for tourists (City of Lodi 2010a).

Long before the incorporation of the City of Lodi, the area had been recognized for its rich soil and ideal climate needed to support a growing, robust agricultural industry. First known as the Watermelon Capital of the World, the Lodi area saw its crops diversify as a

different group of farmers who were more familiar with vineyards than row crops began to migrate to the area. This multi-generational, agricultural transition laid the foundation for what is now one of the finest wine producing regions in the State. More than a century later, the City of Lodi finds itself in the center of more than 25,000 acres of thriving vineyards. The Lodi area's officially recognized terroir is ranked as a premiere wine region not only in the State of California, but across the nation and Europe.

The wine industry's growth, particularly over the last three decades, has led to the creation of more than eighty independent wineries and affiliated tasting rooms, yielding an expansion of tourism never before realized in the history of the community. One sector responding to this growth is hospitality, which saw the recent development of six new facilities with varying levels of service and accommodation to meet the growing tourism needs. In addition, Wine & Roses, the City's first luxury class hotel and spa, completed its last phase of expansion approximately five years ago and remains the only facility of this caliber within the region.

The Lodi Conference and Visitors Bureau, noting the City's growing visitation numbers, cites recent business community survey results that indicate the need for good-quality non-franchise restaurants and banquet space. The Bureau also states, "As the destination marketing organization for the City of Lodi, we are acutely aware of the need for a variety of lodging property types to accommodate our growing visitation numbers," noting that the City's existing inventory of visitor accommodation includes only one resort property (Nancy Beckman, pers. comm.).

There is no agricultural production on the project site. Based upon research conducted as part of a cultural resource analysis for the project, an older orchard had been on the project site, but this orchard was apparently removed (see Chapter 7.0, Cultural Resources). Mixed-species tree plantings, containing apple and almond trees, are abundant throughout most of the property but are more prevalent in the southern half. The project site is surrounded by existing urban and park development, and there are no agricultural fields in the project vicinity.

The Important Farmland Maps, prepared by the California Department of Conservation as part of the Farmland Mapping and Monitoring Program, designate the viability of lands for farmland use, based on the physical and chemical properties of the soils. The maps categorize farmland, in decreasing order of soil quality, as "Prime Farmland," "Farmland of Statewide Importance," "Unique Farmland," and "Farmland of Local Importance." Collectively, these categories are referred to as "Important Farmland." There are also designations for grazing land and for urban/built-up areas, among others. According to the 2016 Important Farmland Map of San Joaquin County, the project site and most surrounding lands are designated "Urban and Built-Up Land." The Lodi Lake area is designated "Nonagricultural and Natural Vegetation" (California Department of Conservation 2016a).

Population

Table 12-1 below shows population and growth trends in Lodi, San Joaquin County, and the State of California from 2010 to 2020. The City of Lodi had an estimated population

of 67,930 in 2020, an increase of 9.3% from its population of 62,134 in 2010. By comparison, Tracy and Manteca, similarly sized cities, had population increases of 15.7% and 26.4%, respectively, while the population of Stockton, a larger city, increased 9.2% during this period (California Department of Finance 2020).

TABLE 12-1
POPULATION OF LODI, SAN JOAQUIN COUNTY, AND CALIFORNIA

Jurisdiction	Population April 1, 2010	Estimated Population January 1, 2020	Population Growth 2010-2020
Lodi	62,134	67,930	9.3%
San Joaquin County	685,306	770,385	12.4%
State of California	37,253,956	39,782,870	6.8%

Source: California Department of Finance 2020.

SJCOG projects that the City's population will grow by approximately 1.5% annually over the next several decades; however, the City projects a more modest growth rate of 1% (City of Lodi 2016b). San Joaquin County is also projected to see substantial growth and urbanization. The recently adopted San Joaquin County General Plan update forecasts total population growth in the County, both incorporated and unincorporated areas, to about 945,300 by 2035. This equates to an average annual population growth rate of 1.5 percent, which is approximately 25 percent more than the State's projected annual average growth rate of 1.2 percent between 2012 and 2035 (San Joaquin County 2016a).

Housing

Lodi's housing supply is composed primarily of single-family homes. Lodi had an estimated 24,754 housing units as of January 1, 2020. Single-family detached units accounted for approximately 63.5% of total housing units, with multi-family units of two or more units per building accounting for approximately 28.9%. The remaining units were single-family attached units or mobile homes. The average number of persons per household in Lodi in 2020 was 2.87 (California Department of Finance 2020).

Of the occupied housing units in Lodi, 54% are owned and 46% are rented. The vacancy rate for housing units between 2000 and 2010 increased from 3.2% to 7.1% (City of Lodi 2016b). The vacancy rate in 2017 was 6% (U.S. Census Bureau 2017). The Housing Element of the Lodi General Plan indicates there has been an overall lack of construction of townhomes, duplexes, and small and medium-sized apartment buildings, which often represent more affordable rental housing (City of Lodi 2016b).

REGULATORY FRAMEWORK

City of Lodi General Plan

The 2010 Lodi General Plan outlines a vision for Lodi's future, building on the city's assets, including its historic downtown, parks, arts and culture, and sense of community. The General Plan guides urban development in the City via a series of land use policies of potential relevance to the proposed project. These include Land Use, Growth Management and Infrastructure, and Community Design and Livability elements of the General Plan. Guidance is also provided by a land use map that designates the type of development intended to occur within the Planning Area of the General Plan, which extends beyond the City limits.

The existing and future land use pattern in Lodi as visualized in the General Plan is characterized by a revitalizing downtown; retail commercial corridors; a variety of low, medium, and high-density residential neighborhoods; relatively discrete industrial areas; and public uses including parks, schools, churches, and hospitals. The General Mills industrial property immediately south of the site is anomalous, being relatively isolated from other industrial districts in the City.

Housing Element

The Housing Element is one of the mandatory elements of a general plan. The City of Lodi adopted the most recent Housing Element for its General Plan in 2016. The Housing Element provides guidance on the provision of housing for Lodi from 2016 to 2023. It has three components: 1) a Housing Needs Assessment that analyzes characteristics and trends in population and housing and assesses housing needs, including needs of specific groups such as the elderly and persons with disabilities; 2) a Resources and Constraints section that addresses the opportunities and challenges to meet identified housing needs; and 3) a Housing Strategy that identifies goals, policies, programs, and quantified objectives to meet housing needs, reduce constraints on housing availability, and make effective use of available resources.

The Housing Strategy includes a goal of providing a range of housing types and densities for all economic segments of the community, while emphasizing high-quality development, homeownership opportunities, and the efficient use of land. Implementing programs to achieve this goal include revising the City's Zoning Ordinance to provide incentives to construct more affordable housing and to change standards that may constrain housing production, revising the City's Growth Management Program to encourage affordable housing production, promoting the City's multi-family housing development standards, and facilitating land divisions, lot line adjustments, and specific plans that result in parcel sizes that enable multi-family developments affordable to lower-income households, among others (City of Lodi 2016b).

The Regional Housing Needs Allocation Plan prepared by SJCOG indicates that Lodi should plan to accommodate 1,931 additional residential units between 2014 and 2023 to meet projected housing needs. Of these units, approximately 43% would need to be affordable to households with low, very low, or extremely low incomes (City of Lodi

2016b). The Housing Element notes that the City is not responsible for actual construction of these units; however, it is responsible for creating a regulatory framework that would facilitate their construction.

Agriculture

With the wine industry increasingly vital to the city's economy and character, the General Plan promotes continued compact development and emphasizes preservation of surrounding agricultural and viticulture lands (City of Lodi 2010a). General Plan Guiding Policy C-G1 promotes preservation and economic viability of agricultural land surrounding Lodi. This Guiding Policy is reflected in General Plan Implementing Policy C-P1, which encourages the City to work with San Joaquin County and the City of Stockton to maintain land surrounding Lodi in agricultural use. Under General Plan Implementing Policy C-P7, the City proposes to adopt an agricultural conservation program, which would include a mitigation fee for acreage converted from agricultural to urban uses, the proceeds from which would be used to fund conservation easements, fee title acquisition, and other programs. To date, the City has not adopted such a program.

City of Lodi Development Code

Lodi Municipal Code Title 17, also known as the City of Lodi Development Code, is intended to implement the Lodi General Plan. The Development Code incorporates the City's Zoning Ordinance, which establishes zoning districts that specify allowable land uses, either by right or with a discretionary permit. It also sets forth development regulations and design guidelines in each district, including building heights and setbacks, parking requirements, and landscaping.

As noted, the project site is currently zoned Industrial (M), which is consistent with the Industrial designation of the Lodi General Plan (Figure 12-2). The M zoning district allows hotels and motels with approval of a Use Permit, but it does not allow for residential uses other than temporary shelters. As noted in Chapter 3.0, Project Description, the project applicant proposes a rezoning of the project site to Mixed Use Center (MCE), which allows for a mix of land uses that include hotels and residential units.

Growth Management Allocation Ordinance

In 1991, the City adopted a Growth Management Allocation Ordinance (Lodi Municipal Code Chapter 15.34) to regulate the location, amount, and timing of residential development. Under the ordinance, the number of residential units approved by the City shall reflect a 2% yearly limitation on growth based on population, to be compounded annually. The ordinance establishes a residential density allocation system, with the goal of promoting a mix of housing types in designated percentages: 65% low-density residential, 10% medium-density residential, and 25% high-density residential. The breakdown by density establishes an upper limit for the number of permits, but it does not guarantee that the density quotas for the three categories would be attained by the end of a given year.

Unused permits roll over to the next year, and there is no annual limit on the number of resulting permits that may be utilized. Because demand for permits has been less than available permits in most years, an inventory of available permits has built up. As of 2023, a total of 1,640 allocations were available (Della Monica 2023).

To advance the objectives of the Growth Management Allocation Ordinance, the City Council annually adopts or updates a map of Lodi and surrounding areas showing lands eligible for development and assigning priority classifications to these lands. The map shall be based upon recommendations of the City Planning Commission, the City Public Works Department, and the City Community Development Department as determined by the availability of City services. These services include, but are not limited to, water, wastewater, storm drains, streets, police and fire protection, and parks.

The limitations set by the Growth Management Allocation Ordinance do not apply to senior citizen housing and projects of four units or less, or to commercial and industrial projects. The residential component of the proposed project would be subject to the ordinance, but the hotel component would not, as it is a commercial activity.

Williamson Act

The Land Conservation Act of 1965, commonly known as the Williamson Act, was enacted to preserve farmland in California. Under the Williamson Act, a contract is executed between landowners and local governments to voluntarily restrict development on property in exchange for lower property tax assessments based on the existing agricultural land use. Contracts are entered for a 10-year period and can be terminated only by a nonrenewal or cancellation. Information in the San Joaquin County GIS Viewer indicates there is no Williamson Act contract for APN 015-64-009, which is the project site.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on land use, population, and housing if it would:

- Physically divide an established community,
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect,
- 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, to non-agricultural use,
- Conflict with existing zoning for agricultural use or a Williamson Act contract,
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

- 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), or
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

The agriculture section of the Environmental Checklist in CEQA Guidelines Appendix G contains questions regarding project impacts on forestry resources. Neither the project site nor its vicinity has forestry resources as defined in California Public Resources Code Section 12220(g), timberland as defined by Public Resources Code Section 4526, or land zoned Timberland Production as defined by California Government Code Section 51104(g). Because of this, impacts on forestry resources will not be analyzed in this EIR.

Impact LUP-1: Division of Communities

The project site is currently vacant and fenced to prevent access; construction and operation of the project would occur entirely within the existing parcel and would open the site to public visitation use. Installation of new pedestrian-friendly circulation ways along both project frontages would improve pedestrian circulation between the site, the community of Woodbridge, and Lodi Lake Park. In a larger sense, these access improvements would also improve pedestrian and bicycle connections between Woodbridge, residential areas near the project, Lodi Lake, and the range of north Lodi residential areas. Nearby residential neighborhoods, including the Woodlake Circle development west of Lower Sacramento Road, would not be directly affected by the project. However, they would directly benefit from the commercial amenities made available on the site and less directly from improvements in pedestrian and bicycle circulation in the area.

The project site is not located within an existing residential community and would not physically divide an established community. Therefore, the project would have no adverse effect on established communities.

Level of Significance: No impact

Mitigation Measures: None required

Impact LUP-2: Conflict with Applicable Plans, Policies, and Regulations

The proposed project provides for a variety of urban density uses in a concentrated area that would support the continued preservation of the surrounding agricultural and viticulture lands. Development of the hotel could accommodate tourists visiting existing vineyards and wineries which would further economic development in the City. The project would provide hotel accommodations, restaurant and banquet facilities that would meet specific existing needs identified by the Lodi General Plan (John Della Monica, pers. comm.) and the Lodi Conference and Visitors Bureau (Nancy Beckman, pers. comm.). The project is not expected to result in any adverse effect on the Lodi economy or on existing visitor accommodations and associated facilities.

The project is sited and designed to be easily accessible from all residential areas and connect to existing streets that expand circulation opportunities for pedestrians and bicyclists. The project is sited in an area of northern Lodi that is currently under-served by commercial and retail facilities. The apartments are easily accessible and located near public services such as schools and parks, and they help fulfill the current need for multi-family housing in the City.

The proposed commercial and residential uses of the site are not industrial uses. The applicant has submitted a request for amendment of the Lodi General Plan and rezoning of the entire site from Industrial to Mixed Use Center, which is being processed in conjunction with requested approvals for proposed residential and commercial development. The proposed rezoning to Mixed Use Center would permit all the proposed land uses. Assuming City review and approval of the proposed development together with the proposed General Plan amendment and rezoning, the project would not involve any conflict with the Lodi General Plan or the Lodi Development Code.

Proposed residential uses are similar to adjoining residential uses to the north as well as the Woodlake Circle residential development west of Lower Sacramento Road. Project construction and operations will not interfere with operation of the existing substation, communications tower, or power generating station located adjacent to the project site.

As noted, there are currently 1,640 allocations available under the Growth Management Allocation Ordinance for the proposed 150 residential units. The project is in an area that has available public services and would not require expansion of facilities, as further described in Chapter 14.0, Public Services and Chapter 16.0, Utilities and Energy.

In summary, the project would not substantially conflict with local plans, policies, and ordinances designed to mitigate potential environmental effects. Project impacts in this area of concern would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact LUP-3: Conversion of Farmland

The project site is in a City where surrounding agriculture is of substantial economic and cultural importance, as indicated by the City's Right-to-Farm Ordinance and its General Plan policies. The project site is not, however, in agricultural use. As noted, the Farmland Mapping and Monitoring Program has designated the project site and most of the surrounding area as Urban and Built-Up Land, with the Lodi Lake area designated as Nonagricultural and Natural Vegetation. As a result, the project would not result in the conversion of any land designated as Farmland in CEQA Guidelines Appendix G. The project would have no impact on the conversion of any nearby agricultural lands for non-agricultural purposes.

Level of Significance: No impact

Mitigation Measures: None required

Impact LUP-4: Agricultural Zoning and Williamson Act

The project site is currently not in agricultural use and has not been in recent times. The project site is zoned Industrial; it is not zoned for agricultural use. As noted, the project site is not under a Williamson Act contract. The project would have no impact on agricultural zoning or Williamson Act contracts.

Level of Significance: No impact

Mitigation Measures: None required

Impact LUP-5: Indirect Conversion of Agricultural Lands

As noted, there are no lands in agricultural production near the project site; all land in the vicinity is developed or is designated for urban development except for Lodi Lake Park, which is a recreational area. Because of this, the project would not encourage the conversion of existing farmland to non-agricultural uses. The project also is not located adjacent to or near any agricultural processing facilities or agriculture-related industry, so the project would not have any impact on these activities. The project would have no impact related to the indirect conversion of agricultural lands.

Level of Significance: No impact

Mitigation Measures: None required

Impact LUP-6: Inducement of Population Growth

The proposed project would create a 92-room hotel with retail and restaurant space and 143 new multi-family apartments on the undeveloped site. It is anticipated that hotel, apartment, and retail employees would be residents of the Lodi and northern San Joaquin County areas. The proposed hotel would provide transient accommodations for Lodi visitors, and the proposed apartments would provide permanent housing for existing and potential future Lodi residents.

Construction of the proposed hotel rooms and associated occupancy would be expected to have beneficial effects for the City of Lodi. The City anticipates a continuing increase in tourism and notes that additional facilities will be needed to meet demand for visitor accommodations (City of Lodi 2010a). The project would make a substantial contribution towards meeting these anticipated needs.

The proposed 143 apartments could accommodate approximately 410 residents, based on the City average of 2.87 persons per household. The estimated number of residents is approximately 0.6% of the estimated 2020 population of Lodi. This increase in residential capacity would be well within projected residential growth and would not significantly affect the overall growth rate of the City. This increase would also be within the allowed increases under the City's Growth Management Allocation Ordinance, which limits the number of residential units approved by the City to stay within a 2% annual increase in population. Therefore, the population impacts of the multi-family residential portion of the project would be less than significant.

The project would provide apartment housing in the City, the construction of which the Housing Element of the City's General Plan has identified as lacking (City of Lodi 2016b). Overall, population impacts would be less than significant, and housing impacts would be beneficial.

Level of Significance: Less than significant

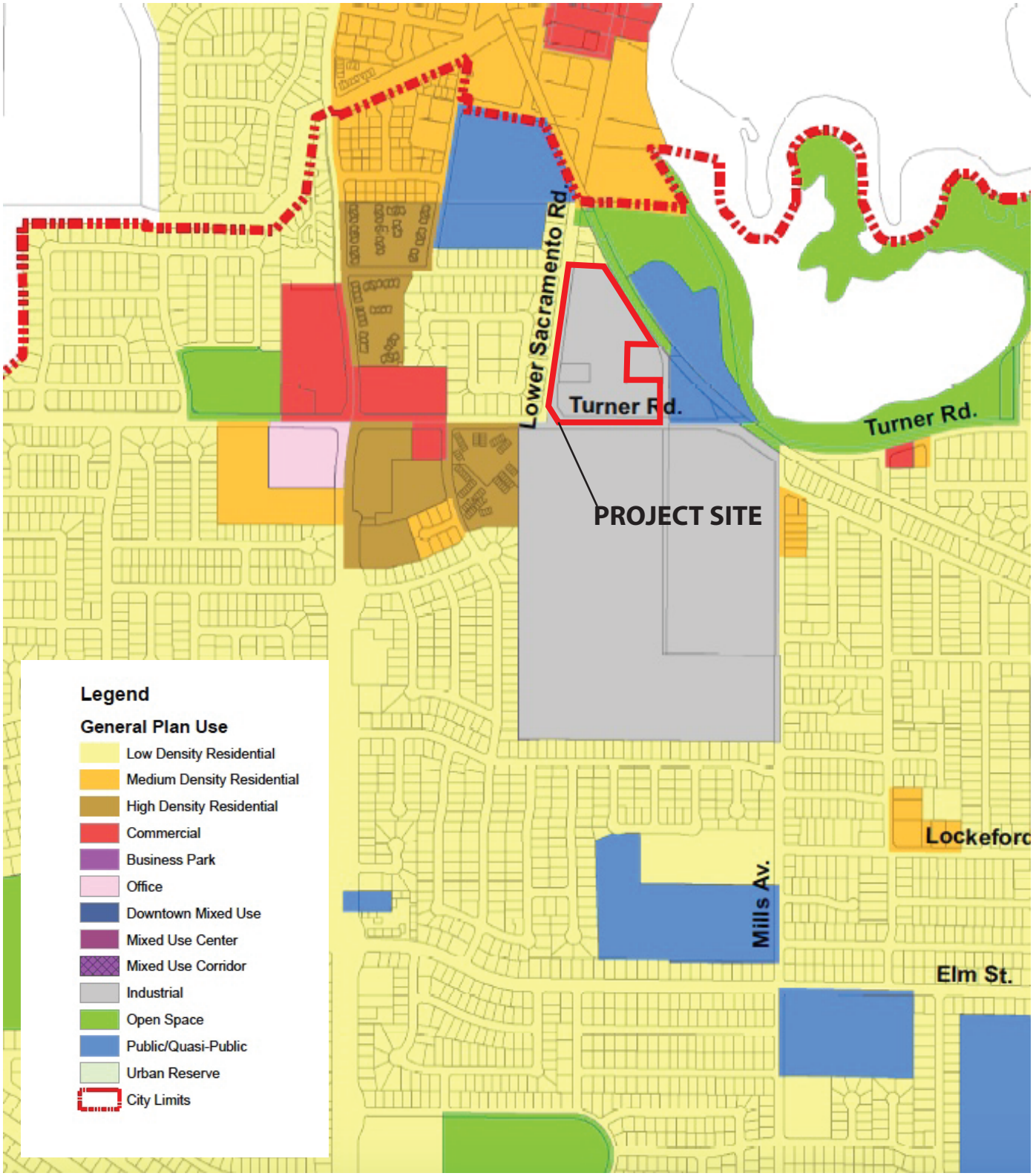
Mitigation Measures: None required

Impact LUP-7: Displacement of Housing and People

There are no residences or other housing units on the project site. The project site is vacant except for two small storage buildings; therefore, the project would not displace any housing units or people. The project would have no impact on this issue. As noted, the project would add more units to the housing stock in Lodi.

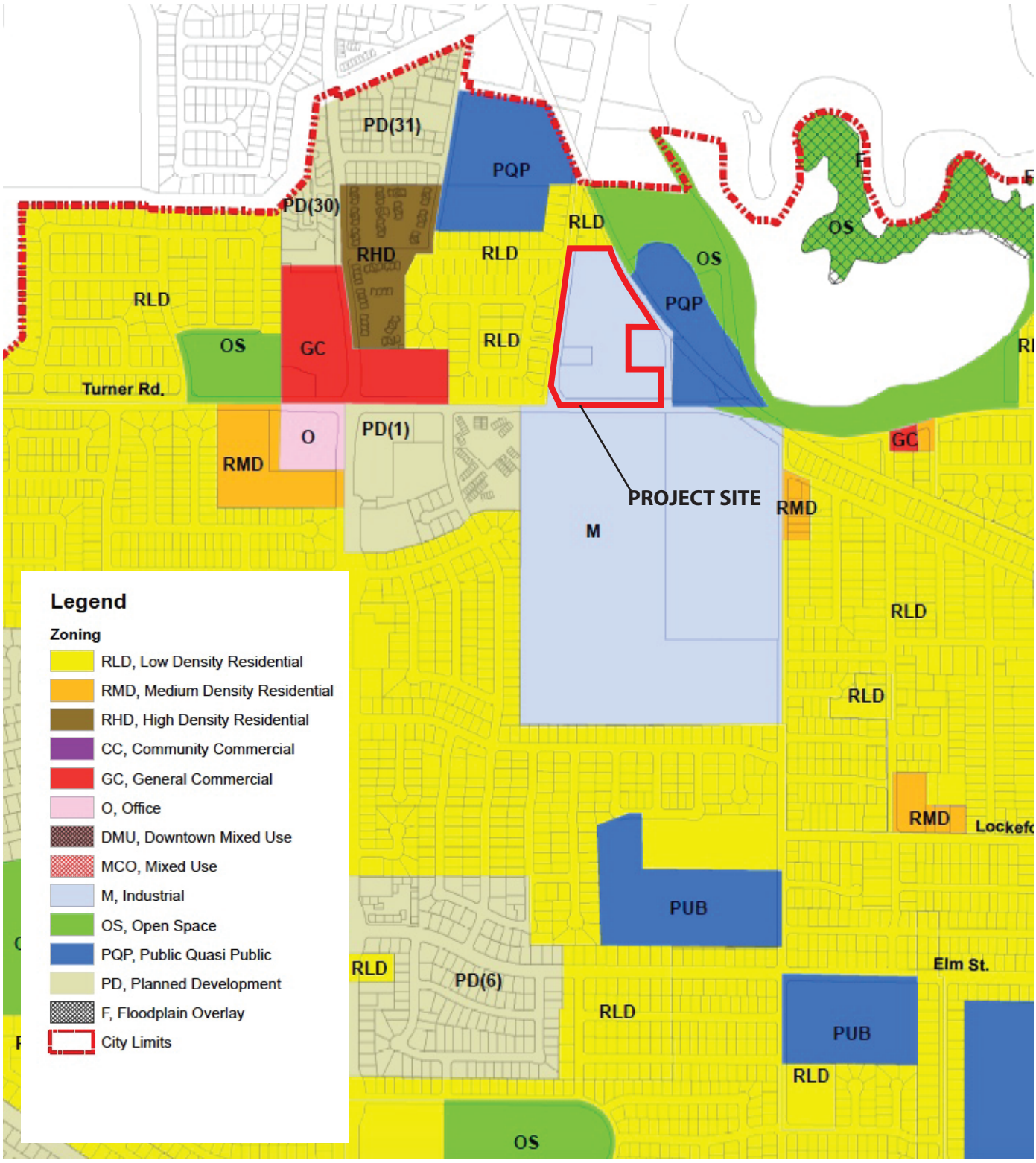
Level of Significance: No impact

Mitigation Measures: None required



SOURCE: Lodi General Plan

Figure 12-1
GENERAL PLAN DESIGNATION



SOURCE: Lodi Zoning Map

13.0 NOISE

Information and analysis for this chapter is primarily from a noise study conducted by J. C. Brennan Acoustical Consultants, available in Appendix G of this EIR. As a basis for the analysis in the noise study, continuous hourly noise level measurements were conducted for a period of 24 hours during June 25-26, 2018 at two locations within the project site, using precision integrating sound level meters (Figure 13-1). The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey.

Supplemental information regarding off-site noise sources is provided by a 2020 study conducted by Worley on behalf of the project architects. The focus of the Worley study, also available in Appendix G, specifically analyzed noise generated by the adjacent NCPA power plant.

ENVIRONMENTAL SETTING

Noise Background

Noise is typically defined as airborne sound that is loud, unpleasant, unexpected, or undesired. Perceptions of noise are highly subjective from person to person. The effects of noise on people can be placed in three categories: 1) subjective effects of annoyance, nuisance, and dissatisfaction; 2) interference with activities such as speech, sleep, and learning; and 3) physiological effects such as hearing loss or sudden startling.

Noise is measured using the decibel (dB) scale. The dB scale uses the hearing threshold as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. The decibel scale is logarithmic; two sound levels 10 dB apart differ in acoustic energy by a factor of 10.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by A-weighted sound levels, expressed as dBA. There is a strong correlation between dBA and the way the human ear perceives sound; for this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness, and a decrease of 10 dBA is generally perceived as being half as loud. All noise levels reported in this chapter are in terms of A-weighted levels but are expressed as dB, unless otherwise noted.

Community noise is commonly described in terms of the "ambient" noise level, defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the equivalent sound level (L_{eq}), which corresponds to a steady-state, A-weighted sound level containing the same total energy as a time-varying signal over a given time period, usually one hour. The L_{eq} shows very good correlation with community response to noise and is the foundation for other composite noise descriptors such as the Day-Night Average Level (L_{dn}) and the Community Noise Equivalent Level (CNEL). The L_{dn} is based upon the average hourly L_{eq} over a 24-hour day, with a +10-dB weighting applied to noise during the hours between 10:00 p.m. and 7:00 a.m. to account for the greater sensitivity of people to noise during that period. The CNEL is the same as the L_{dn}, with an additional +5-dB weighting applied to noise during the hours between 7:00 p.m. and 10:00 p.m.

Noise levels in developed areas are primarily a function of human and mechanical activity and the intensity, duration, and frequency of that activity. Noise levels also vary by distance from a noise source. The noise level at a given distance from a source can be estimated using the Inverse Square Law of Noise Propagation. Essentially, this law states that noise decreases by 6 dBA with every doubling of distance from a source (Harris 1991). Thus, the noise level 50 feet from a source, decreases by 6 dBA at 100 feet, and by 6 dBA again at 200 feet.

Existing Noise Conditions

The primary noise source in the project vicinity, and in Lodi in general, is motor vehicle traffic. Vehicle traffic along Lower Sacramento Road and Turner Road is the principal noise source at the project site. The NCPA power station, when in operation, is also a significant noise source; however, plant operations are limited to a maximum of 200 hours per year. The NCPA plant is used to reduce peak demands; therefore, operation times depend upon demand and other marketplace factors in the California power industry.

The off-site railroad spurs in the project vicinity are currently inactive and therefore generate no noise; the Union Pacific Railroad nonetheless maintains these lines for potential future use. The former General Mills facility, across Turner Road and south of the site, is not a substantial noise source, as activity there is conducted primarily indoors. The project site is not within two miles of a public airport or private airstrip. Aircraft noise is not an issue at the project site and is not discussed further in this analysis.

Continuous hourly noise measurements were gathered by J.C. Brennan over a 24-hour period at two locations on the project site. The results of the noise level measurements are shown in Table 13-1. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period. Complete noise monitoring results are provided in the Brennan noise study in Appendix G.

TABLE 13-1
EXISTING BACKGROUND NOISE MEASUREMENTS

Site	CNEL	Average Measured Hourly Noise Levels, dB					
		Daytime (7 am-10 pm) Low-High (Average)			Nighttime (10 pm-7 am) Low-High (Average)		
		L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
A	52.8 dB	47.8	45.8	61.9	46.1	43.9	59.9
B	59.8 dB	55.8	52.1	69.3	52.8	48.2	68.2

Note: Noise measurement sites identified in Figure 13-1

Source: J.C. Brennan and Associates 2021.

The Worley study analyzed noise generated by the intermittent operation of the adjacent NCPA power plant on the project site. A maximum noise level of approximately 80 dBA was recorded during plant startup at the proposed face of the hotel west of the power plant, then declined to approximately 67 dBA during normal plant operation. Similarly, at the site of proposed residential buildings west of the power plant, a maximum noise level of approximately 77 dBA at plant startup was recorded that subsequently declined to approximately 68 dBA (Worley 2020).

Some land uses are considered more sensitive to noise than others. Land uses often considered sensitive to noise include residences, schools, libraries, hospitals, and care facilities. Noise-sensitive land uses are typically given special attention to protect them from excessive noise. The closest existing noise-sensitive land uses to the project site are single-family residences located west and north of the project site.

Groundborne Vibrations

Groundborne vibration is not a common environmental problem. It is typically associated with transportation facilities, although it is unusual for vibration from sources such as buses and trucks to be perceptible, even at locations close to major roads. Some common sources of groundborne vibration are trains, buses on rough roads, and construction activities such as blasting, pile driving, and operating heavy earth-moving equipment. The effects of groundborne vibration include felt movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, vibration can cause damage to buildings (FTA 2006).

Vibration can be measured in terms of acceleration, velocity, or displacement. A common measurement is peak particle velocity, given in inches per second. Standards pertaining to human perception and damage to structures have been developed for vibrations measured by peak particle velocity. Caltrans has prescribed a methodology for evaluating groundborne vibration impacts, which is described in the Significance Thresholds section of this chapter.

Airport/Airstrip Noise

One of the items in the Environmental Checklist in Appendix G of the CEQA Guidelines is potential exposure of a project to noise from public-use airport and private airstrip operations. As noted in Chapter 10.0, Hazards and Hazardous Materials, the closest public-use airport to the project site is the Lodi Airpark, approximately 4.2 miles to south. There are no private airstrips in the vicinity of the project site. As such, the project site is not exposed to noise from airport or airstrip operations, and the issue is not discussed further in this EIR.

REGULATORY FRAMEWORK

Title 24, California Code of Regulations

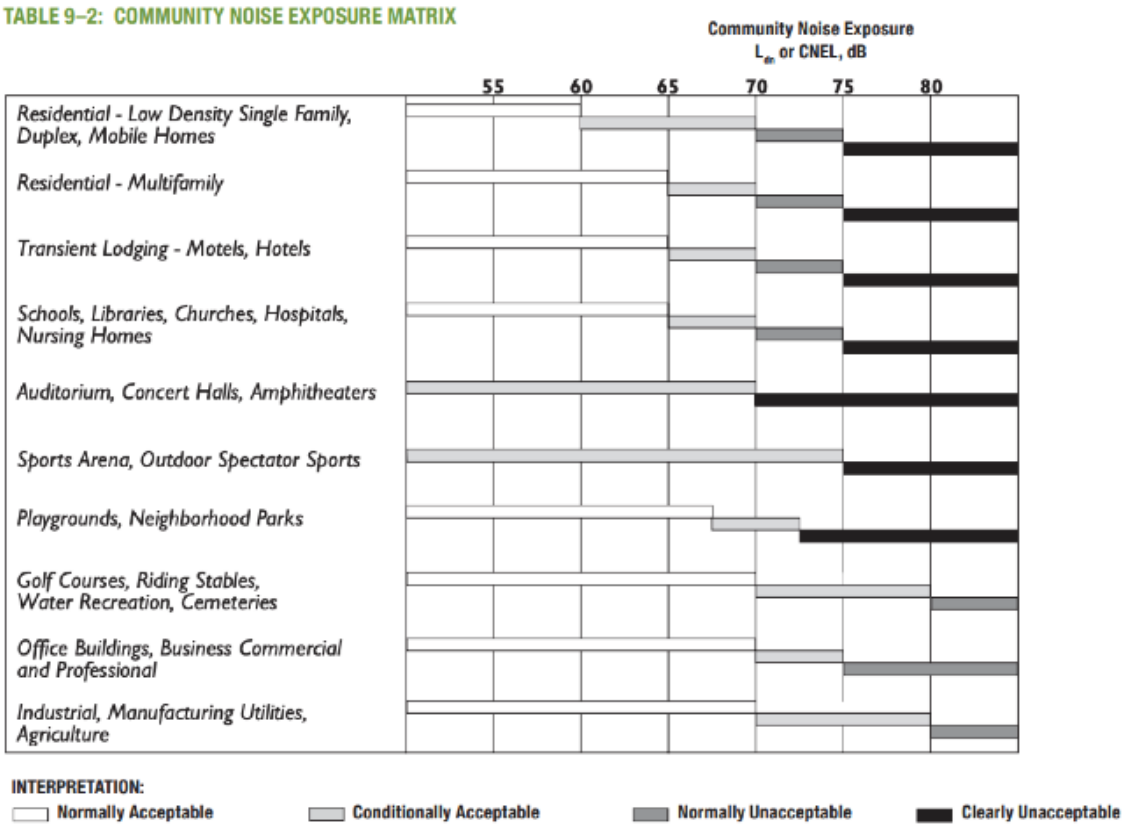
Title 24 of the California Code of Regulations, the Building Standards Administrative Code, contains the State Noise Insulation Standards, which specify interior noise standards for new hotels, motels, apartment houses, and dwellings other than single-family homes. Such new structures must be designed to reduce outdoor noise to an interior level of no more than 45 dB in any habitable room. They require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than 60 dB. Title 24 standards are enforced through the building permit application process.

City of Lodi General Plan

The Noise Element of the Lodi General Plan establishes acceptable limits of noise exposure for various land uses for both exterior and interior environments, based on guidelines provided by the Governor's Office of Planning and Research (OPR). These standards are intended to protect community members and sensitive uses from noise hazards by establishing criteria that define and mitigate for noise-generating development. Table 13-2 presents the allowable noise exposure levels for outdoor activity and interior areas in Lodi. Outdoor activity area standards do not apply to non-residential land uses unless they include such areas.

According to the Lodi General Plan, the allowable noise exposure level for residential uses is 60 dB CNEL in outdoor activity areas and 45 dB CNEL in interior areas. Tor Transient Lodging uses, noise exposure of up to 65 dB is allowable. Noise exposure of up to 70 dB CNEL would be conditionally acceptable for residential and hotel uses, if mitigation is included to ensure interior noise levels do not exceed 45 dB CNEL (City of Lodi 2010a).

TABLE 13-2
COMMUNITY NOISE EXPOSURE MATRIX



Source: City of Lodi 2010a

Lodi Municipal Code

Lodi Municipal Code Chapter 9.24 is the City's Noise Ordinance. This chapter prohibits noise deemed excessive, offensive, or disturbing, with limited exceptions. Section 9.24.030(C) states that it is unlawful for any person, firm, or corporation to cause, permit, or generate any noise or sound between the hours of 10:00 p.m. and 7:00 a.m. which exceeds the ambient noise level at the property line of any residential property by more than five decibels as determined at the time of such reading. This is applicable whether such noise or sound is of a commercial or noncommercial nature. However, Chapter 9.24 exempts from its provisions any bell, siren, or similar device on any vehicle that is required by law and that is automatically activated by placing the vehicle transmission in reverse, or by any backing movement.

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on noise if it would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies,
- Generation of excessive groundborne vibration or groundborne noise levels, or
- For a project located within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public or public use airport if no plan has been adopted, exposure of people residing or working in the project area to excessive noise levels.

Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to measurably severe noise levels. In practice, a noise impact may be considered significant if it would generate noise that would conflict with local noise criteria or ordinances, or substantially increase noise levels at noise-sensitive land uses. The City of Lodi, like many jurisdictions, does not have an adopted policy regarding significant increases in ambient noise.

A common practice in many jurisdictions is to use a 3-5 dB increase as a threshold of significance. However, a limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for the magnitude pre-project-noise conditions. Table 13-3 is based upon recommendations by the Federal Interagency Committee on Noise for the assessment of changes in ambient noise levels. Although the recommendations were specifically developed to assess aircraft noise impacts, they have been widely accepted as applicable to all sources of noise described in terms of cumulative noise exposure metrics such as L_{dn} or CNEL. The rationale for these recommendations is that a smaller increase in noise resulting from a project is sufficient to cause annoyance as ambient noise levels are higher.

TABLE 13-3
SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

Ambient Noise Level Without Project, L_{dn}	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise 1992.

Caltrans has prescribed a methodology for evaluating groundborne vibration impacts from construction based on potential damage to structures and human annoyance, from both transient sources (e.g., blasting, drop balls) and continuous/frequent intermittent sources (e.g., impact and vibratory pile drivers, vibratory compaction equipment). The City does not have specific policies pertaining to vibration levels. However, Table 13-4 presents thresholds for impacts related to groundborne vibration, based on methodology developed by Caltrans. For this analysis, vibrations of 0.10 inches per second (2.5 millimeters per second) or greater are considered significant.

TABLE 13-4
GROUNDBORNE VIBRATION THRESHOLDS

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/sec	in/sec		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion.	Vibrations unlikely to cause damage of any type.
2.0	0.08	Vibrations readily perceptible.	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected.
2.5	0.10	Level at which continuous vibrations begin to annoy people.	Virtually no risk of "architectural" damage to normal buildings.
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations).	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage.
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Vibrations at a greater level than normally expected from traffic but would cause "architectural" damage and possibly minor structural damage.

Note: mm/sec – millimeters per second; in/sec – inches per second
Source: Caltrans 2002.

Environmental Concerns Not Discussed in this Analysis

The project is subject to noise from the adjacent NCPA power plant and from traffic on Turner Road and Lower Sacramento Road. Potential effects of these conditions on future residents, guests and employees of the project are not considered within the scope of CEQA

analysis, as discussed in Section 1.3 of this EIR. The project would not exacerbate these conditions. Potential health risks or hazards associated with these conditions, if any, will be considered by the City of Lodi as necessary in its evaluation of the proposed project. It should be noted that noise studies have been prepared as part of the project application process. The results and recommendations of the studies would be considered by the City in its ultimate decision on the project.

Impact NOISE-1: Increase in Noise Levels in Excess of Standards – Traffic Noise

The noise study modeled existing and predicted future noise levels on Lower Sacramento Road, Turner Road and other potentially affected roadways using the Federal Highway Administration's Highway Traffic Noise Prediction Model (FHWA RD-77-108). Direct inputs to the model included predicted traffic data provided by KD Anderson and Associates in their traffic study shown in Appendix H. More information about the Highway Traffic Noise Prediction Model and model inputs is provided in the Brennan noise study in Appendix G. Traffic noise levels are predicted at a reference distance of 75 feet from the roadway centerlines along each roadway segment.

Table 13-5 shows the predicted ground-level traffic noise levels under Existing, Existing Plus Project, Cumulative, and Cumulative Plus Project traffic conditions. As shown in the table, the addition of traffic from the proposed project would not add measurably to the ambient noise level. As a result, project impacts would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

TABLE 13-5
TRAFFIC NOISE LEVELS

Roadway	Segment	Existing and Existing + Project Traffic Noise Levels (L_{dn}/CNEL) @75-feet from the Roadway Centerline			Cumulative and Cumulative + Project Traffic Noise Levels (L_{dn}/CNEL) @ 75-feet from the Roadway Centerline		
		Existing	Existing + Project	Δ	Cumulative	Cumulative + Project	Δ
Turner Rd.	Lower Sacramento Rd. to Mills Ave.	63	63	0	64	64	0
Lower Sacramento Rd.	Turner Rd. to North City Limits	63	63	0	63	63	0

Notes: Distances to traffic noise contours are measured in feet from the centerlines of the roadways. Actual distances may vary due to shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.
Source: J.C. Brennan and Associates 2021.

Impact NOISE-2: Exposure to Noise Levels in Excess of Standards – Project Construction

Noise impacts resulting from construction depends on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise-sensitive areas. Noise would also be generated during the construction phase by increased truck traffic on area roadways. A primary project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites.

Noise levels from typical construction equipment are shown in Table 13-6. Activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet.

TABLE 13-6
CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Predicted Noise Levels, L_{max} dB				Distances to Noise Contours (feet)	
	At 50 ft.	At 100 ft.	At 200 ft.	At 400 ft.	70 dB L_{max} contour	65 dB L_{max} contour
Auger Drill Rig	84	78	72	66	250	446
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete Saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic Tools	85	79	73	67	281	500

Source: Federal Highway Administration 2006.

Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. The noise increase from construction traffic would also be of short duration and would occur during daytime hours. The J. C. Brennan noise study evaluated project construction noise impacts. It concluded that, based upon noise measurement data collected in the adjacent neighborhoods, it is not expected that

construction would result in a significant temporary increase in background ambient noise levels. No mitigation measures were recommended (J.C. Brennan and Associates 2021).

The project would comply with the provisions of Lodi Municipal Code Chapter 9.24, which includes prohibition of noise-generating activities during nighttime hours (10:00 p.m. – 7:00 a.m.). This would avoid construction noise during times when nearby residents would be most sensitive to noise. Project impacts related to construction noise would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact NOISE-3: Groundborne Noise and Vibration

The project would not involve potential groundborne vibration sources other than operation of construction equipment. In most cases, vibration induced by typical construction equipment does not result in adverse effects on people or structures. Noise from construction equipment typically overshadows any meaningful groundborne vibration effects on people (Caltrans 2013).

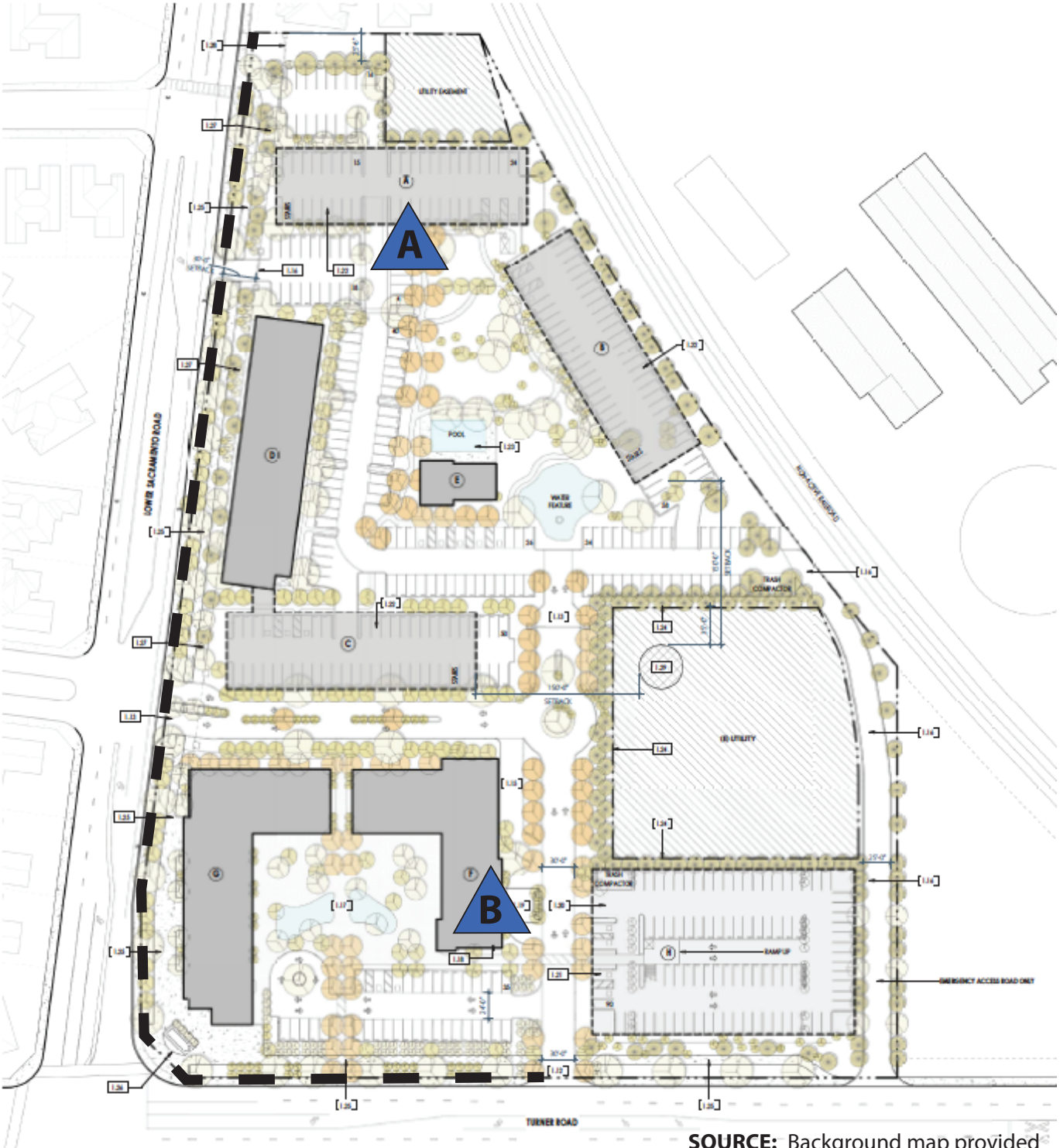
Using the methodology prescribed by Caltrans, the ground vibration produced by a large bulldozer at the northeast corner of the site would produce a peak particle velocity of 0.053 at the nearest residence to the northeast. The predicted peak particle velocity is within the "strongly perceptible" threshold, but it is below the threshold at which damage to residences could be expected. Heavy construction activity in this portion of the site would be limited duration. Because of this, project construction impacts related to groundborne vibration on nearby residences would be less than significant.

As noted, the railroad spurs on and adjacent to the project site are presently inactive; therefore, no noise associated with their use is currently being generated. The spur extension onto the project site, which is not owned by the UPRR, would be removed as part of project construction. Were the spur brought back in service, it could be expected that operations would be infrequent and at low speed, resulting in low vibration potential. While this is by no means conclusive, the City is considering feasibility of converting this spur and railroad track east of the former General Mills site into a multipurpose trail (see Chapter 15.0, Transportation).

Potential vibration from this source is a feature of the existing environment, and its potential effects on the project are not within the scope of CEQA analysis.Project impacts related to groundborne noise and vibration would therefore be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required



Noise Measurement Locations

Potential Barrier Location

SOURCE: Background map provided by NJA Architecture, with overlay noise information provided by JC Brennan and Associates, 2020.

Figure 13-1
NOISE MEASUREMENT SITES

14.0 PUBLIC SERVICES AND RECREATION

ENVIRONMENTAL SETTING

Fire Protection

The Lodi Fire Department provides fire protection services within the Lodi City limits, which include the project site. The Fire Department has four stations in the City; the closest to the project site is Station 4 at 180 North Lower Sacramento Road, approximately 0.7 miles to the south. Station 4 is equipped with one engine and one reserve truck. The second responder would be Station 1, another single-engine company, approximately 2.4 miles southeast of the project site. The Fire Department has approximately 50 fire personnel on staff. The Lodi General Plan indicates that the Fire Department has a self-imposed National Fire Protection Association's response time criterion of six minutes for 90% of all calls (City of Lodi 2010a).

In the event of an incidental hazardous materials release, the Fire Department and first responders are trained in emergency response in accordance with the regulations set by OSHA. In addition, Station 2 has a hazardous materials response vehicle and equipment specifically designed to respond to hazardous material incidents. All public fire protection agencies in San Joaquin County, including the Lodi Fire Department, operate under a master mutual aid agreement, under which other fire agencies may be called upon to assist should the resources of one agency be exhausted (San Joaquin County 2009).

Police Protection

The Lodi Police Department provides law enforcement services for the City, including the project site. The main station is located at 215 West Elm Street, approximately 2.8 miles southeast of the project site. As of 2019, the Police Department had a total of 105 personnel, including 74 sworn officers and 18 dispatchers. The Police Department has divided the City into three districts that encompass five patrol beats. The project site is within Patrol Beat 1 of the Sunset District (Lodi Police Department 2019). It is the Police Department's policy to respond to all emergency calls within five minutes. The Police Department has no adopted service levels, such as sworn officers per 1,000 population.

Schools

The project site is within the boundaries of the Lodi Unified School District (LUSD), which provides school services from kindergarten to 12th grade for most of northern San Joaquin County, including northern Stockton. The LUSD operates 49 schools: 28 elementary schools, three K-8 schools, six middle schools, four comprehensive high schools, and two continuation high schools, along with six special programs and several

preschool programs. As of the 2019-20 school year, there were 31,400 students enrolled in the LUSD at all grade levels (EdData 2020).

The closest elementary school is Woodbridge Elementary School at 1290 Lilac Street, approximately 0.2 miles northwest of the project site. The closest middle school is Millswood Middle School at 233 North Mills Avenue, approximately 0.65 miles to the south. Lodi High School is at 3 South Pacific Avenue, approximately 0.75 miles to the southeast. The project site is within the service boundaries of all three schools.

According to a 2016 school facility fee study, enrollment in the LUSD is expected to increase by 10.8% between the 2015-16 school year and the 2020-21 school year. The LUSD overall was operating at 106.2% of school classroom capacity during the 2015-16 school year, although no overcrowding is being experienced at any schools. Information on classroom capacities of individual schools is not available. However, the school facility fee study noted that the LUSD has added capacity through the construction of Millswood Middle School and an addition to Lodi High School. To accommodate anticipated future enrollment, the LUSD projects it will need six K-8 elementary schools and classroom additions to its high schools (LUSD 2016). To date, no new schools have been constructed other than Millswood Middle School.

Parks and Recreational Services

The City of Lodi Parks, Recreation, and Cultural Services Department maintains 23 developed and seven undeveloped parks and open spaces throughout Lodi, and it offers a wide variety of recreational programs and activities. The parks are classified as community, neighborhood, open space, special use areas, and mini/urban parks. Drainage basins play a large role in the provisions of parks within the City.

The closest park to the project site is Lodi Lake Park, approximately 500 feet to the east at its closest point. The approximately 43-acre Lodi Lake Park centers on Lodi Lake, created by water from the Mokelumne River (see Chapter 11.0, Hydrology and Water Quality). It is the only regional park within City limits, attracting visitors from beyond City boundaries as well as Lodi residents. Lodi Lake Park includes a swimming beach, toddler pool, boat house, two boat docks, group picnic areas, and a visitor center. Popular recreational activities include fishing, kayaking, canoeing, paddle boarding, swimming, and horseshoes. The park also offers nature programs and hosts various community events. The Lodi Parks, Recreation, and Cultural Services Department Strategic Action Plan states that the park is the most highly visited park in the City (City of Lodi 2015).

Adjacent to and northeast of Lodi Lake Park is the Lodi Lake Wilderness Area, which is the only natural open space within City limits. The Lodi Lake Wilderness Area spans 58 acres, including 25 acres of lake area. The Wilderness Area was intended to preserve the riparian and natural open space along the Mokelumne River. It provides 2.3 miles of paved and unpaved trails (City of Lodi 2010a).

The San Joaquin County Parks and Recreation Department manages 11 regional parks that offer a wide range of recreational facilities and activities (San Joaquin County 2014). The Woodbridge Wilderness Area is the closest County Park to the project site,

approximately 0.75 miles to the north. This natural area, accessible from River Meadows Drive in Woodbridge, features a riparian environment along one-quarter mile of the Mokelumne River, along with trails and river access for fishing.

The General Plan defines an overall park and open space standard ratio of eight acres per 1,000 residents. At least five acres of this open space should be designated for parks only (that is, excluding drainage basins). The standard ensures a high level of park facilities and services for existing and new residents. To assist in the acquisition and development of City parks, the City requires dedication of parkland or payment of in-lieu fees on all new residential, commercial, office, and industrial development (City of Lodi 2010a).

Other Public Services

Libraries in San Joaquin County and the City of Stockton have merged to become the Stockton-San Joaquin County Public Library system. The merged system has 15 branches in nine communities; one of the branches is in Lodi. The Lodi Public Library is at 201 West Locust Street, approximately 1.5 miles to the southeast. This library offers computer workstations and printing for general and Internet use, a reference collection for in-depth research, and a circulating collection of library materials.

The San Joaquin County Superior Court has jurisdiction over all felonies, misdemeanors, civil cases of all amounts, and other legal proceedings. These proceedings are conducted at the Stockton Courthouse, the Juvenile Justice Center in French Camp, and branch courts in Manteca and Lodi. All courthouses are staffed and maintained by the State of California. The Lodi courthouse is in two buildings: one on 217 West Elm Street, and the other on 315 West Elm Street. Both buildings are approximately 1.4 miles to southeast of the project site. The Lodi courthouse is currently closed until further notice.

REGULATORY FRAMEWORK

City of Lodi Impact Fee Mitigation Program

The City has adopted an Impact Mitigation Fee Program to fund new infrastructure and capital facilities to meet demands from new development. The program, with limited exceptions, will apply to all future growth anticipated through 2035. Impact fees would be assessed on new residential, retail, office/medical, and industrial development. The capital facility impact fee categories incorporated in this program include Fire, Police, General City Facilities, and Parks.

Fire, police, parks and recreation, and general City facility costs are allocated based on "persons served." For residential land uses, the persons served equals the residential population; for non-residential land uses, the persons served is equal to 50% of the number of employees. Future costs of new facilities are allocated between existing development and future development. For fire and general City facilities, the allocation is 81%/19%; for police facilities, it is 66%/34%. The impact fees are assessed based upon the future development share, with a further division between residential and non-

residential future development (City of Lodi 2012b). Park demand is measured by applying the parks service standard identified in the General Plan to the future number of residents in the City. By allocating facilities costs to each land use category based on its potential demand for park facilities, the mitigation program ensures that each land use category will fund a portion of the future required facilities (City of Lodi 2012b).

Low-density residential development and retail (minor and major) would require in-lieu mitigation fees. The high-density residential mitigation fee would apply to the proposed apartments, and the retail fee would apply to the retail space.

SB 50

SB 50, enacted in 1998, created the present School Facility Program, which is a State/local match program for the funding of new kindergarten-12th grade school facilities and the modernization of existing facilities. SB 50 also created several statutory changes in development fees for school facilities, the most notable effect being the pre-emption of school mitigation by the State. Satisfaction of the development fee process outlined in the statute is deemed to be "full and complete mitigation" of the impacts upon school facilities by new development, regardless of the identified level of impact, including mitigation for CEQA purposes.

The development impact fee is the source of school capital improvement funding provided by new development. SB 50 established a base fee for both residential and commercial/industrial development. This base has been adjusted for inflation every two years. School districts must establish the nexus between the development and the need for school facilities via a fee justification study to impose the biannual increase. Fees are levied and collected at the time the building permit is issued. District certification of the payment of the applicable fee is required before a city or county can issue the building permit.

The LUSD is eligible to levy development impact fees on new residential and commercial development to the maximum amount currently allowed by statute. Development impact fees are $3.48 per square foot of residential development and $0.56 per square foot of commercial/industrial development (LUSD 2018).

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact related to public services and recreation if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or generate a 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: fire protection, police protection, schools, parks, or other public facilities,

- 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, or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact PSR-1: Fire Protection Services

The proposed project would involve increases in demand for fire protection services. However, the Lodi Fire Department indicates that demands associated with the project could be accommodated with existing facilities and staff (Brad Doell, pers. comm.). New or expanded fire protection facilities would not be required. As noted above, Station 4 is approximately 0.7 miles from the project site, and availability of service and response times would not be affected.

The project would provide adequate access for fire protection equipment; in addition to the principal public accessways to the project, the proposed development would include two designated emergency vehicle accessways, one located along Lower Sacramento Road and one along Turner Road. Both public access points and the emergency vehicle accessways would be constructed to county and City standards to accommodate fire engines and equipment in the event of an emergency.

In its comments on the previous IS/MND, the NCPA noted that the power station adjacent to the project site includes a 120,000-gallon diesel storage tank, a natural gas compressor, natural gas delivery equipment, and a diesel starter. The NCPA stated that these facilities pose a fire risk to the proposed apartments located just off the fence line. As noted in Chapter 10.0, Hazards and Hazardous Materials, this issue is technically not one that is analyzed under CEQA, as CEQA does not require discussion of the impacts of existing environmental conditions on a project. However, it is noted that a minimum setback of 150 feet from any diesel storage tank is required. All project buildings meet this minimum setback requirement.

Project site and building design are subject to the requirements of the adopted California Fire Code regarding placement of fire hydrants, adequacy of water supply to the site, and emergency access. The project would also be subject to the City's adopted Building and Electrical Codes, including applicable fire safety provisions, including the smoke detector and sprinkler system requirements. The Fire Department would be actively involved in the project's site plan and design review process, and this involvement can be expected to ensure project compliance with applicable federal, state, and local regulations. Project impacts on fire protection services and facilities are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact PSR-2: Police Protection Services

The proposed project involves a marginal increase in the Lodi population and an associated increase in demand for police services. The increase in residents due to the apartment complex is not considered substantial and would not generate a significant increase in demand for police protection services. New or physically altered police facilities that could result in substantial physical impacts would not be required. The Lodi Police Department has adequate existing resources to accommodate the project, and response times would not be affected. Project impacts on police protection services would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact PSR-3: Schools

The proposed residential units can be assumed to generate additional student loading for the LUSD. Students from kindergarten through 6th grade would attend Woodbridge Elementary School, while students in 7th and 8th grades would attend Millswood Middle School. High school students (9th through 12th grades) would attend Lodi High School. The proposed hotel development would not result in student generation, so it would have no effect on school enrollment.

Student generation associated with the proposed 150 multi-family residential units could amount to approximately 78 students, based upon a factor of 0.523 students per residence that is used by LUSD for its estimates (LUSD 2018). An increase of 78 students is not considered significant when compared to a District enrollment of 31,394. Existing school facilities have adequate capacity and facilities to accommodate the minor potential increase in enrollment. The potential increase in students would not create significant overcrowding or capacity issues that would require the construction of new school facilities (Vicki Brum, pers. comm.).

As noted, the LUSD collects development impact fees in accordance with SB 50. The retail and hotel development would be subject to the commercial/industrial school impact fee of $0.56 per square foot, while the multi-family residential development would be subject to the residential impact fee of $3.48 per square foot. Payment of these development impact fees is considered by State law to be adequate mitigation for CEQA purposes. Therefore, project impacts on schools are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact PSR-4: Parks and Recreational Services

It is anticipated that the project would attract residents and visitors to the site. Residents of the apartments and visitors of the hotel would likely use nearby parks and recreational facilities, particularly Lodi Lake Park. Hotel guests would use these facilities on a short-term basis, if at all. Residents of the apartments may use them more regularly.

The proposed apartments and hotel would not create a significant increase in population, and thus an increase in park users, that would cause a substantial physical deterioration of existing parks and recreational facilities. The current facilities could accommodate the anticipated small increase in users. In addition, the project applicant would be required to pay the associated in-lieu mitigation fees for future park improvements which would offset any potential impacts from increased users. It is anticipated that these fees would be utilized in part for Lodi Lake Park improvements and maintenance.

The project does not propose the construction or operation of new parks or recreational facilities. The addition of the hotel, apartments, and retail space would not require the expansion of existing recreational facilities that would result in an adverse physical effect on the environment. The project would not result in a need to construct new recreational facilities. Impacts on parks and recreational facilities are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact PSR-5: Other Public Facilities

Since the project is unlikely to generate a substantial population increase, the project is unlikely to generate a substantial demand for additional library or courthouse services. No new or expanded library or courthouse facilities would be required. Project impacts on other public facilities would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

15.0 TRANSPORTATION

Information and analysis in this chapter is based on a transportation impact studies prepared for the project by KD Anderson and Associates Transportation Consultants and Fehr and Peers. The studies together consider the range of potential impacts of the project on vehicle miles traveled (VMT), operational safety on streets, highways and other transportation facilities; the KD Anderson study also considered internal circulation, on-site parking supply, and pedestrian, bike, transit, and other potential transportation impacts associated with the project. Studies describing the project's effects on VMT, which is the current preferred method for traffic impact analysis under CEQA, are shown in Appendix H. Other transportation-related subjects are discussed in the KD Anderson study, which is available for review at the Lodi Public Works Department.

REGULATORY FRAMEWORK

State Regulations

State CEQA Guidelines Section 15064.3

The State of California has recently added Section 15064.3 to the CEQA Guidelines, which is meant to incorporate SB 743 into CEQA analysis. SB 743 was enacted in 2013 with the intent to balance congestion management needs and the mitigation of the environmental impacts of traffic with statewide GHG emission reduction goals. SB 743 directed OPR to develop an alternative mechanism for evaluating transportation impacts and to amend the CEQA guidelines to provide a transportation impact analysis framework that prioritizes reducing GHG emissions, replacing the prior focus of minimizing automobile delay. OPR issued a Technical Advisory on evaluating transportation impacts in accordance with SB 743 in December 2018, concurrently with modifications to the CEQA Guidelines.

Section 15064.3 states that VMT is the preferred method for evaluating transportation impacts, rather than the commonly used LOS. The VMT metric measures the total miles traveled by vehicles as a result of a project. VMT accounts for the total environmental impact of transportation associated with a project, including use of non-vehicle travel modes such as public transit and bicycling. Section 15064.3(b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric. Criteria applicable to land use projects include the following:

- VMT exceeding an applicable threshold of significance may indicate a significant impact. The City currently has no thresholds of significance related to VMT.
- Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing "high-quality transit corridor" should be presumed to cause a less-than-significant transportation impact.

- Projects that decrease VMT in the project area compared to existing conditions should be presumed to cause a less-than-significant transportation impact. Because of proposed development, the project is expected to increase VMT in the project area.

While a quantitative analysis of VMT is preferred, a qualitative analysis may be used if existing models or methods are not available to estimate VMT for the project being considered. The City has adopted VMT guidance and thresholds against which the project is compared. These guidelines are described in the Local Regulations section below.

Regional Regulations and Standards

Regional Transportation Plans

Regional transportation plans applicable to Lodi have been prepared by SJCOG. SJCOG is a joint powers authority comprised of the County of San Joaquin and the cities of Lodi, Stockton, Manteca, Tracy, Ripon, Escalon, and Lathrop. The primary role of SJCOG is to foster intergovernmental coordination within San Joaquin County on transportation issues. SJCOG is overseen by a Board of Directors which allocates funding for transportation improvements and establishes regional transportation policies and programs.

Regional Transportation Plan/Sustainable Communities Strategy

SJCOG adopted the most recent version of its Regional Transportation Plan in 2018. SJCOG, as the designated metropolitan planning organization representing San Joaquin County, is required by both federal and State law to prepare a long-range transportation planning document known as a Regional Transportation Plan. The Regional Transportation Plan sets forth the transportation priorities of the SJCOG region from 2017 to 2042, based on household and job growth forecasts, market demand and economic studies, and transportation studies. It identifies policies and supportive strategies for these transportation priorities, as well as a financial plan to fulfill the objectives and performance indicators which guide the Regional Transportation Plan (SJCOG 2018).

Roadways projects near the project site that are part of the 2018 Regional Transportation Plan include the reconstruction of the State Route 99/Turner Road interchange and the widening of Ham Lane between Lodi Avenue and Elm Street to four lanes. Other transportation projects include improvements to Grapeline facilities and a Citywide Bicycle Facilities Detection Improvement Project.

The Regional Transportation Plan includes a Sustainable Communities Strategy, as required by SB 375, which links land use and transportation strategies with the intent of meeting specified per capita GHG reduction targets for emissions from cars and light trucks. Chapter 9.0, Greenhouse Gas Emissions, provides a detailed discussion of the Sustainable Communities Strategy.

Regional Congestion Management Plan

The SJCOG adopted the latest version of its Regional Congestion Management Plan in 2016. The Regional Congestion Management Plan is designed to coordinate land use, air

quality and transportation planning to reduce potential congestion from traffic generated by development. Along with all State highways, the Regional Congestion Management Plan also designates a local roadway and intersection network on which traffic congestion would be monitored and programs to reduce congestion would be targeted. Once an intersection is listed, it cannot be removed. A Regional Transportation Impact Fee is imposed on new development to support improvements to the regional transportation network (SJCOG 2016a). The segments of Turner Road and Lower Sacramento Road adjacent to the project site are not parts of the Regional Congestion Management Plan network.

Regional Bicycle, Pedestrian, and Safe Routes to Schools Master Plan

In 2012, SJCOG developed the Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan. This regional plan for San Joaquin County serves as a guide to planning, developing, and managing a regional bicycle and pedestrian network. Additionally, the plan identifies bikeways and pedestrian projects of regional significance and includes an implementation and funding strategy to help agencies involved in the implementation of the plan. The plan proposes a Class III bike route along Turner Road adjacent to the project site; however, this route has not been designated a priority project (SJCOG 2012a).

Regional Transit Systems Plan

SJCOG adopted the Regional Transit Systems Plan in 2016. The plan is a long-range transit plan that looks at bus and rail transit needs, their related costs, and details a financial forecast of anticipated funding through 2024. The plan was prepared in collaboration with the bus/transit operators in San Joaquin County, including Grapeline. The plan indicates that the City of Lodi intends to continue improving its existing core service for the next ten years through ongoing maintenance activities, station upgrades, the addition of a new transfer facility, and fleet replacement (SJCOG 2016b).

Regional Smart Growth/Transit Oriented Development Plan

In 2012, SJCOG adopted the Regional Smart Growth/Transit Oriented Development Plan. This plan provides key background information that serves as context for smart growth development in San Joaquin County. As defined in the plan, "smart growth" is development that revitalizes central cities and older suburbs, supports and enhances public transit, promotes walking and bicycling, and preserves open space and agricultural lands. "Transit-oriented development" is defined as development within one-half mile of a transit station and of convenience retail uses. Smart growth also focuses on "infill development" - a pattern of development that prioritizes re-use of vacant structures, new construction on vacant properties that might have been passed-over for development, and redevelopment on properties where the buildings are beyond their useful life (SJCOG 2012b).

Interregional STAA Study for I-5 and SR-99

In 2013, the Interregional Truck Operations on I-5 and SR 99 and STAA Routes Improvement Study was released. The study, prepared for both SJCOG and the Sacramento Area Council of Governments, noted that the Surface Transportation Assistance Act of 1982 (STAA) authorized motor carrier operation of 48-foot and longer semi-trailers on

National Network highways, along with other roads designated by the State. Local stakeholder dissatisfaction and possible lack of knowledge regarding the status, use and planning of STAA routes along the I-5 and State Route 99 corridors provided the impetus for this study. The study recommended working more closely with land use and transportation planning agencies to include STAA standards in planning documents, as well as more consistent efforts to sign local STAA-compliant routes (SACOG/SJCOG 2013). Turner Road, including the segment adjacent to the project site, has been designated a STAA route.

Local Regulations and Standards

City of Lodi General Plan

The Transportation Element of the Lodi General Plan sets forth policies and implementation measures related to transportation in the City. General Plan Implementing Policy T-P12 states that, for purposes of project review, a standard of LOS E during peak hour conditions is applicable to all streets in the City's jurisdiction. The objective of this performance standard is to acknowledge that some level of traffic congestion during the peak hour is acceptable and indicative of an economically vibrant and active area, and that infrastructure design decisions should be based on the conditions that predominate during most of each day.

General Plan Implementing Policy T-P10 exempts downtown Lodi from LOS standards to encourage infill development in order to create a pedestrian-friendly urban design character and densities necessary to support transit, bicycling, and walking. General Plan Implementing Policy T-P9 also allows exceptions to LOS standards upon findings by the City Council that achieving the designated LOS would be technologically or economically infeasible or would compromise the City's ability to support other important policy priorities.

Even though LOS is no longer the primary significance criteria for a CEQA document, the City of Lodi will continue use LOS to evaluate the consistency of projects with the General Plan, and to aid the understanding of potential major increases to vehicle delay at intersection and roadway segments.

City of Lodi Guidelines for Evaluating VMT Impacts

The City of Lodi has adopted the *SB 743 Implementation Guidelines for City of Lodi* (Fehr & Peers, 2020). The Guidelines provide direction for the conduct of VMT analysis for land development projects in the city. The analysis of the VMT impacts of the project described below was conducted in accordance with these Guidelines.

City of Lodi Short Range Transit Plan

The City of Lodi Short Range Transit Plan was adopted in 2013 and updated in 2019. This ten-year plan is intended to provide a detailed business plan to guide improvements to City transit organization and is also important to qualify for state and federal funding. It includes a review of demographics and transit needs, a series of surveys and ridership counts, a review of the effectiveness and efficiency of existing services, analysis of a wide range of

options, and the results of public input processes. The resulting plan provides operational, capital, and institutional plans, including an implementation plan. The updated Short Range Transit Plan calls for rerouting of Route 1, but this would not affect existing service or stops near the project site. However, the plan proposes to eliminate the final 3:30 p.m. run on Sundays (City of Lodi 2019).

City of Lodi Bicycle Master Plan

The City of Lodi Bicycle Master Plan, adopted in 2012, is intended to guide and influence bikeway policies, programs, and develop standards to make bicycling in the City of Lodi more safe, comfortable, convenient, and enjoyable for all bicyclists. The plan outlines goals, and regulatory requirements for Lodi's existing and proposed bicycle network. According to the Bicycle Master Plan, a Class III bike route has been proposed along Turner Road (City of Lodi 2012c) – the same as proposed in the Safe Routes to Schools Master Plan. The Bicycle Master Plan is in the process of being updated.

Lodi Greenline Trail Feasibility Study

The City of Lodi recently released a study, prepared with SJCOG and Bike Lodi, on the feasibility of either converting approximately 1.75 miles of existing railroad track from downtown Lodi to the community of Woodbridge into a Class I multipurpose trail to be used by bicycles and pedestrians, or to construct a multipurpose trail along the existing track in the study area. The study area includes the existing spur along the eastern boundary of the project site, along with track extending east from the former General Mills site. The study explored the potential design and development features of both options, along with the costs and potential funding sources (City of Lodi 2022). The feasibility study was presented at the February 16, 2022 City Council meeting, and the Council supported additional studies on the Greenline Trail.

ENVIRONMENTAL SETTING

Transportation systems within the City of Lodi include streets and highways, public transit, pedestrian and bicycle facilities, and railroads. There are no active air transportation systems within the City except for emergency medical transport; and there are no water-based transportation systems in the city.

Street and Road Systems

Primary regional access to the Lodi area is provided Interstate 5 to the west and SR 99 to the east. The following regional and local roadways provide access to and from the project site and vicinity.

Turner Road is an east-west roadway along the southern boundary of the project site that extends from State Route 99 to I-5 and connects to both via interchanges. It is designated by the Lodi General Plan as a minor arterial (City of Lodi 2010a). Near the project site, Turner Road has two travel lanes in each direction; west of Lodi, the number of travel lanes decreases to one in each direction. Exclusive left-turn lanes and a center two-way left-turn lane are present along portions of Turner Road within the City. Turner Road has exclusive

left-turn pockets at the intersection with Lower Sacramento Road adjacent to the project site. As of September 2020, the average daily traffic volume on Turner Road adjacent to the project site is approximately 15,390 vehicles per day (City of Lodi 2020).

Lower Sacramento Road is a north-south roadway along the western boundary of the project site. Lower Sacramento Road extends north beyond the San Joaquin-Sacramento County line and south to Stockton. This roadway is offset at two intersections with Turner Road about one-quarter mile apart. For this project, the portion of Lower Sacramento Road north of Turner Road is referred to as "Lower Sacramento Road (North)," and the portion of Lower Sacramento Road south of Turner Road is referred to as "Lower Sacramento Road (South)."

Lower Sacramento Road (North) adjacent to the project site is designated by the Lodi General Plan as a minor arterial (City of Lodi 2010a), and it has one travel lane in each direction. Other segments of the roadway have two travel lanes in each direction. Exclusive left-turn lanes and center-turn lanes are present along segments of the roadway, including a dual left-turn lane from southbound Lower Sacramento Road (North) to Turner Road adjacent to the project site. As of September 2020, the average daily traffic volume on Lower Sacramento Road (North) adjacent to the project site is approximately 9,930 vehicles per day (City of Lodi 2020).

Mills Avenue is a north-south roadway approximately one-quarter mile east of the project site. The roadway is designated by the Lodi General Plan as a collector road (City of Lodi 2010a). Near the project site, Mills Avenue has one travel lane in each direction. The southern terminus of Mills Avenue is at Harney Lane, and the northern terminus is at Turner Road. At the intersection of Turner Road and Mills Avenue, the northern leg consists of a driveway to the City's SWTF, adjacent to the project site. As of September 2020, the average daily traffic volume on the segment of Mills Avenue closest to the project site is approximately 5,600 vehicles per day (City of Lodi 2020).

Existing Traffic Conditions

Traffic conditions and potential traffic impacts can be described using the Level of Service (LOS) metric. LOS, a measure of the quality of traffic flow, is not used for CEQA analysis of transportation impacts as discussed previously. This information regarding roadways providing access to the project site and vicinity is included in the KD Anderson traffic study, which is available for review at the Lodi City offices. All roadways and intersections in the project vicinity, however, operate at acceptable Levels of Service as defined in the Lodi General Plan.

Public Transit

Transit services in the City of Lodi are operated primarily by Lodi Transit, also known as Grapeline. Grapeline provides local bus service with approximately 30 vehicles in the fleet. All vehicles are wheelchair accessible. There are five weekday and four weekend fixed routes; each starts and ends at the Lodi Transit Station in downtown Lodi. Grapeline Route 1 runs along Turner Road, with a bus stop at the intersection of Turner Road and Lower Sacramento Road. A weekend Express Route 1 also serves the vicinity, with a stop at the

Lodi Lake entrance. Demand-response service in Lodi is provided by dial-a-ride service offered to the public and the VineLine paratransit service available to passengers eligible under the Americans with Disabilities Act (City of Lodi 2019).

Regional public transit connections are available at the Lodi Transit Station through South County Transit and the San Joaquin Regional Transit District (SJRTD). South County Transit is a public transit service based in Galt in Sacramento County. It operates SCT/Link, which provides bus service from Galt to several destinations. The SCT/Link Hwy 99 Express provides weekday hourly bus service, between 5:45 a.m. and 6:45 p.m., from the Lodi Transit Station to Galt, Elk Grove, and south Sacramento (City of Lodi 2019).

The SJRTD provides public transportation services throughout San Joaquin County, including the City of Lodi, as well as interregional service. SJRTD provides fixed-route, flexible fixed-route, and dial-a-ride services. SJRTD Route 23 Intercity and Route 93 Hopper provide weekday connections between the Lodi Transit Station and Stockton, from where connections can be made to Manteca, Lathrop, and Tracy. Route 723 is a weekend version of Route 23 with an identical service area in Lodi. All routes stop at transfer points at Ham Lane/West Lodi Avenue and at Kettleman Lane/Tienda Drive (City of Lodi 2019).

Bicycle and Pedestrian Facilities

Bicycle lanes are provided on several streets in Lodi. In the project vicinity, a Class I paved pedestrian and bicycle pathway starts from the sidewalk on the east side of Lower Sacramento Road, north of the project site where the Union Pacific rail line intersects Lower Sacramento Road. The path travels along the west side of Lodi Lake and provides direct access to the park. The path also provides access to Turner Road at the intersection of Turner Road and Mills Avenue. A Class II bicycle lane has been established along Lower Sacramento Road between the Union Pacific line and Turner Road (City of Lodi 2012c). The City of Lodi has just released for public review a feasibility study for constructing a Class I multipurpose trail along the spur on the eastern boundary of the project site (see below).

Existing sidewalks are present along both Lower Sacramento Road and Turner Road frontages of the project site. A paved multi-use path along the east side of Lodi Lake allows vehicle, bicycle, and pedestrian use. Lodi General Plan policies seek to ensure that pedestrian facilities and connections are constructed in all new developments.

Railroads

Amtrak provides passenger rail service on its San Joaquin line, which connects Oakland and Sacramento to Bakersfield, with stops at several stations in the San Joaquin Valley and the Bay Area, including Lodi at the Lodi Transit Station. The Lodi station provides a Quik-Trak ticket kiosk for passengers traveling on the San Joaquin line. Two trains provide service from Stockton to Sacramento, with several bus connections offering more travel options.

Lodi is served by two national freight rail services: Union Pacific Railroad and Burlington Northern Santa Fe. Freight rail service is also provided by the Central California Traction

Company, a local railroad that operates 52 miles of track between Lodi and Stockton and is the short line operator for the Port of Stockton. These rail lines provide freight service to many of the industrial and warehouse uses on the east side of Lodi, and they connect to the large intermodal facilities in Stockton.

As has been noted, a railroad spur runs along the eastern boundary of the project site. This spur, originating in the Union Pacific main line through downtown Lodi, once served the former General Mills; the tracks terminate northwest of the project site at the WID Diversion Canal in southern Woodbridge. This spur is presently inactive but is being retained by Union Pacific as a potential rail access corridor. Another railroad spur at the approximate center of the project site is not used and would be removed by the project.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact on transportation if it would:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities,
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b),
- Substantially increase safety hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or
- Result in inadequate emergency access.

Impact TRANS-1: Conflicts with Motor Vehicle Transportation Plans

As noted, the segments of Lower Sacramento Road and Turner Road adjacent to the project site are not part of the Regional Congestion Management Plan network, but project traffic could use roadways that are part of the that network. The project would be required to pay the Regional Transportation Impact Fee, which would constitute the project's proportionate share of future improvements to network facilities. Payment of the Regional Transportation Impact Fee would mitigate potential project impacts on these facilities.

As noted, CEQA Guidelines Section 15064.3(b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric. Because of proposed development on vacant property, the project is expected to increase VMT in the project area. However, the project site is adjacent to a transit corridor, and Grapeline stops are close to the project site. Existing bikeways and sidewalks are located along the principal streets in the vicinity. The project is a mixed-use development that includes multifamily housing units. These features would encourage greater use of alternative transportation modes and lesser use of

motor vehicles. Therefore, the project would not conflict with CEQA Guidelines Section 15064.3. Project impacts related to motor vehicle plan are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-2: Conflicts with Non-Motor Vehicle Transportation Plans

The project proposes to develop residential uses on currently vacant land that is mostly surrounded by urban development. It is near existing transit stops and trails for walking and bicycling, and the residential development is within walking distance of Woodbridge Elementary School.

The project would not interfere with existing Lodi Grapeline bus routes in the vicinity, other than potentially with construction work in Turner Road that would be temporary. The project would not interfere with the implementation of plans applicable to public transportation, such as the Regional Transportation Plan and the Regional Transit Systems Plan. The same potential impact applies to proposed bicycle routes, so the project is not expected to interfere with plans for the installation of bike routes in the vicinity, as described in the Regional Bicycle, Pedestrian, and Safe Routes to Schools Master Plan or the City's Bicycle Master Plan.

As noted, existing sidewalks have been installed along the Lower Sacramento Road and Turner Road frontages. The project would not remove these sidewalks, and it would include internal pedestrian walks, particularly in the residential complex. In addition, as noted in Chapter 12.0, Land Use, installation of new pedestrian-friendly circulation ways along both project frontages would improve pedestrian and bicycle connections between Woodbridge, residential areas near the project, Lodi Lake, and north Lodi residential areas. The result would be improved pedestrian circulation in the area.

As noted, a railroad spur runs along the eastern boundary of the project site. The spur is currently not in use, and the City recently conducted a feasibility study to examine conversion of this spur into a multipurpose trail. This spur line, although inactive, is presently being retained by Union Pacific for possible future use. Another unused private railroad spur located within the project site would be removed as a part of the project. Project impacts on non-vehicular transportation plans are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-3: Safety Hazards

Access to the hotel and commercial space would be provided by a new driveway along Turner Road. The project would include an eastbound-to-northbound exclusive left-turn lane for vehicles entering the project site from eastbound Turner Road. For vehicles exiting the project site onto eastbound Turner Road, an acceleration lane would be provided.

Apartment residents would primarily access the site via the proposed driveway connection with Lower Sacramento Road. The driveway would align with Woodlake Circle. Although the traffic volumes at this location would increase, adding turning lanes along Turner Road and aligning the apartment access with Woodlake Circle would improve traffic circulation and reduce traffic hazards. The proposed project and driveways would not substantially increase traffic hazards. Impacts would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-4: Emergency Access

The project would be required to maintain adequate emergency vehicle access to individual land uses developed within the project site through the City's Site Plan and Design Review processes. Coordination with the Lodi Fire Department and Lodi Police Department would occur during the development of the project's Site Plans and would continue as City review of the project proceeds. Fire Department coordination would include the development of a Fire Access Site Analysis. The approved project Site Plan would require compliance with these and other San Joaquin County Fire Prevention Bureau standards (San Joaquin County Fire Prevention Bureau 2017). Emergency access to the project site, including access through security gates, would be arranged with the Lodi Fire Department.

Along with the public access driveways, the project proposes an emergency vehicle access east of the hotel entrance on Turner Road and north of the apartment entrance on Lower Sacramento Road. The driveways would provide access for emergency vehicles and equipment. Therefore, impacts related emergency access would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact TRANS-5: Vehicle Miles Traveled

As discussed in the *Lodi SB 743 Implementation Guidelines Report*, the potential VMT impacts of a mixed-use project must be evaluated separately using analysis parameters appropriate to each use. Accordingly, the residential and commercial portions of the project were analyzed separately as discussed below.

Residential Component VMT Effects

The VMT effects of the residential component of the Lakehouse project were evaluated by KD Anderson Transportation Consultants (2022) using the City of Lodi Travel Demand Model. The Lodi Travel Demand Model estimates that the residential portion of the Lakehouse project would generate 10,254.6 VMT per day. Based on the proposed 150 units, each dwelling unit would generate an average of 68.4 VMT. This would exceed the multifamily residential significance threshold of 45.4 VMT per dwelling unit. Because of this, the VMT impact of the residential component of the project on VMT is considered significant.

The *Lodi SB 743 Report* does not define VMT mitigation measures specific to Lodi projects. At the time the KD Anderson report was prepared initially, potential mitigation measures for significant VMT impacts were available in the California Air Pollution Control Officers Association (CAPCOA) publication *Quantifying Greenhouse Gas Mitigation Measures - A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* (CAPCOA 2010). The KD Anderson discussion of potential VMT mitigation measures was drawn from the 2010 CAPCOA document. This 2010 description of mitigation has, however, become outdated and has been replaced by an updated version, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA 2021).

VMT mitigation measures that are potentially applicable to the proposed project, which are closely related to GHG reduction measures, are described from the 2021 CAPCOA document. The 34 potential transportation measures are listed in page 63 of the CAPCOA document shown below.



Transportation

LAND USE
- T-1. Increase Residential Density
- T-2. Increase Job Density
- T-3. Provide Transit-Oriented Development
- T-4. Integrate Affordable and Below Market Rate Housing
- T-17. Improve Street Connectivity

TRIP REDUCTION PROGRAMS
- T-5. Implement Commute Trip Reduction Program (Voluntary)
- T-6. Implement Commute Trip Reduction Program (Mandatory Implementation and Monitoring)
- T-7. Implement Commute Trip Reduction Marketing
- T-8. Provide Ridesharing Program
- T-9. Implement Subsidized or Discounted Transit Program
- T-10. Provide End-of-Trip Bicycle Facilities
- T-11. Provide Employer-Sponsored Vanpool
- T-12. Price Workplace Parking
- T-13. Implement Employee Parking Cash-Out
- T-23. Provide Community-Based Travel Planning

PARKING OR ROAD PRICING/MANAGEMENT
- T-14. Provide Electric Vehicle Charging Infrastructure
- T-15. Limit Residential Parking Supply
- T-16. Unbundle Residential Parking Costs from Property Cost
- T-24. Implement Market Price Public Parking (On-Street)

NEIGHBORHOOD DESIGN
- T-18. Provide Pedestrian Network Improvement
- T-19-A. Construct or Improve Bike Facility
- T-19-B. Construct or Improve Bike Boulevard
- T-20. Expand Bikeway Network
- T-21-A. Implement Conventional Carshare Program
- T-21-B. Implement Electric Carshare Program
- T-22-A. Implement Pedal (Non-Electric) Bikeshare Program
- T-22-B. Implement Electric Bikeshare Program
- T-22-C. Implement Scootershare Program

TRANSIT
- T-25. Extend Transit Network Coverage or Hours
- T-26. Increase Transit Service Frequency
- T-27. Implement Transit-Supportive Roadway Treatments
- T-28. Provide Bus Rapid Transit
- T-29. Reduce Transit Fares

CLEAN VEHICLES AND FUELS
- T-30. Use Cleaner-Fuel Vehicles

Of the 34 Transportation GHG (and VMT) reduction programs described by CAPCOA, three have potential applicability to the project. The three that are potentially applicable include the following:

> T-9. Implement Subsidized or Discounted Transit Program. See analysis of non-residential VMT impacts below. This improvement may result in marginal increases in transit usage but would not, however, result in a substantial net reduction in VMT.
>
> T-14. Provide Electric Vehicle Charging Infrastructure. Potential GHG Mitigation. Install onsite electric vehicle chargers in an amount beyond what is required by the 2019

California Green Building Standards (CALGreen) at buildings with designated parking areas (e.g., commercial, educational, retail, multifamily). Reductions in VMT that would result from this measure are considered very low, given that Eastvale infrastructure would already be required and this measure would only slightly increase its availability to residents of the multifamily component of the project.

T-19-A. Construct or Improve Bike Facility. Potentially Feasible. The project is served by existing bikeway facilities, consistent with the City of Lodi Bikeway Master Plan. This measure would involve additional improvement in existing on-street bikeways in the immediate project area to improve bicyclist safety and comfort. Such improvements, which are not described in the Master Plan, would require new engineering design, City approval and consideration of applicability to other City bikeways. Potential reductions in VMT associated with such improvements cannot be reliably quantified.

The remaining list of measures described by CAPCOA cannot be reasonably applied to the residential portion of the project, as detailed below. Two of the Land Use measures, T-1 and T-2, involve substantial opportunity to reduce VMT, but are not applicable to the subject project.

T-1. lncrease Residential Density. Not Applicable. The residential portion of the project involves multi-family residential development at a density of over 30 units per acre; by its nature the project provides a reduction in VMT as compared to average residential densities. The multi-family nature of the project is, however, already accounted for in the VMT generation estimate provided by KD Anderson as discussed above, and the project VMT is compared to the VMT significance threshold for multi-family residential development. No additional VMT credit can be assigned using the CAPCOA methodology.

T-2. lncrease Job Density. Not Applicable. The residential component of the project does not include substantial employment. Some VMT reduction synergy may result from the project's location adjacent to proposed commercial development but cannot be reliably quantified using the CAPCOA methodology.

Program T-4, *Integrate Affordable and Below Market Rate Housing*, is inconsistent with the project objectives; the project proposes upscale market rate apartment units and does not include a below-market or affordable housing component.

A number of other programs cannot reasonably be applied to the project by virtue of the project's location and scale. Several of the CAPCOA transportation measures are applicable only at the community level and cannot be implemented at the project level. For example:

T-3. Provide Transit-Oriented Development. The project is not located in or near a transit-oriented development area or a high-quality transit corridor. The general project area is located at the margins of the City of Lodi does not have access to a diverse set of urban amenities.

T-17. Improve Street Connectivity. Not Applicable. This measure is addressed to larger projects that provide a design opportunity to lay out new street patterns; access to the site is already provided via two major roadways, and access to these streets is direct and unhindered.

T-18. Provide Pedestrian Network Improvement. Not Applicable. This measure is applicable at a neighborhood or community level and would not be applicable to the project in isolation. The project site and vicinity are presently provided with pedestrian ways, and the project would provide direct internal access to the surrounding community facilities.

T-23. Provide Community-Based Travel Planning. Not Applicable. This program would be implemented if feasible at community-wide scale and would not be reasonably applied to the project

Several potential VMT reduction measures are applicable to industrial and commercial projects and employee travel and are therefore not applicable to the residential portion of the project. These include:

T-5. Implement Commute Trip Reduction Program (Voluntary).
T-6. Implement Commute Trip Reduction Program (Mandatory Implementation and Monitoring).
T-7. Implement Commute Trip Reduction Marketing.
T-8. Provide Ridesharing Program.
T-10. Provide End-of-Trip Bicycle Facilities.
T-11. Provide Employer-Sponsored Vanpool.
T-12. Price Workplace Parking.
T-13. Implement Employee Parking Cash-Out.

Still other measures defined by CAPCOA involve limitations on provision of parking for the proposed multi-family units that are inconsistent with the current mode of parking regulation in the City of Lodi and other comparable small cities in largely rural areas. These include:

T-15. Limit Residential Parking Supply.
T-16. Unbundle Residential Parking Costs from Property Cost.
T-24. Implement Market Price Public Parking (On-Street).

And finally, a number of programs, including improvements to the bikeway system, would necessarily be implemented at a neighborhood or community scale and not at the scale of the proposed project.

T-19-B. Construct or Improve Bike Boulevard.
T-20. Expand Bikeway Network.
T-21-A. Implement Conventional Carshare Program.
T-21-B. Implement Electric Carshare Program.
T-22-A. Implement Pedal (Non-Electric) Bikeshare Program.
T-22-B. Implement Electric Bikeshare Program.
T-22-C. Implement Scootershare Program.
T-25. Extend Transit Network Coverage or Hours
T-26. Increase Transit Service Frequency
T-27. Implement Transit-Supportive Roadway Treatments
T-28. Provide Bus Rapid Transit
T-29. Reduce Transit Fares

Implementation of the three potentially-feasible mitigation measures described above have only limited potential to reduce VMT generated by the residential portion of the project. The specific means to implement the measures at a project level are not well defined, and the amount of reduction cannot be reliably quantified without speculation. Therefore, these measures are not considered adequate to reduce the project's VMT impacts to a less-than-significant level. Besides these measures, there is no other known mitigation for the residential project's VMT effects. Therefore, the impact of the residential component of the Lakehouse project on VMT is considered significant and unavoidable.

Level of Significance: Significant

Mitigation Measures:

> **TRANS-1: The following mitigation measures shall apply to the residential portion of the project.**
>
> **Implement Subsidized or Discounted Transit Program**. See analysis of non-residential VMT impacts below. This improvement may result in marginal increases in transit usage but would not, however, result in a substantial net reduction in VMT.
>
> **Construct or Improve Pedestrian and Bike Facilities**. See TRANS-2, **Provide Traffic Calming Measures** below. Potential reductions in VMT associated with these improvements cannot be reliably quantified.
>
> Significance After Mitigation: Significant and Unavoidable

Non-Residential Component VMT Effects

The proposed hotel and retail commercial elements of the project are considered "unique or atypical projects" under the SB 743 Implementation Guidelines for City of Lodi. The VMT threshold for unique or atypical projects is described on page 14 of the Guidelines as follows:

> Special consideration will be necessary to analyze VMT impacts for land uses that do not fit into any of the above eight categories. Common examples are hotels, medical centers, wineries, churches, schools/colleges, specialty retail uses, etc. These uses should be analyzed on a case-by-case basis using available information and applying the general intent of the Technical Advisory.

For VMT analysis of land use projects, the City of Lodi has chosen to utilize a threshold of significance that is 15 percent below that of existing development in the city, consistent with California Governor's Office of Planning and Research recommendations. In this instance, "existing development" represents other hotels within the City limits with similar amenities. While a number of hotels exist within the City of Lodi, most are situated along the SR 99 corridor and cater to highway or business travelers. The Wine and Roses Hotel, Restaurant, and Spa is situated at 2505 West Turner Road in Lodi, about one-quarter mile west of the project site. Through discussions with the City and BaseCamp Environmental, it was determined that the travel characteristics of the Wine and Roses Hotel, Restaurant, and Spa would be similar to that of the Lakehouse hotel project, making it a good comparative site to study.

An analysis of travel to and from the Wine and Roses Hotel found that the average trip length was 19.6 miles, an average influenced by the considerable length of the longest 10% of trips. Applying this average to the daily trips estimated for the Lakehouse hotel, with an adjustment for internal trips, and the daily VMT for the Lakehouse hotel would be 14,296. Prior to any adjustments, VMT generation rates are expected to be identical for the Lakehouse hotel and Wine and Roses Hotel given their similar locations, on-site amenities, and expected clientele. The resulting VMT ratio for the Lakehouse hotel is 156.6 miles of travel per day per room. The Lakehouse hotel's VMT impact would be considered less than

significant if it generated 15% below that average, which would be 133 VMT per room or less.

Improvements to the bicycle and pedestrian facilities in the project vicinity recommended in TRANS-2 below could result in marginal increases in non-auto transportation, although their contribution to VMT reduction would be small.

Various Transportation Demand Management (TDM) strategies may provide a means to reduce the project's VMT below current levels. A total of seven potentially feasible TDM strategies were identified from CAPCOA's *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* by the author of the VMT analysis. The VMT analysis indicates that the net effect of all seven identified TDM strategies would be a 1.2% decrease in the Lakehouse hotel's estimated total VMT. A 1.2% VMT reduction translates into a reduction of 173 miles of travel per day. When added to the VMT savings associated with internal trips, the total reduction is 283, or about 2% of the project's total VMT. Thus, it is apparent that the effects of internal trips and combined with all of the potential TDM strategies would not reduce the project's VMT to at least 15% below that of existing similar hotels in Lodi. Thus, the VMT effect of the hotel portion of the project would be significant and unavoidable.

Three of the seven strategies identified (and their range of effectiveness) are listed below as having potential to reduce the VMT impacts of the project. Even though they are not capable of reducing VMT effects to a less than significant level, they are capable of being implemented by the project and are therefore recommended as potentially feasible mitigation for the project's VMT effects.

- Implement a voluntary Commute Trip Reduction (CTR) program (Individual effectiveness = 0% to 4%).
- Implement an employee parking cash-out program (Individual effectiveness = 0% to 12%).
- Construct or improve bike storage facility (Individual effectiveness = 0% to 0.8%).

Three of the recommended VMT reduction strategies, which are listed below, recommend changes to operation of the City's Grapeline transit system. These changes, which include changes in fares, service frequency and hours of operation, would theoretically facilitate transit service but cannot reasonably be applied to the proposed project. A fourth measure would involve a general but unspecified set of improvements that would also tend for facilitate transit service but involve no direct relationship to the project. The proposed citywide changes to the transit system would have no direct or proportional relationship to the project or its VMT effects. Therefore, these measures are not recommended as mitigation measures.

- Extend transit network hours (Individual effectiveness = 0% to 4.6%)
- Increase transit service frequency (Individual effectiveness = 0% to 11.3%)

- Reduce transit fares (Individual effectiveness = 0% to 1.2%)
- Implement transit-supportive roadway treatments (Individual effectiveness = 0% to 1%).

Based on the OPR Technical Advisory, it is appropriate to consider the 18,500 square feet of retail as "locally serving" for several reasons. First, it is well below the OPR threshold of 50,000 square feet of space as local retail. Second, it is situated in an established area of the City where there are many residents, but not all that many small retail shops. Third, it may cater to residents and overnight guests at the sight, which is further evidence of serving the local population. For these reasons, VMT impacts associated with the retail use should be considered less than significant.

In summary, the VMT impacts of the retail uses would be less than significant. However, even with feasible mitigation measures imposed, the Lakehouse hotel's VMT would not be reduced to at least 15% below that of similar uses (i.e., other Lodi hotels with similar amenities). Therefore, VMT impacts associated with the non-residential portions of the project would be significant and unavoidable.

Level of Significance: Significant

Mitigation Measures:

TRANS-2: The following measures shall apply to both the residential and non-residential components of the project:

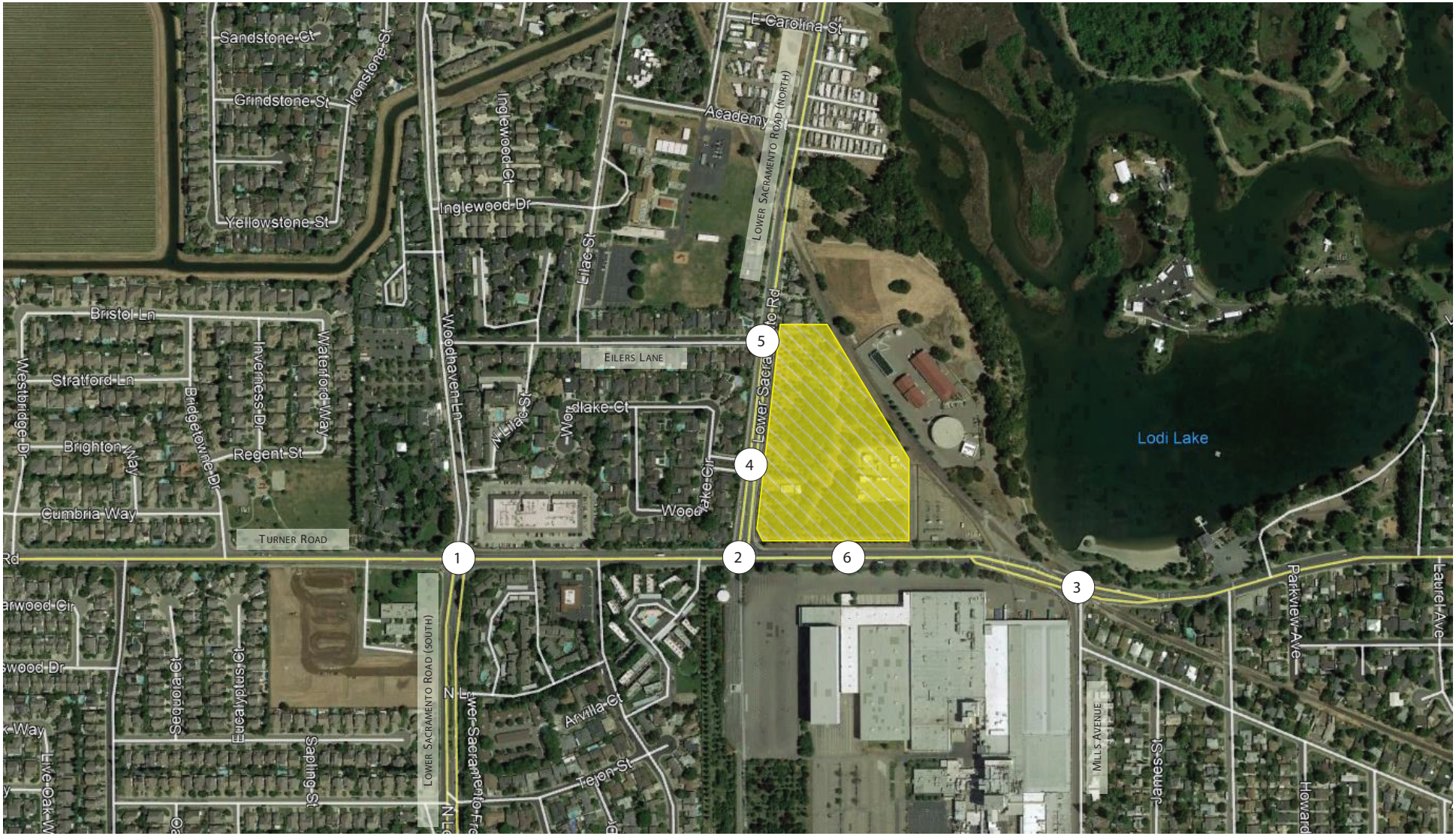
Provide Traffic Calming Measures. The project applicant shall install Class II bike lanes along the north side of Turner Road adjacent to the project site. Pedestrian improvements discussed above would further promote non-auto transportation. Existing marked crosswalks shall be improved with additional safety measures, such as crosswalk signs and lighting. These improvements shall be made prior to start of project operations.

Implement Subsidized or Discounted Transit Program. The project shall provide subsidized/discounted daily or monthly public transit passes for Grapeline to apartment residents and hotel employees.

TRANS-3: The following measures shall apply to only the non-residential component of the project:

- Implement a voluntary Commute Trip Reduction (CTR) program.
- Implement an employee parking cash-out program.
- Construct or improve bike facility. In addition to any bicycle parking requirements associated with building code requirements, the proposed hotel and retail commercial uses shall provide secure covered bicycle storage facilities for employee use as required by the Lodi Zoning Code.

Significance After Mitigation: Significant and unavoidable.



BaseCamp Environmental

Figure 15-1
ROADWAY NETWORK AND STUDY INTERSECTIONS

16.0 UTILITIES AND ENERGY

ENVIRONMENTAL SETTING

Wastewater Collection and Treatment

The City's municipal wastewater collection and treatment system consists of approximately 191 miles of collection pipelines ranging in sizes from 4 to 42 inches in diameter. (City of Lodi 2012d). The closest wastewater collection line to the project site is along Turner Road, just east of the project site boundary. At this point, an existing pump station directs wastewater through a six-inch force main to a 10-inch gravity line in Mills Avenue, which conveys wastewater south to larger lines. These lines eventually connect to a 42-inch sewer trunk line which flows southwest to the City's WPCF, approximately six miles southwest of Lodi along Interstate 5.

The WPCF has a treatment capacity of 8.5 million gallons per day (mgd) and a peak flow capacity of 16 mgd (City of Lodi 2012d). As of 2014, average dry weather flow to the WPCF was approximately 5.1 mgd (City of Lodi 2016c). The WPCF can treat wastewater to tertiary, ultraviolet-disinfected standards or secondary, undisinfected levels in accordance with Waste Discharge Requirements issued by the Central Valley RWQCB (Order No. 2006-0003 issued 2006, amended by Order No. 2013-0058-EXEC in 2013). Storage ponds at the WPCF receive disinfected, tertiary-treated effluent that is subsequently used as irrigation water on neighboring City-owned land managed for crop production and effluent recycling. Treated wastewater that is not recycled is discharged into Dredger Cut, a nearby Delta slough, in accordance with the adopted Waste Discharge Requirements.

Water Supply and Distribution

Potable water service to the project site and vicinity is provided by the City of Lodi's potable water system. The City has 28 groundwater wells spaced throughout the City, with a combined capacity of 170.4 acre-feet per day (City of Lodi 2016a). In 2015, these wells pumped a total of approximately 9,370 acre-feet of water and supplied approximately half of the City's water (City of Lodi 2016c). The closest groundwater well to the project site is Well No. 7, northeast of the Turner Road and Mills Avenue intersection. Approximately 26% of the City's total supply in 2015 came from surface water, with the remainder recycled water that is not used for drinking. The City has sought to expand the use of surface water for drinking.

In 2003, the City of Lodi entered into a 40-year agreement with the WID to purchase up to 6,000 acre-feet of surface water annually. In January 2008, the agreement was extended to 2047 and allows a total of 42,000 acre-feet of water to be banked for future use. The WID water supplements the City's groundwater supply to meet current water demands and to reduce the City's dependence on the groundwater aquifer, which is in overdraft condition.

The treated surface water supply could provide from 18 to 100 percent of the total delivery, depending on day-to-day water demands (City of Lodi 2015a).

Additionally, in 2014, the City entered into an agreement with the North San Joaquin Water Conservation District (NSJWCD) that took effect October 2015. Under this agreement, the City can receive up to 1,000 acre-feet of water between October 15 and March 30, if NSJWCD has supply available. The agreement was in effect for five years, with the possibility to renew for a total term not to exceed 40 years (City of Lodi 2015a). To date, this agreement has not been renewed.

The Lodi SWTF, located adjacent to Lodi Lake immediately northeast of the site, was built in 2012 to enable domestic use of Mokelumne River surface waters, reduce groundwater withdrawals, and meet current and future water demands. The surface water from WID and NSJWCD (see Chapter 11.0, Hydrology and Water Quality) is delivered to the SWTF via Lodi Lake (City of Lodi 2016c). The SWTF can treat 8-10 mgd of water, and treatment capacity can be expanded up to 20 mgd in the future (City of Lodi 2016a).

Treated water is delivered to the City's distribution system via a 36-inch diameter transmission pipeline at the intersection of North Mills Avenue and Turner Road; the pipeline is approximately 620 feet east of the project site. The City's existing water distribution system consists of a 240-mile network of six to 14-inch diameter water mains. Existing City water distribution lines are adjacent to the project site, including a 12-inch diameter water line along the Turner Road frontage and a 10-inch diameter line along the Lower Sacramento Road frontage. The water system also has three water storage tanks with a total storage capacity of 4.1 million gallons. One tank is located at the SWTF east of the project site. The project site itself has no wells, storage tanks, or pump stations; remnants of an irrigation system for existing trees consisting of small-diameter PVC pipe are found throughout the site.

According to the City's 2015 Urban Water Management Plan, water demand for multifamily uses averaged approximately 1,504 acre-feet in 2015 and commercial uses averaged 6,274 acre-feet. By 2040, it is estimated that multifamily uses would increase to approximately 2,124 acre-feet and commercial uses would increase to 8,048 acre-feet. Total average annual potable and raw water demand in Lodi is expected to increase from approximately 15,086 acre-feet in 2015 to approximately 18,941 acre-feet in 2040. The City's water supply is anticipated to increase from 18,656 acre-feet in 2015 to 28,686 acre-feet in 2040, which includes recycled water. Supply would exceed potable and raw water demand in a normal year from 9,745 to 11,948 acre-feet, and in dry years from 5,745 to 7,948 acre-feet (City of Lodi 2016c).

Storm Drainage Collection

The City maintains a gravity-based storm water system built around several storm water detention basins and disposal of runoff by pumping to the WID Canal system, Lodi Lake, or the Mokelumne River. The detention basins, many of which are maintained as parks and recreational facilities during non-runoff periods, are scattered throughout the City. As of 2010, the City has a total of 3,394 catch basins and 2,193 manholes in its storm water system. The City maintains 124 miles of storm water collection and conveyance piping

ranging in size from 4 to 72 inches in diameter. The City's storm water drainage system includes 18 storm outlets to the Mokelumne River, Lodi Lake, or the WID Canal. Lodi's storm water system is serviced by 49 storm pumps operating at 14 pumping stations. All pumping stations are electrically powered. Backup auxiliary power is supplied by on-site diesel emergency generators at Lodi Lake, Shady Acres, Beckman Park, and DeBenedetti Park (City of Lodi 2012a).

Storm water in the project vicinity is conveyed to Lodi Lake via a 30-inch diameter gravity storm drain located along Lower Sacramento Road and a 42-inch diameter storm gravity pipeline along Turner Road. Several catch basins are located along both roads. Storm water is conveyed to the Turner Road pump station located at the SWTF just east of the project site; two outfalls at this pump station discharge stormwater to Lodi Lake.

As described in Chapter 11.0, Hydrology and Water Quality, the City's SWMP was developed to fulfill its NPDES Phase II MS4 General Permit requirements. The Phase II MS4 permit requires the City to operate under a permit for stormwater discharges to the Mokelumne River and the Sacramento-San Joaquin Delta. In 2015, the City adopted the Multi-Agency Post-Construction Stormwater Standards Manual, which provides guidance on managing stormwater for new development projects and describes a range of storm water BMPs that need to be included in those projects (Larry Walker Associates 2015). The specified BMPs are intended to improve the quality of the storm water runoff and protect the quality of the receiving waters that surround Lodi; the BMPs also reduce the peak flow volume of storm water runoff.

Solid Waste Collection and Disposal

The City of Lodi contracts with Waste Management to provide residential and commercial garbage collection, transportation, and disposal, as well as the collection of recyclable materials. Garbage is collected weekly, while recyclable materials and yard and garden waste are collected on alternating weeks. The City uses a three-cart system to reduce the amount of trash sent to landfills.

Residential and commercial solid waste is hauled to the North County Recycling Center and Sanitary Landfill, owned and operated by San Joaquin County and located at 17720 East Harney Lane. The North County Landfill is a Class III landfill; that is, one that only accepts non-hazardous solid waste. It has a permitted capacity of approximately 41,200,000 cubic yards and a maximum permitted throughput of 825 tons per day. As of the beginning of 2010, the North County Landfill had remaining capacity of 35,400,000 cubic yards, which at the maximum permitted throughput would allow the landfill to accept solid waste to the year 2048 (CalRecycle 2020).

Industrial solid waste originates from manufacturing facilities and factories including construction and demolition projects. Industrial waste also means solid waste produced by any person, firm or corporation primarily engaged in the business of processing and manufacturing for the purpose of wholesale. Businesses interested in collecting and transporting industrial waste within the City limits must first obtain a permit from the Public Works Department. Permitted industrial waste haulers are only allowed to service those businesses classified by the City as an industrial customer.

Communications Systems

An existing cellular communications tower, owned and operated by AT&T, is located in the northeast corner of the project site. Underground and overhead communication lines from both AT&T and Comcast are located along Lower Sacramento Road and Turner Road.

Energy

CEQA requires that an EIR includes a discussion of the potential energy impacts of a proposed project, with emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (Public Resources Code Section 21100(b)(3)). Appendix F of the CEQA Guidelines provides guidance for a discussion of energy impacts. Subjects may include identifying wasteful, inefficient, and unnecessary consumption of energy during project construction, operation, maintenance, and/or removal that cannot be feasibly mitigated, and the pre-emption of future energy development or future energy conservation.

Energy Usage

According to the latest information from the U.S. Energy Information Administration (EIA), California consumed 7,967 trillion British thermal units (BTUs) of energy in 2016. Only Texas consumed more energy. However, consumption per capita in California was 202 million BTUs, which was 48th among all states and the District of Columbia. Transportation accounted for approximately 39.8% of the energy consumed in California, followed by industrial with 23.2%, commercial with 18.9%, and residential with 18.1%. Natural gas accounted for approximately 2,200 trillion BTUs of the energy consumed in California, while motor gasoline (excluding ethanol) accounted for approximately 1,700 trillion BTUs (EIA 2020).

Electricity is a major energy source for residences and businesses in California. In 2019, electricity consumption in California totaled approximately 279,402 gigawatt-hours. In San Joaquin County, electricity consumption totaled approximately 5,583 million kilowatt-hours, of which approximately 3,690 million kilowatt-hours were consumed by non-residential uses and the remainder by residential uses (CEC 2020a). As indicated above, natural gas is another major energy source. In 2019, natural gas consumption in California totaled approximately 13.2 billion therms. Natural gas consumption in San Joaquin County totaled approximately 259 million therms, of which approximately 170 million therms were consumed by non-residential uses and the remainder by residential uses (CEC 2020b).

Motor vehicles account for substantial energy usage. The SJCOG estimated countywide VMT daily was 17,868,785 miles in 2015, which led to the consumption of approximately 511 million gallons of gasoline and diesel fuel (SJCOG 2018). Travel mileage in San Joaquin County is influenced by the County's relative jobs/housing imbalance and the resulting commute patterns, which involve relatively long trips. Approximately 30% of the employed workforce living within San Joaquin County commute to out-of-county job sites (SJCOG 2018).

Energy consumption has impacts beyond just usage of resources. The Lodi community emitted 486,628 metric tons CO_2e of GHGs in 2008, with energy consumption accounting for 55.1% of total emissions (City of Lodi 2014).

Energy Systems and Facilities

As of 2018, California ranked seventh in the U.S. in petroleum production, 14th in natural gas production, and fourth in production of electricity. California ranked first in the U.S. as a producer of electricity from solar, geothermal, and biomass resources, and fourth in conventional hydroelectric power generation. Almost one-third of California's electricity supply came from generating facilities outside the state (EIA 2020).

Electrical service in the City of Lodi is provided by the LEU. Electricity is obtained cooperatively with the other municipal members of the NCPA and distributed via LEU's lines. Approximately 31% of LEU's electricity is supplied by large hydroelectric facilities, while another 31% is from renewable sources, mainly geothermal. Approximately 17% comes from natural gas plants, and the remaining 21% comes from unspecified power sources (LEU 2019). Existing LEU lines are located along both the Turner Road and Lower Sacramento Road frontages of the project site. As noted, both a LEU substation and a NCPA power station are adjacent to and east of the project site.

A new electrical generating facility designed to help meet peak demands is scheduled for installation on the City of Lodi Potable Water Treatment Plant site east of the proposed residential area and immediately east of the inactive railroad spur. Development of this facility will require the extension of a natural gas line from an existing PG&E gas line in Lower Sacramento Road across the proposed residential project site and the railroad right-of-way to reach the generator site. This pipeline alignment will not conflict with proposed residential building siting.

Natural gas service in the City is provided by PG&E. PG&E provides natural gas to a 70,000-square mile service area in northern and central California, utilizing approximately 6,700 miles of gas transmission pipelines and 42,000 miles of gas distribution pipelines (PG&E website). An existing four-inch diameter natural gas pipeline is located beneath Lower Sacramento Road. This line connects to a six-inch diameter gas line beneath Turner Road.

REGULATORY FRAMEWORK

City of Lodi Impact Fee Mitigation Program

As noted in Chapter 14.0, Public Services, the City has adopted an Impact Mitigation Fee Program to fund new infrastructure and capital facilities to meet demands from new development. The infrastructure impact fee categories incorporated in this program include Water, Storm Drainage, and Streets. The high-density residential mitigation fee would apply to the proposed apartments, and the retail fee would apply to the retail space.

Solid Waste Regulations

The California Integrated Waste Management Act (AB 939), State legislation enacted in 1989 and subsequently amended, requires local jurisdictions to divert at least 50% of their solid waste from landfills by 2000. The 50% recycling of solid waste places the City in compliance with AB 939. More recent legislation, AB 341, increased the recycling requirement to 75% of solid waste by 2020. Beginning April 1, 2016, the State's Mandatory Organic Waste Recycling law (AB 1826) phases in requirements for businesses, including multifamily properties of five or more units, based on the amount and type of waste the business produces weekly, with full implementation in 2019.

- January 1, 2017: Businesses that generate 4 cubic yards of organic waste per week arrange organic waste recycling services.
- January 1, 2019: Businesses that generate 4 cubic yards or more of commercial solid waste per week arrange organic waste recycling services.

California Energy Efficiency Regulations

California Energy Code

California has implemented numerous energy efficiency and conservation programs that have resulted in substantial energy savings. The State has adopted comprehensive energy efficiency standards as part of its Building Standards Code, California Codes of Regulations, Title 24. Part 6 of Title 24, also known as the California Energy Code, contains energy conservation standards applicable to all residential and non-residential buildings throughout California, including schools and community colleges. These standards are occasionally updated.

Among the provisions of the adopted California Energy Code are standards for non-residential development that require "cool roofs." A "cool roof" is a roof that has been designed to reflect more sunlight and absorb less heat than a standard roof. Cool roofs can be made of a highly reflective type of paint, a sheet covering, or highly reflective tiles or shingles. Cool roof requirements apply to roofs on conditioned (heated or cooled) non-residential buildings that have low-sloped roofs. The proposed hotel development would likely be subject to cool roof requirements.

California Green Building Standards Code (CALGreen)

In 2009, the California Building Standards Commission adopted a voluntary Green Building Standards Code, also known as CALGreen. In January 2010, the Commission made CALGreen mandatory, effective January 1, 2011, and it has since been incorporated in the State's Building Standards Code, California Codes of Regulations, Title 24. Part 11. CALGreen sets forth mandatory measures, applicable to new residential and nonresidential structures as well as additions and alterations, on water efficiency and conservation, building material conservation, interior environmental quality, and energy efficiency. Mandatory energy efficiency measures for nonresidential structures include compliance with the latest building energy efficiency measures adopted by the State. The City of Lodi

has adopted the 2019 California Green Building Standards Code (Lodi Municipal Code Chapter 15.18).

Energy efficiency improvements and an increased use of renewable energy are important components in meeting GHG emission reduction goals in the City's CAP, adopted in 2014 (City of Lodi 2014). Chapter 9.0, Greenhouse Gas Emissions, discusses the Lodi CAP in detail.

Renewables Portfolio Standard

In 2002, California adopted a Renewables Portfolio Standard, and subsequently modified it in 2006 and 2011. Under the 2011 modifications, all electricity retailers in the state must generate 20% of electricity they sell from renewable energy sources (i.e., solar, wind, geothermal, hydroelectric from small generators, etc.) by the end of 2013, 25% by the end of 2016, and 33% by the end of 2020. In 2018, California derived an estimated 34% of its electricity from renewable sources, which exceeded the 2020 target (CEC 2020c). As noted, LEU obtained approximately 31% of its electricity from renewable sources in 2017.

In 2015, SB 350 was signed into law, which increased the electricity generation requirement from renewable sources to 50% by 2030. More recently, in 2018, SB 100 accelerated the schedule for 50% electricity generation from renewable sources to 2026 and set a goal of 60% electrical generation from renewable sources by 2030. It also set the goal that, by the end of 2045, eligible renewable energy resources and zero-carbon resources will supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all State agencies. The goals of SB 100 are consistent with the carbon neutrality goal of Executive Order B-55-18 (see Chapter 9.0, Greenhouse Gas Emissions).

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project may have a significant impact related to utilities and energy if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects,
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years,
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments,

- 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,
- Not comply with federal, state, and local statutes and regulations related to solid waste,
- Result in potentially significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Impact UTIL-1: Wastewater Services and Facilities

Wastewater flows would be collected in new on-site lines that would convey wastewater from the project to the existing pump station on Turner Road. This line may have gravity flow, or wastewater may need to be pumped through force mains and a private lift station to the same location (Chang pers. comm.). The nature of this connection will be determined based on more detailed engineering and demand by the applicant and the City Engineer prior to the issuance of building permits. This improvement would occur entirely within the existing paved section of Turner Road and would involve no new ground disturbance; its potential environmental effects would be less than significant.

The proposed project would involve the generation of new wastewater flows from proposed residential units as well as from the proposed hotel, restaurant and other commercial units planned for the site, which would require collection and treatment. Wastewater from the site would be collected in the City wastewater system and directed to the WPCF for treatment in accordance with the City's existing Waste Discharge Requirements issued by the Central Valley RWQCB. The estimated average wastewater flows generated by the project would be 0.17 cubic feet per second (Chang, pers. comm.), or approximately 109,874 gallons per day. Based on the existing WPCF capacity and average dry weather flow, the WPCF can accommodate the additional wastewater generated by the project without the need for new or expanded facilities or additional discharge approval by the RWQCB.

The City of Lodi regulates wastewater discharge amounts through charges for Sewer System Unit fees. Sufficient Sewer System Units must be obtained by the developer to cover the wastewater demands associated with the project. The existing wastewater lines adjacent to the site may have sufficient capacity to accommodate estimated peak flows. However, as noted above, a lift station may be required on the project site. A detailed utility plan for the project detailing project wastewater demand and indicating the location, size and capacity of wastewater collection facilities needed to accommodate project demands will need to be submitted to the City Engineer for approval prior to the issuance of building permits. Therefore, the potential environmental effects of the provision of adequate wastewater facilities would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-2: Water Services and Facilities

The City's Urban Water Management Plan calculated that the number of gallons per capita per day of water demand was 200 in 2015 (City of Lodi 2016c). Based on this factor and the number of persons per household in Lodi in 2019 (see Chapter 12.0, Land Use), the proposed residential development would generate an estimated water demand of 31,212,610 gallons per year, or approximately 95.8 acre-feet per year. Information from the U.S. Energy Information indicates that water consumption by lodging facilities was approximately 41.7 gallons per square foot (EIA 2017). Based on this factor, the estimated water demand generated by the proposed hotel development would be approximately 2,251,800 gallons per year, or approximately 6.9 acre-feet per year. Total water demand from the project would be approximately 102.7 acre-feet per year.

Water would be supplied by the City from its existing and projected future supplies. The City would not need to obtain additional water supplies or water rights to provide water to the project. As indicated in the discussion of existing and projected water supplies above, the City would have adequate supplies to accommodate the additional project demand, even during multiple dry years. No new or expanded water supply entitlements would be required to provide water service to the proposed project.

The project would connect to the existing water lines located along Lower Sacramento and Turner Roads. The existing water supply lines have adequate capacity to serve the project and would not need to be expanded. No new or expanded water system facilities would be required to provide water service to the proposed project. Project impacts on water supplies and facilities would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-3: Stormwater Services and Facilities

As discussed in Chapter 11.0, Hydrology and Water Quality, storm drainage from the project site, after detention and treatment, would be collected and discharged to the City's existing storm drain pipelines along Turner Road and Lower Sacramento Road. The City's existing storm drainage system has adequate capacity to accommodate the increase in storm drainage from the project; new stormwater drainage structures would not be required. Therefore, impacts would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-4: Solid Waste

Project construction would require the removal of existing trees, shrubs, grasses, debris, and two prefabricated steel buildings. Waste materials from demolition operations would

be directed to existing recycling facilities. All solid waste generated during construction and operations would be removed in accordance with applicable state regulations.

Operation of the apartments, hotel, and retail space would generate solid waste at rates consistent with other similar land uses. The project is not anticipated to create a significant amount of solid waste. The North County Recycling Center and Landfill has a remaining capacity of 89 percent (41 million cubic yards) with an estimated closure date of 2048 (San Joaquin County 2014). Project impacts related to solid waste disposal would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-5: Energy and Telecommunications Facilities

As noted above, existing electrical, natural gas, and telephone lines are available near the project site. The project site would have access to these services without requiring significant expansion of these systems, since lines are available. The residential portion of the proposed project has been designed to avoid conflict with the PG&E gas line to be extended across the site to a planned new peak electrical generator.

Recently, PG&E filed for bankruptcy protection in anticipation of substantial legal liabilities the company expects as a result of recent destructive wildfires in its service area, some of which were determined to have been started by PG&E transmission lines. PG&E has emerged from bankruptcy proceedings. The bankruptcy settlement is not anticipated to disrupt delivery of natural gas to PG&E customers. It is expected that PG&E would extend its natural gas services to the project site as required, especially since existing gas lines are already in the area. Project impacts on energy and communications systems would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-6: Project Energy Consumption

The project proposes development of a hotel with restaurant and retail components and an apartment complex. Table 16-1 provides an estimate of the annual energy consumption of the proposed development on the project site, based on the 2012 Commercial Buildings Energy Consumption Survey and the 2015 Residential Energy Consumption Survey, both by the EIA. Given the project design features that would promote energy efficiency (see below), it is expected that energy consumption by project operations would be approximate to the figures in Table 16-1, and possibly less since average factors were used.

Project construction would require the use of equipment and tools that would require energy use, mainly electricity and diesel fuel. Gasoline is expected to be consumed by employee and delivery vehicles. While the project site has trees that would need to be removed as part of construction, there is little else to distinguish the site from other

construction sites in the valley. The site has relatively flat topography and is readily accessible. As such, it would not require work, and thus energy resources, that would be significantly different from similar sites in the Central Valley.

TABLE 16-1
ANNUAL PROJECT ENERGY CONSUMPTION

Commercial-Electricity			
Land Use	**Square Footage**	**Average Annual Use per Square Foot (kWh)**	**Annual Electricity Use (kWh)**
Hotel	75,900	15.6	1,184,040
Restaurant	1,600	43.5	69,600
Retail	18,500	15.2	281,200
		Total	**1,534,840**
Commercial-Natural Gas			
Land Use	**Square Footage**	**Average Annual Use per Square Foot (cf)**	**Annual Natural Gas Use (cf)**
Hotel	75,900	42.5	3,225,750
Restaurant	1,600	178.0	284,800
Retail	18,500	21.5	397,750
		Total	**3,908,300**
Residential Energy Use			
Type of Energy	**Households**	**Average Annual Consumption per Household**	**Annual Consumption**
Electricity	143	4,581 kWh	655,083 kWh
Natural Gas	143	15,900 cf	2,273,700 cf

Note: kWh – kilowatt-hour; cf – cubic feet
Sources: EIA 2016a, 2016b, 2018.

The project would be required to comply with the 2016 California Green Building Standards Code. Both residential and non-residential projects would be subject to mandatory measures to promote energy efficiency, water efficiency and conservation, and alternative modes of transportation. The project also would be required to comply with the building energy efficiency standards of California Code of Regulations Title 24, Part 6 in effect at the time of project approval. Compliance with these standards would reduce energy consumption associated with project operations, although reductions from compliance cannot be readily quantified.

In addition to meeting the applicable State and local standards, the project proposes to incorporate a range of sustainability components in construction and operation of the proposed housing, hotel, and retail uses, as listed by the project applicant. Sustainability components include design strategies, such as:

Sustainable Site Development Strategies:

- On-site renewable energy - photo-voltaic solar canopies
- Pedestrian oriented. Encouragement of guest & residences to walk or bike throughout the site and surrounding locations, such as Lodi Lake.
- Bicycles available to guest for duration of stay.
- Secure short- and long-term bicycle parking for residences.
- Changing rooms and shower facilities for staff.
- Electric vehicle recharging stations.
- Reduced parking footprint through the use of a parking structure (commercial) and subgrade parking below the residences.

Sustainable Building Design:

- Cool roof systems with increased solar reflectance.
- High performance thermal glazing.
- CalGREEN-compliant direct-vent sealed combustion gas fireplaces.
- Whole building weather protection and waterproofing systems.

Water Use Reduction Strategies:

- Water conservation program including low-flow plumbing fixtures and low water use laundry.
- Areas for rainwater capture, storage and recycle system.
- Water use reduction program for staff and guests.
- Building-level water metering.
- Grading and paving to control surface stormwater.
- Low water use landscape design and plant selection.
- Low water use irrigation systems.

Energy Efficiency and Atmospheric Quality:

- Use of natural light.
- Daylight sensor lighting systems in offices.
- High energy efficient mechanical and electrical systems.
- Light pollution reduction for all outdoor lighting.
- HVAC systems that do not contain CFCs and Halon.
- Fundamental building commissioning and verification.
- Optimized energy performance.
- Building level energy metering.
- Fundamental refrigerant management.

Renewable Energy:

- Rooftop solar panel array.
- Materials and Resource Management.
- Recycled construction waste.
- Construction and demolition waste management planning.

Implementation of even just some of these sustainability components would further reduce energy consumption by project operations. Overall, project construction and operations would not consume energy resources in a manner considered wasteful, inefficient, or unnecessary. Project impacts related to energy consumption are considered less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

Impact UTIL-7: Consistency with Energy Efficiency Plans

In addition to reducing energy consumption, all proposed sustainability components would meet the energy efficiency goals of CalGREEN and Title 24, as well as the energy efficiency objectives of the City's CAP. The proposed use of renewable energy would contribute to meeting the goals of the State's Renewables Portfolio Standard. Project impacts related to consistency with energy efficiency plans would be less than significant.

Level of Significance: Less than significant

Mitigation Measures: None required

17.0 CUMULATIVE IMPACTS

17.1 INTRODUCTION

A cumulative impact, as defined by CEQA Guidelines Section 15355, is an environmental effect that may result from the combination of two or more environmental effects associated with a proposed project, or from the combination of one or more project environmental effects with related environmental effects caused by other closely related projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over time. Cumulative impacts may also result when a project's environmental effects compound or increase other environmental impacts.

CEQA Guidelines Section 15130 states an EIR must discuss the cumulative environmental impacts of a project "when the project's incremental effect is cumulatively considerable." As defined in CEQA Guidelines Section 15065(a)(3), "cumulatively considerable" effects occur when the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, current projects, and probable future projects. If the project does not involve a cumulatively considerable contribution to a significant cumulative effect, the project's effect does not need to be considered significant, and discussion in the EIR can be limited to the basis for that conclusion.

The analysis of cumulative impacts is to be based on either 1) a list of past, present, and probable future projects producing related or cumulative impacts, or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified environmental document which described or evaluated regional or area-wide conditions contributing to the cumulative impact. For this EIR, the general plan projection approach is used; the City did not identify any other individual projects, comparable to the proposed project, that have the potential to make a substantial contribution to cumulative impacts.

The following cumulative impact analysis determines for each environmental discipline:

- The geographic context for the analysis,
- Whether there exists the potential for a significant cumulative impact in that environmental discipline,
- Whether the project would make a cumulatively considerable contribution to a significant cumulative impact, or make significant an impact that was otherwise less than significant, and
- Whether and how a significant cumulative impact or a considerable contribution can feasibly be avoided or reduced to a less than significant or less than considerable level.

A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact when that measure will be implemented. Where significant cumulative impacts are identified, the EIR must examine reasonable, feasible options for mitigating or avoiding the project's contribution to a level that is less than considerable. As provided in *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) a project's considerable contribution to a significant cumulative impact can be reduced with mitigation measures to a level that is less than considerable.

17.2 CUMULATIVE IMPACT SETTING

The potential cumulative impacts of long-range urban development in the City of Lodi through the year 2030 are accounted for in the EIR for the current Lodi General Plan (City of Lodi 2010a). The EIR analysis considered the environmental effects of buildout of all lands designated in the Lodi General Plan for urban development, including development of the project site. The proposed project would contribute to the long-range cumulative environmental impacts identified in the EIR for the current General Plan, including potential cumulative impacts of planned urban development on the resources and environmental conditions addressed at a project level in this EIR.

The project would involve development that differs from the existing General Plan designation of the site and the buildout development assumed in the EIR. The current General Plan designation of the project site is Industrial; the project proposes a General Plan Amendment to change this designation to Mixed Use. However, as discussed below, the changes proposed by the project would not result in any considerable new contribution to any significant cumulative impacts identified in the Lodi General Plan EIR.

17.3 CUMULATIVE IMPACTS OF PROJECT

17.3.1 Aesthetics and Visual Resources

Cumulative impacts on aesthetics are assumed to be localized; that is, aesthetic changes at a site will not generally impact aesthetics at another site if the sites are not visually connected in some fashion. A visual connection could be established by juxtaposition or by location along a travel corridor, among other possibilities. For the purposes of this EIR, the geographic context for cumulative analysis is defined as the "project vicinity," defined more precisely as the approximately 3.1 square miles located within a one-mile radius of the project site.

The potential aesthetic effects of urban development were addressed in the Lodi General Plan EIR. Planned urban development in the Lodi area would result in changes in viewsheds, as lands surrounding the existing urban area are converted from rural agricultural to urban land use. The proposed project would not result in such conversion, as the project site is within an existing urbanized area. The Lodi General Plan contains several policies that would specifically improve the visual character throughout the City and would minimize negative impacts on visual character. The Lodi General Plan EIR

concluded that any adverse impacts on visual character would be less than significant and that a beneficial impact would occur in some areas.

As discussed in Chapter 4.0, Aesthetics, the project would substitute views of new professionally designed hotel and multifamily residential development for existing views of vacant land with surrounding residential and industrial development. Some tree canopy would be removed, but the site otherwise has limited scenic resources. Based on general review of the proposed site plans and elevations, the project appears to be designed to complement the character of the adjacent residential area and urban landscape, and it includes architectural and landscaping features that make the project aesthetically pleasing. The project would not make a considerable contribution to any known significant cumulative impacts related to aesthetics and visual resources, and it may have a beneficial cumulative impact.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

17.3.2 Air Quality

Cumulative impacts on air resources may be assessed at both a regional and local level. The project would involve contributions to potential air quality impacts at the regional level, defined as the San Joaquin Valley Air Basin, and at the local level, defined as the project vicinity.

Air quality impacts of development in Lodi were analyzed in the General Plan EIR. The EIR noted that, over the long term, the full implementation of the General Plan would result in an increase in criteria pollutant emissions primarily due to related motor vehicle trips. Stationary sources and area sources would result in lesser quantities of criteria pollutant emissions. Stationary sources and diesel-fueled mobile sources would also generate emissions of TACs, including diesel particulate matter that could pose a health risk.

Overall, implementation of the General Plan would result in a cumulatively significant net increase of criteria pollutants which would exceed the annual SJVAPCD thresholds for PM_{10}, as well as the threshold used for this analysis for $PM_{2.5}$. However, the General Plan also commits the City to support federal and State efforts to reduce emissions through its air quality and transportation trip reduction policies. These policies intend that the General Plan would not interfere with the SJVAPCD's efforts to achieve and maintain air quality standards through regional incentives and regulatory programs it has established or is planning to put in place.

As described in Chapter 5.0, Air Quality, air pollutant emissions would be generated by the project, but they would not exceed SJVAPCD significance thresholds for projects. The SJVAPCD significance thresholds were developed, in part, to ensure that project emissions did not interfere with the implementation of air quality management plans prepared by SJVAPCD for the Air Basin to meet federal and State air quality standards. These include plans for ozone and particulate matter – criteria pollutants for which the Air Basin is currently in nonattainment status. Since the CalEEMod results indicate that project operations would not exceed these significance thresholds, the project would not interfere

with the attainment objectives of these air quality plans. Because of this, while the project would contribute emissions, it would not make a considerable contribution to a cumulatively significant impact related to air quality.

Contribution to Significant Cumulative Impacts: Less than considerable.

Mitigation Measures: None required

17.3.3 Biological Resources

Cumulative impacts on biological resources can be addressed in several potential contexts, including habitat areas for individual sensitive species, watersheds, or bioregions. The proposed project site is in an area that has been subjected to intensive agricultural and then urban use and is not biologically diverse or sensitive. For the purposes of this EIR, the geographic context for cumulative biological resource analysis is defined as the project vicinity.

According to the Lodi General Plan EIR, development proposed under the General Plan would, for the most part, be situated on infill sites or land contiguous to existing development. Potential impacts on biological resources would be reduced to a level that would be less than significant through implementation of General Plan policies and regional, State, and federal regulations. Development in accordance with the General Plan would not conflict with the provisions of the adopted SJMSCP.

As described in Chapter 6.0, Biological Resources, the project would have no significant impact on special-status species. There is a low probability of Swainson's hawk and burrowing owl occurring on the project site, as well as potential impacts on protected migratory bird species. However, required participation in the SJMSCP (see Chapter 6.0 Biological Resources) and proposed mitigation measures would reduce impacts on these species to a less than significant level. There are no other sensitive habitats, such as riparian forest and wetlands, on the project site. The project would not make a considerable contribution to a cumulatively significant biological resource impact.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

17.3.4 Cultural Resources and Tribal Cultural Resources

The geography of cultural resource impacts can be defined by region, by political subdivision, or by the geography of the cultural resources present in an area when adequate inventory data are available to define it. Cultural resource information is ordinarily available only for small percentages of a given area – those areas that have been intensively surveyed. For the purposes of this EIR, the geographic context for cumulative analysis of cultural resources is defined as the City of Lodi.

The General Plan EIR also stated that new development occurring outside of existing urban areas may adversely affect archaeological or paleontological resources during ground preparation or other construction activities. A records search by the NAHC did not indicate

the presence of specific Native American cultural resources in the Planning Area. However, the absence of specific site information does not indicate the lack of resources. Specific projects are required by proposed General Plan policies to conduct supplemental environmental analysis in line with CEQA requirements prior to construction. A significant cumulative impact was not identified in this issue area.

As described in Chapter 7.0, Cultural Resources, no historical or archaeological resources are known to exist on the project site. However, two tribes contacted about the project indicated that the site is in an area sensitive for tribal cultural resources due to its proximity to the Mokelumne River. Mitigation measures included in this EIR would set forth procedures regarding potential encounters with cultural resources, including monitoring of construction activities by tribal representatives. Implementation of these mitigation measures would avoid significant impacts on previously discovered historical and archaeological resources, including tribal by cultural resources. The project would not make a considerable contribution to any cumulative significant cultural resource impacts.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

17.3.5 Geology, Soils, and Mineral Resources

Cumulative impacts associated with geology and soils are assumed to be localized. For the purposes of this EIR, the geographic context for cumulative geology and soils analysis is defined as the City of Lodi.

The Lodi General Plan EIR stated that implementation of the General Plan could result in the exposure of people or structures to potentially adverse impacts associated with earthquake-related ground shaking, soil erosion, liquefaction, and shrink-swell hazards. However, compliance with the California Building Code and other state and local regulations, as well as General Plan policies, would ensure that impacts are reduced to levels that are less than significant. The same conditions would apply to the project. The project would not make a considerable contribution to any cumulative geology or soils impacts.

As discussed in Chapter 8.0, Geology, there are no mineral resources on the project site. Therefore, the project would not contribute to any cumulative loss of access to mineral resources in the County.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

17.3.6 Greenhouse Gas Emissions

GHG emissions are related to global climate change. Global climate change is a distinct CEQA issue in that, while a project may generate GHG emissions, the impacts of such emissions are global. As such, the impacts of a project's GHG emissions are considered cumulative in nature. Therefore, there is no cumulative impact discussion related to GHG

emissions in this chapter; the analysis of this topic is shown in Chapter 9.0, Greenhouse Gas Emissions, addresses such impacts.

17.3.7 Hazards and Hazardous Materials

Cumulative impacts associated with hazards and hazardous materials are assumed to be localized. Any project exposure to hazards would occur on or in the immediate vicinity of the site, and any potential on- or off-site impact of hazardous materials use associated with the project would also be limited to the immediate vicinity. For the purposes of this EIR, the geographic context for cumulative analysis of hazards and hazardous materials is defined as the project vicinity.

The Lodi General Plan EIR stated that implementation of the General Plan could result in potential exposure of people or the environment to hazardous materials or hazardous waste associated with future development and growth of the City's population. However, because hazardous materials use and disposal is heavily regulated and the General Plan contains additional policies regarding hazardous materials, potential impacts are less than significant.

There are no recorded contamination sites on the project site or vicinity. Development of the project site would be subject to existing permitting requirements related to hazardous materials handling and emissions control, which would reduce the potential for hazardous material releases, and consequently any off-site health effects, to a level that would be less than significant. The project would not involve a considerable contribution to any cumulative hazard or hazardous material impacts.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

17.3.8 Hydrology and Water Quality

Cumulative hydrologic impacts are logically analyzed on a watershed basis, or in the case of groundwater at an aquifer level. For the project, the geographic context for cumulative surface water analysis is defined as the Mokelumne River watershed.

As described in Chapter 11.0, Hydrology and Water Quality, there are no surface waters on or immediately adjacent to the project site. The project would add impervious surfaces that could generate additional runoff, some of which could contain contaminants from parking areas. However, the project will be required to comply with the SWRCB Construction General Permit requirements, including preparation of a SWPPP. In addition, under the City's SWMP, designed to ensure compliance with the City's MS4 General Permit, the project would be required to submit a Project Stormwater Plan for City review and approval. Potential pollution from the additional runoff would be minimized; therefore, the project would not involve a considerable contribution to any significant cumulative surface water quality effects.

The project site is located within the Eastern San Joaquin Valley Subbasin, which is the geographic context for cumulative groundwater analysis. The proposed project would not

directly use groundwater but would connect to the City's water system. As noted in Chapter 11.0, while the City depends on mostly groundwater, the project would not require additional groundwater supplies nor draw substantially upon available supplies. In addition, the City would be required to comply with the Groundwater Sustainability Plan adopted for the Eastern San Joaquin Valley Subbasin. The Groundwater Sustainability Plan is designed to manage groundwater use such that undesirable results, such as overdraft, are avoided. As a result, the project would not involve a considerable contribution to any significant cumulative groundwater or water quality effects.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

17.3.9 Land Use, Population, and Housing

Cumulative land use impacts are related to the scale of the project and the presence or absence of a defined community or land use entity; the geographic context for cumulative land use analysis can range from a project site and adjacent parcels to an entire community or region, depending on project size. The project site is currently under City jurisdiction; therefore, for the purposes of this EIR, the geographic context for cumulative land use analysis is defined as the City of Lodi.

The project site is within an urbanized area and has been designated for urban uses. The project proposes to change the allowable land uses from industrial to hotel and residential uses. The additional residential units could generate population growth currently not accounted for in the City's General Plan Land Use Map. However, the project would provide housing for Lodi's anticipated growing population, plus a General Plan amendment is proposed. The additional residents would not increase the City's population such that future projections would be substantially inaccurate.

Overall, the project would not substantially alter land use patterns in the City such that adverse impacts would occur to the community at large. The project would not involve a considerable contribution to any significant cumulative land use, population, or housing impacts, other than a potentially positive impact on housing availability.

Agricultural Resources

Cumulative impacts on agricultural land resources may be assessed on a regional or local level; analysis at a local level yields a more conservative result. For the purposes of this EIR, the geographic context for cumulative analysis of agricultural resources is defined as San Joaquin County.

The Lodi General Plan EIR noted that the only adverse environmental impact is the potential conversion of agricultural land, which will affect some agricultural activities and prime agricultural soils. Buildout of the General Plan is not expected to result in land use incompatibilities with sites designated for continued agriculture use. General Plan policies seek to ensure contiguous urban development and to avoid fragmentation of existing agricultural areas.

As described in Chapter 12.0, Land Use, there are no agricultural operations nor land designated as Farmland on the project site, which is within a developed urban area. The project would not contribute to a loss of Farmland in San Joaquin County. As such, the project would not make any considerable contribution to cumulative impacts on agricultural resources in the County.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

17.3.10 Noise

Cumulative noise impacts are assumed to be localized. The impacts of noise are reduced with distance, and the potential for cumulative impacts will ordinarily be limited to a few hundred yards, unless there is a very significant existing or proposed noise source. The NCPA plant is a significant noise source when it is operating. There are no other "very significant" noise sources in the project vicinity. For the purposes of this EIR, the geographic context for cumulative noise analysis is defined as the project vicinity.

As discussed in Chapter 13.0, Noise, the project would not generate noise that would increase ambient levels. The proposed land uses are not considered significant noise sources, and any noise generated by the project would not contribute meaningfully to NCPA power plant noise when it is operating. As such, the project would not involve a considerable contribution to any significant cumulative noise impacts.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

17.3.11 Public Services and Recreation

Cumulative impacts related to public services are appropriately addressed at a community level, or in this case the City level, as the City of Lodi would provide most of the public services for the project site and nearby land uses. The Lodi General Plan EIR did not identify any significant impacts on public services with application of General Plan policies. In addition, as noted in Chapter 14.0, Public Services, the City has adopted an Impact Mitigation Fee Program to fund new infrastructure and capital facilities to meet demands from new development, along with in-lieu mitigation fees for future park improvements. Mitigation fees for schools are also established. The project would not involve incremental effects on public services but no significant increases that would not be mitigated by existing development fees. The project would involve a considerable contribution to any cumulative public service or recreation impacts.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

17.3.12 Transportation

Cumulative transportation impacts, primarily vehicular traffic, are addressed within the area potentially impacted by a proposed project, typically within a certain radius from the project site. This is also the case with respect to the potential traffic impacts of the project, which are addressed in detail in Chapter 15.0, Transportation.

The project's potential for cumulatively considerable contributions to traffic was considered in the project traffic study by KD Anderson and Associates (2018), which is shown in Appendix H.

As discussed in Chapter 15.0, Transportation, VMT is the preferred metric to use when evaluating the significance of the transportation impacts of a project. The project is expected to increase VMT in the project area. VMT impacts would be mitigated by project features and available transit, along with mitigation measures designed to reduce vehicle travel. Moreover, the project proposes to add housing in an area that is already developed and that is close to public service facilities and relatively close to retail areas. This would reduce the VMT that would be generated by residential traffic and encourage alternate forms of travel such as walking and bicycling. However, even with implementation of these measures, VMT impacts are still considered significant.

The project's cumulative traffic impact would be significant on VMT, even with implementation of mitigation measures. There are no feasible mitigation measures that would reduce this impact to a level considered less than significant.

Contribution to Significant Cumulative Impacts: Significant (VMT)

Mitigation Measures: None feasible (VMT)

17.3.13 Utilities and Energy

Cumulative utility impacts are appropriately considered at the level of the service area of the utilities. For water, sewer, storm drainage, and solid waste services, this would be the City of Lodi, as the City either provides these services directly or contracts these services out to franchisees. For energy and communications services, the service area is regional or statewide, but the project would involve no demands with potential effects that could not reasonably extend outside the immediate project vicinity. Therefore, for the purposes of this EIR, the geographic context for cumulative analysis of these systems is defined as the project vicinity.

As described in Chapter 16.0, Utilities and Energy, the City would have adequate water supplies for the project and sufficient capacity in its wastewater and stormwater facilities to accommodate the project. No new or expanded supplies or facilities would be required. The project would not make a considerable contribution to cumulative impacts related to utilities.

For this project, cumulative impacts related to energy are considered at the level of the LEU service area, which is the City of Lodi. LEU obtains its electricity from power plants and hydroelectric facilities it owns along with power purchases. It is expected that LEU

can generate additional electricity for the proposed project without expanding its power plants. PG&E imports most of its natural gas from other states, although it also uses in-state gas wells. PG&E can provide additional natural gas to the project without expanding its infrastructure. With energy efficiency standards in building codes, future development would not place as much demand on PG&E's energy supplies as it otherwise might. The project would not make a considerable contribution to cumulative impacts related to energy.

Contribution to Significant Cumulative Impacts: Less than considerable

Mitigation Measures: None required

18.0 ALTERNATIVES

18.1 INTRODUCTION

CEQA Guidelines Section 15126.6(a) requires an EIR to "consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation." More specifically, the EIR shall "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." The alternatives analysis must identify the potential alternatives and include adequate information about each one to allow meaningful evaluation, analysis, and comparison with the proposed project. Alternatives to be considered must feasibly attain most of the basic project objectives and avoid or substantially lessen one or more of the significant effects of the proposed project, even if an alternative would impede to some degree the attainment of the project objectives or would be more costly. The environmentally superior alternative must be identified among the alternatives considered.

There are no set rules governing the nature and scope of the alternatives to be discussed, other than the "rule of reason." While the "rule of reason" is not defined, it is understood to mean that not all conceivable alternatives need to be considered. If an alternative is not feasible or does not provide an opportunity to avoid or substantially reduce environmental effects, the alternative need not be analyzed in detail. In that case, the reasons for limiting the analysis should be identified.

The following sections describe the process used to select project alternatives for evaluation in this chapter, the alternatives that were considered but not subjected to detailed analysis, and the analysis of selected alternatives to the project. The alternatives analysis conforms to CEQA and the CEQA Guidelines and represents the best professional opinion of the EIR preparer, City of Lodi staff, and their technical reviewers. However, the final authority for the approval of the proposed project, the selection or rejection of alternatives, and the feasibility or infeasibility of alternatives is the Lodi City Council.

18.2 SELECTION OF ALTERNATIVES

Alternatives to the project were selected for evaluation in this EIR based on the criteria set forth in CEQA Guidelines Section 15126.6. These criteria include 1) ability of the alternative to meet most of the basic objectives of the project; 2) feasibility of the alternative; and 3) ability of the alternative to avoid or substantially reduce one or more of the significant environmental impacts of the project. These criteria are discussed in more detail below.

Ability of the Alternative to Meet Project Objectives

Potential alternatives to the project were evaluated and selected with respect to the objectives of the project. As identified and discussed in Section 3.2 of this EIR, the project objectives are to develop apartments and a hotel with associated retail commercial use for the overall benefit of the community and to provide an upscale living environment to attract professionals to invest and settle in the Lodi area.

Feasibility of the Alternative

Alternatives to the project were evaluated with respect to the "rule of reason" and general feasibility criteria suggested by the CEQA Guidelines, including such criteria as the suitability of the site or alternative site, the economic viability of the alternative, the availability of infrastructure, the consistency of the alternative with general plan designations, zoning or other plans or regulatory limitations, the effect of applicable jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to an alternative site, including consideration of whether or not the site is already owned by the applicant. The application of these criteria to potential alternatives to the proposed project is described in this section and in Section 18.3.

Avoidance or Substantial Reduction of Significant Impacts

The evaluation of alternatives must also consider the potential of the alternative to avoid or substantially lessen any of the significant environmental impacts of the project, as identified in Chapters 4.0 through 16.0 of this EIR. The potential impacts of the project are summarized in Chapter 2.0, Summary.

The alternatives analysis accounts for the potentially significant environmental impacts of the alternatives as compared to the proposed project. Some of the potential impacts of the project, and the alternatives, are common to virtually all development in the Lodi vicinity and would not vary from alternative to alternative. Similarly, certain environmental impacts are addressed by routine requirements that would apply uniformly to any alternative. Since the focus of the alternatives analysis is comparison to the proposed project, issues that do not vary between the alternatives are not extensively analyzed.

Aesthetics. While the project site is vacant and close to a lake and park area, it is within an urbanized area. Project alternatives involving development of the project site would have similar potential impacts to the proposed project. Since potential impacts would be similar, aesthetics are not considered in this analysis.

Agricultural Resources. The project site is in an urbanized area with no adjacent agricultural lands. The California Department of Conservation's Farmland Mapping and Monitoring Program designates the project site as Urban and Built-Up Land. Neither the project nor project alternatives would impact existing agricultural resources, so they are not considered in this analysis.

Biological Resources. Planned development has the potential to impact existing biological resources within the project site, which consist mostly of common vegetation and wildlife. Potential impacts on special-status species that could use the project site are commo from

site to site and can typically be avoided by mitigation measures typically required, mainly participation in the SJMSCP. As such, biological resources are not considered in this analysis.

Cultural Resources and Tribal Cultural Resources. Planned development has the potential to impact unknown archaeological and tribal cultural resources within the project site. This potential is relatively common from site to site. These potential impacts can be avoided by mitigation measures typically required of development projects. As such, cultural resources and tribal cultural resources are not considered in this analysis.

Geology, Soils and Mineral Resources. The project involves soils constraints and geologic hazards that are common in the Lodi area and would be addressed through routine geotechnical engineering, which would be required by the project. Soil erosion is a potential issue but would be addressed through the Construction General Permit process. Potential impacts on paleontological resources can be avoided by mitigation measures typically required of development projects. No mineral resources have been identified on the project site. As all alternatives would be in similar conditions and would have the same potential impacts, issues related to geology, soils, and mineral resources are not considered in the analysis.

Public Services and Recreation. The project would generate potential impacts for public services that are common to new land development in the City of Lodi. Application of routine requirements, including the payment of impact fees and in-lieu park fees, would reduce these potential effects to a level that would be less than significant. Public services and recreation are not considered in this analysis.

Utilities. The project would involve new demands for sewer, water, storm drainage, and other utilities. The project site is located within defined service areas for these utilities, and capacity is available to serve the project. Issues identified in the EIR are routine matters that would be addressed by City review of development design and improvements. Utility issues are not considered in detail in this analysis.

18.3 ALTERNATIVES NOT CONSIDERED IN DETAIL

The following alternatives were not addressed in detail, as they did not meet the criteria for detailed analysis defined above. That is, the following alternatives 1) would not meet most of the basic objectives of the project, 2) were clearly infeasible, or 3) did not have the ability to avoid or substantially lessen the significant environmental impacts of the project. Alternatives that might conceivably meet the analysis criteria were subject to detailed analysis, as documented in Section 18.4.

18.3.1 Alternative Sites

CEQA Guidelines Section 15126.6(f)(2) indicates that alternative locations for a proposed project should be considered if any of the significant impacts of the project would be avoided or substantially lessened at an alternative location. Only locations that have the potential to avoid or substantially reduce any of the significant impacts of the project need be considered for inclusion in the EIR. As with all potential alternatives, project location

alternatives must be reasonable, feasible, and able to meet most of the basic objectives of the project. The analysis may also consider the fact that a proposed project site is currently owned or controlled by the project developer.

The Lodi Housing Element identified several areas considered appropriate for residential development (City of Lodi 2016b). These included areas currently under County jurisdiction that could be annexed to the City. Potential development in these areas would require approval from San Joaquin County, or annexation would need to occur before the City could take any action.

The Housing Element also identified areas considered "vacant or underutilized infill." Underutilized infill areas are areas within the City limits that are currently developed but are capable of being developed at higher densities or with greater intensity. Most of these areas are located adjacent to existing residential areas or in areas designated for mixed-use development by the Lodi General Plan. The vacant or underutilized parcels identified in the Housing Element are mostly smaller than the area proposed for residential development by the project. In addition, since the underutilized parcels have existing development, there would be reduced space available for the residential development proposed by the project.

There are two vacant parcels that potentially could be used for residential development as proposed by the project. They are located adjacent to each other along the eastern side of Lower Sacramento Road south of State Route 12 (Kettleman Lane). The parcels are designated for Medium Density Residential use by the Lodi General Plan, and the zoning is also Medium Density Residential. As such, relocating the residential portion of the project on either of these parcels would require a General Plan amendment and possible rezoning. If the hotel were also to be relocated on the same parcels, that would require an additional General Plan amendment and rezoning, plus it would reduce the land area available for residential development in the City.

The Lodi General Plan has designated several areas for commercial development, where a hotel could be constructed. However, most of these designated areas have been developed, and areas that remain vacant are not owned by the project applicant. Because of this, alternative sites were considered infeasible and unlikely to meet project objectives. This alternative was not analyzed further.

18.3.2 Alternative Site Design

This alternative would involve site designs for the proposed project that would avoid or substantially lessen one or more of the potentially significant impacts identified in this EIR. Regarding the proposed development, there are no readily apparent design changes that could be implemented that would reduce the potential impacts of the proposed development under the project. The project as proposed has changed a few aspects of the original project to be consistent with a required setback from a hazardous material storage facility. This setback would need to be observed under any residential alternative design. Any site design would be limited by the NCPA plant and its operations, along with City requirements and limitations such as building heights and interior noise levels. Given these requirements and limitations, this alternative is considered infeasible and unlikely to avoid

or substantially reduce significant environmental impacts. This alternative was not analyzed further.

18.3.3 Expanded Residential Development

Under this alternative, development on the project site would be limited to the residential complex. However, the residential complex would be expanded to cover most of the project site. No hotel development would occur. As with the proposed project, this alternative would require a General Plan Amendment and a rezoning to allow for the proposed development.

This alternative would have similar impacts to the proposed project on most issues. The alternative would change the proposed land use on the project site from industrial to high-density residential. This would lead to additional residential development that could help to address housing availability issues described in the Housing Element. However, the expanded residential development would likely have increased impacts on traffic, with associated impacts on air quality, GHG emissions, and noise. It also would likely lead to an increased demand for public services and for utilities such as water supply, wastewater collection, and electricity. Therefore, this alternative would increase the severity of some environmental impacts, while not substantially reducing other impacts, as well as not advance the project objective of providing a hotel. This alternative was not analyzed further.

18.3.4 Agricultural Use

This alternative proposes that the project site be used for agriculture, as it had previously. This alternative would avoid many of the impacts associated with urban development, such as traffic, noise, air quality and GHG emissions, and aesthetics. It also would place less demand on services such as wastewater treatment, schools, and solid waste collection. The project site would potentially be a visual resource in a developed area.

However, since the project site is in a developed area, agricultural operations would likely conflict with nearby development, particularly the residential areas. Agricultural equipment noise and the use of agricultural chemicals may disturb nearby residents, and equipment use of adjacent streets would disrupt predominantly urban traffic. The use and storage of agricultural chemicals for an operation would increase the potential risk of accidental releases and soil contamination. There would likely be an increased demand for irrigation water, which would need to be supplied by an irrigation district and conveyed in some manner to the site. There is also a question as to whether agricultural operations on the project site would be economically feasible. Because of these issues, this alternative was considered infeasible and would not advance project objectives. This alternative was not analyzed further.

18.4 ALTERNATIVES CONSIDERED IN DETAIL

The alternatives to the proposed project that have been considered in detail are addressed in the following sections. The overall analysis is summarized in Table 18-1.

TABLE 18-1
COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

Issue Area	*Proposed Project*	Alt 1: No Project	Alt 2: Industrial Development	Alt 3: Reduced Development – Hotel Only	Alt 4: Reduced Development – Apartments Only
Air Quality and Greenhouse Gas Emissions	*Less than significant*	Avoided	Possibly more severe	Reduced, but already less than significant	Reduced, but already less than significant
Energy	*Less than significant*	Avoided	Potentially more significant	Reduced, but already less than significant	Reduced, but already less than significant
Hazardous Materials	*Less than significant with mitigation*	Avoided	Possibly more severe	Reduced	Reduced
Hydrology and Water Quality	*Less than significant with mitigation*	Avoided	No change	Reduced	Reduced
Land Use, Population, and Housing	*Less than significant*	No housing units would be added	Possibly more severe	Possibly more severe	Possibly more severe
Noise	*Less than significant with mitigation*	Avoided	Possibly more severe	Reduced	Reduced
Transportation / Traffic	Significant and unavoidable (VMT), *less than significant (other issues)*	Avoided	Possibly more severe; VMT impacts speculative	Reduced	Reduced short-term, possibly more severe long-term

18.4.1 No Project Alternative

CEQA Guidelines Section 15126.6(e) states that the alternatives analysis must include evaluation of a "no project" alternative. "No project" is defined as no action with respect to the proposed project and continuation of existing circumstances without approval of the project. CEQA Guidelines Section 15126.6(e)(3)(B) further explains:

If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the “no project” alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental impacts of the property remaining in its existing state against environmental impacts which would occur if the project were approved. If disapproval of the project under consideration would

result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.

For the purposes of this EIR, the No Project Alternative is defined as no development as proposed by the project and the maintenance of existing environmental conditions on the project site, as there are currently no alternative plans for site development. In other words, the No Project alternative would also be the "no build" alternative.

This alternative would avoid the environmental impacts of the proposed project. No additional infrastructure would need to be installed. No traffic, with its attendant air quality and noise impacts, would be generated. Open space area would remain available for birds and other wildlife. Existing drainage patterns, including percolation into soils, would not be altered. This alternative also would eliminate the significant and unavoidable VMT impacts associated with the proposed project.

However, this alternative would not meet the objectives of the proposed project, as no development would occur. Without the development of the apartment complex, no housing stock would be added to Lodi, which would reduce the future availability housing and potentially lead to physical impacts such as deteriorating stock from overcrowding and deteriorating public areas from use by homeless people. By leaving the area undeveloped, grasses and weeds would continue to grow on the project site, which would create a potential fire hazard and have adverse visual effects.

In summary, this alternative would avoid or reduce most of the environmental impacts of the proposed project, but it would not accomplish project objectives and may have some adverse environmental effects. It should be noted that potential environmental impacts of the proposed project would be reduced to levels that are less than significant with the implementation of mitigation measures, while still realizing the project objectives.

18.4.2 Industrial Development

Under this alternative, future development would occur on the project site, but the development would be consistent with the existing Lodi General Plan designation and zoning. As noted in Chapter 12.0, Land Use, the existing General Plan designation is Industrial, and the existing zoning is Industrial (M). The M zone is applied to areas appropriate for a mix of heavy manufacturing, warehousing, general service, storage, and distribution activities. The maximum FAR in the M zone is 0.6, so the maximum amount of floor area that could be developed on the project site would be approximately 229,997 square feet.

The M zone excludes residential uses except for temporary shelters. Other excluded land uses include medical offices and clinics, fitness/indoor sports facilities, convenience stores, small recycling facilities, and car washes. Other land uses are allowed by right or with a

use permit. Given the range of possible land uses under the M zone, this EIR does not provide analysis of the multitude of potential land uses; instead, the EIR analyzes a general light industrial use, which the City considers a representative industrial land use that could be expected in the project area. Some other potential industrial land uses, such as heavy manufacturing and warehouses, are considered unlikely to be constructed on the project site, given its proximity to residential areas. For this analysis, light industrial development would occur to the amount allowed by the maximum FAR.

Development under this alternative would have similar impacts to the proposed project. Ground disturbance impacts related to soil erosion, surface water quality, and drainage would be similar. Public services and utilities from the City would be extended to the project site, and basic curb, gutter, and sidewalk improvements would be made. Drainage issues would be the same as the proposed project. In addition, such development would be more compatible with the adjacent NCPA power station and with the nearby LEU substation and SWTF.

However, this alternative does not meet the objectives of the proposed project related to development. Depending on the type of industrial activity located on the project site, this alternative may have new or more severe impacts than the proposed project. For instance, an industrial activity could generate potentially significant air pollutant emissions, including TACs, along with GHGs. It also may use or store a greater quantity of hazardous materials, the release of which could have a more adverse impact on the vicinity than would occur under the proposed project. Uses involving exposed process machinery and extensive outdoor storage or raw materials or products may involve adverse visual impacts, as well as soil and water contamination concerns.

It is not known whether traffic volume under this alternative would be substantially different from the proposed project, and could be either greater or lesser; however, it is likely that traffic generated under this alternative would have more heavy-duty truck traffic, which could have substantial localized air quality and noise impacts. Likewise, the energy consumption that could occur under this alternative is not known, but it could also be greater than that under the proposed project, depending on the industrial activity. The potential VMT effects of this alternative are considered too speculative to describe.

In summary, this alternative would have similar environmental impacts to the proposed project on some issues, but it would potentially have new or more severe impacts on others. As noted, potential environmental impacts of the proposed project would be reduced to levels that are less than significant with the implementation of mitigation measures while still realizing the project objectives.

18.4.3 Reduced Development - Hotel Only

Under this alternative, development of the project site would be limited to the hotel only. Hotel development would occur in the same way as under the proposed project. No residential construction would occur. It is assumed that the hotel would occupy the same area as under the proposed project – at the corner of Turner Road and Lower Sacramento Road. The portion of the project site where residential development has been proposed would remain undeveloped for the time being. According to the Lodi Development Code,

a hotel may be developed in the M zone with a use permit. Therefore, it is assumed that the project would not seek a General Plan Amendment or a rezone of the site, but only a use permit along with other site approvals.

With development limited to only the hotel, impacts related to the development of the apartment complex would be eliminated for the time being. Less traffic would be generated under this alternative, with related impact reductions on air quality, VMT, and noise. Regarding VMT, it is expected that there would be a substantial reduction, although the significance of the environmental impact of the reduced VMT cannot be determined with certainty. Also, there would be less demand placed on public services such as fire and police protection. Impacts on school services would be substantially reduced, as a hotel is not expected to generate at most a very limited student population. Demands for utilities and energy would likely be reduced from those under the proposed project. The building footprint and ground disturbance would be less than under the proposed project. Depending on site design, the hotel could be set further back from the power station, the substation, and the railroad track, thereby avoiding potential impacts from proximity to these facilities.

However, this alternative would not meet the objectives of the proposed project related to residential development. The elimination of the multifamily development would mean the project would make no contribution to additional housing in Lodi. Reduced development also would mean reduced property tax revenue for the City, meaning less money would become available that could be used to enhance public services. In addition, since no change to the General Plan designation and zoning of the project site is proposed, the undeveloped land would remain available for industrial development, including by right development. This could lead to land use compatibility issues with existing nearby residential uses, even though the General Plan and zoning allow for it.

In summary, this alternative would have environmental impacts that generally would be less than the proposed project, but it would not meet proposed project objectives and have some adverse impacts related to the provision of housing and public services. As noted, potential environmental impacts of the proposed project would be reduced to levels that are less than significant with the implementation of mitigation measures while still realizing the project objectives.

18.4.3 Reduced Development - Apartments Only

Under this alternative, development of the project site would be limited to the residential complex only. No hotel construction would occur. It is assumed that the complex would occupy the same area as under the proposed project – the northern portion of the proposed project site. The portion of the project site where the hotel has been proposed would remain undeveloped for the time being. The current Industrial General Plan designation and M zone on the site do not allow residential development; therefore, a General Plan Amendment and a rezone would need to be obtained.

With development limited to only the residential complex, impacts related to the development of the multifamily residences would be eliminated. Less traffic would be generated under this alternative, with related impact reductions on air quality, VMT, and noise. Regarding VMT, it is expected that there would be a substantial reduction, although

the significance of the environmental impact of the reduced VMT cannot be determined with certainty. Also, there would be relatively less demand placed on public services such as fire and police protection, although impacts on school services would remain essentially the same as those under the proposed project. Demands for utilities and energy would likely be reduced from those under the proposed project. The building footprint and ground disturbance would be less than under the proposed project. Depending on site design, the residential complex could be set further back from the power station, the substation, and the railroad track, thereby avoiding potential impacts from proximity to these facilities.

However, this alternative would not meet the objectives of the proposed project related to hotel development. The elimination of the hotel would mean reduced property tax and no transient occupancy tax revenue for the City, meaning less money would become available that could be used to enhance public services. In addition, if no change to the General Plan designation and zoning of the undeveloped portion of the project site is proposed, the undeveloped land could potentially be available for development that is consistent with the current Industrial designation. This could lead to land use compatibility issues similar to those of the proposed project with the adjacent power station and substation. On the other hand, if the General Plan designation and zoning for the entire project site is changed to allow the residential development, then additional residences could be constructed, which could lead to greater or lesser environmental impacts than the proposed project.

In summary, this alternative would have environmental impacts that generally would be less than the proposed project, but it would not meet proposed project objectives and potentially have more severe adverse impacts on some issues. As noted, potential environmental impacts of the proposed project would be reduced to levels that are less than significant with the implementation of mitigation measures while still realizing the project objectives.

18.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As the No Project Alternative would eliminate or avoid all potential environmental impacts associated with the proposed project, it would be considered the environmentally superior alternative. However, this alternative would meet none of the project objectives, plus it would have some adverse environmental impacts.

CEQA Guidelines Section 15126.6(e)(2) requires that, if a No Project Alternative is identified as the environmentally superior alternative, then an EIR shall identify an environmentally superior alternative from the other alternatives. The Reduced Development Alternative would reduce impacts from those of the proposed project in some issue areas, while having the same environmental impacts on other issues; this alternative would partially meet the objectives of the proposed project. Therefore, the Reduced Development Alternative would be considered the environmentally superior alternative to the No Project Alternative.

19.0 OTHER CEQA ISSUES

19.1 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

CEQA Guidelines Section 15126.2(b) states that an EIR shall discuss significant environmental effects that cannot be avoided if a proposed project is implemented. This includes significant impacts that can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be mitigated without imposing an alternative design, the implications of these impacts, and the reasons why the project is being proposed notwithstanding their effects, should be described.

Table 2-2 of this EIR identifies all the potentially significant environmental effects of the project and the mitigation measures to address these effects. The proposed mitigation measures would be effective in reducing potential environmental effects to levels that would be less than significant with the exception of the project's VMT impacts. Even with the application of feasible mitigation measures, the project's VMT impact would be significant and unavoidable.

19.2 IRREVERSIBLE ENVIRONMENTAL COMMITMENTS

CEQA Guidelines Section 15126.2(c) states that an EIR shall discuss significant irreversible environmental changes which would be involved in a proposed project should it be implemented. CEQA Guidelines Section 15126.2(c) states, in part:

"Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

The project would involve the irreversible commitment of construction materials to the construction of buildings, parking spaces, and other project infrastructure. Construction materials would include sand and gravel, concrete, asphalt, plastics, and metals, as well as renewable resources such as wood. All these materials would not be used in highly significant or unusual quantities when compared to similar projects and would be obtained from existing commercial sources. Some of these materials, such as concrete and asphalt, could be recycled if some or all the project facilities were demolished in the future.

Another resource impact of the project that is irreversible is the use of energy during project construction and operations. Energy use is discussed in Chapter 16.0, Utilities and Energy, in which it was determined that the project would not consume energy in a wasteful, inefficient, or unnecessary manner.

The project would involve significant irreversible environmental changes, mainly the conversion of open space formerly used for agricultural production to urban commercial uses. This would involve an irreversible commitment of the project site to developed uses; investments in building development and utilities would likely prohibit any future return to former open space uses. However, as discussed in Chapter 12.0, Land Use, and Chapter 17.0, Cumulative Impacts, the impacts of conversion of this land to urban uses is considered less than significant, as the land is designated for industrial development in the Lodi General Plan, is designated Urban and Built-Up Land by the Farmland Mapping and Monitoring Program and is located in an urban area where the surrounding lands are mostly developed with urban uses.

Commitment of the project site to urban uses would involve an essentially irreversible loss of open space and the potential biological resource values associated with it. As discussed in Chapter 6.0, Biological Resources, the value of the project site for biological resources is limited. No special biological resources, such as sensitive natural communities, are on the project site, and potential impacts on foraging and nesting habitat for special-status and migratory species would be minimized by required participation in the SJMSCP. Project site development would involve an essentially irreversible reduction in groundwater recharge area and increases in runoff during rainfall events. Groundwater recharge losses are not, however, considered significant, and potential increases in runoff would be mitigated to a level that would be less than significant.

19.3 GROWTH-INDUCING IMPACTS

CEQA Guidelines Section 15126.2(d) requires an EIR to discuss the potential growth-inducing impacts of a project or program. "Growth-inducing impacts" are ways in which a proposed project could foster economic or population growth or the construction of additional housing in the surrounding environment, either directly or indirectly. CEQA Guidelines Section 15126.2(d) further notes that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Growth can be induced in a variety of ways. New development can create demands for other types of development. For example, new industrial development which provides jobs may attract new residents to an area, creating a demand for more housing. The same project in an area with an available supply of labor may have no growth-inducing effect at all. In a more general sense, new urban development in rural areas may induce growth by providing both a nucleus for a change in land use and economic incentives for conversion of nearby agricultural lands.

Growth may also be induced through the removal of development obstacles. One potential obstacle is the lack of utilities or infrastructure to support development. The provision of new utilities or other infrastructure that can serve development, particularly in an area that is undeveloped, may induce growth. For example, construction of new or larger domestic water systems in unserved areas may facilitate development of other lands in these areas. Expansion of other utility systems, like electrical systems, can have similar effects. But in some cases, the extension of new infrastructure may not have a distinguishable growth-

inducing effect, outside of its indirect contribution as an element of the proposed development.

The project is located on vacant land in an area that has been substantially developed for urban uses. The only non-urban area of significance in the vicinity is Lodi Lake Park, which has been developed for recreational use. As a result of the existing development, infrastructure already exists near the project site, so the project would not add infrastructure that could induce urban growth in an area that is undeveloped.

The project proposes the construction of multifamily housing; as such, it would directly affect population growth. However, as discussed in Chapter 12.0, Land Use, project impacts on population and housing would be less than significant.

In summary, the project is in a developed area that already has the necessary supporting infrastructure. The project would not have a growth-inducing impact.

19.4 ENVIRONMENTAL JUSTICE

Recently, environmental justice has been an issue which has led State agencies to comment on CEQA documents for specific development projects. Environmental justice is not an issue that CEQA explicitly requires to be addressed; however, the State of California has recently emphasized the incorporation of environmental justice in land use and environmental planning.

State law defines "environmental justice" as "the fair treatment of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." Low-income residents, communities of color, tribal nations, and immigrant communities have historically experienced disproportionate environmental burdens and related health problems. This inequity has resulted from many factors, including inappropriate zoning and incomplete land use planning, which has led to development patterns that concentrate pollution emissions and environmental hazards in communities that have not had the political power to protect themselves. The environmental impacts of projects on nearby "disadvantaged communities" (see below) that currently experience greater pollution burdens than other communities have been the subject of comments submitted by State agencies.

SB 535 – Disadvantaged Communities

In 2012, the Legislature passed SB 535, directing that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. To assist in identifying a disadvantaged community for the purposes of SB 535, the California Office of Environmental Health Hazard Assessment has developed the California Communities Environmental Health Screening Tool (CalEnviroScreen). CalEnviroScreen measures pollution and population characteristics using 20 indicators such as air quality, drinking water quality, waste sites, toxic emissions, asthma rates, and poverty. It applies a formula based on these indicators to each U.S. Census tract in California to generate a score that rates the level of cumulative impacts on each area. A census tract with a higher score is one that experiences higher pollution burdens and

vulnerability than one with a lower score. A census tract that scores in the top 25% under the CalEnviroScreen formula is considered a disadvantaged community.

The project site is located within Census Tract 6077004105. Census Tract 6077004105 has an overall score that places it in the 31-40 percentile, which does not meet the SB 535 definition of a disadvantaged community. This census tract, with a population that is 65% White, has relatively low scores on most environmental issues, although it has higher scores in drinking water and pesticides, most likely reflecting issues in the rural areas that are included in the tract (OEHHA 2020).

SB 1000 – Environmental Justice and General Plans

SB 1000, signed into law in 2016, requires cities and counties to adopt an Environmental Justice element or to integrate environmental justice goals, objectives, and policies into other elements of their General Plans. The Environmental Justice Element or integrated EJ policies must reduce the unique or compounded health risks in disadvantaged communities by addressing at minimum the following topics: Pollution Exposure and Air Quality, Public Facilities, Food Access, Safe and Sanitary Homes, Physical Activity, Civil or Community Engagement, and Improvements and Programs That Address the Needs of Disadvantaged Communities. The current Lodi General Plan was adopted prior to the enactment of SB 1000. It is expected that future updates to the General Plan would comply with SB 1000 provisions.

Analysis and Conclusions

As noted above, Census Tract 6077004105, within which the project site is located, has an overall CalEnviroScreen score that does not meet the SB 535 definition of a disadvantaged community. Adjacent census tracts to the south and east of the project site have even lower CalEnviroScreen scores. The project would not be constructed in an area with a high pollution burden and a predominantly lower-income or minority population that may experience such a burden.

SB 1000 recommends the integration of a minimum of seven environmental justice topics in land use planning. Some of these topics are not directly connected to potential impacts on the physical environment, which is what CEQA evaluates. However, other topics directly affect environmental issues. Table 19-1 lists the SB 1000 environmental justice topics relevant to CEQA analysis and the project's environmental impacts relevant to these issues.

TABLE 19-1
SB 1000 TOPICS AND PROJECT IMPACTS

SB 1000 Topic	Project Impacts
Pollution Exposure and Air Quality	The project would generate air pollutant emissions that are below SJVAPCD significance thresholds designed to assist in achieving federal and state air quality standards. The project site is not located near any major air pollution source and is not itself a source of air toxic emissions. The project would connect to the City's water system, so water pollution is not an issue. (Chapter 5.0, Air Quality; Chapter 16.0, Utilities and Energy).
Public Facilities	The project would be connected to the City's water and wastewater systems. The project would be located next to a power plant, but mitigation and project features would reduce the main environmental impact (noise) to a level that would be less than significant. The project would have access to public transit and to sidewalks and bikeways, and it would be close to schools and Lodi Lake Park (Chapter 14.0, Public Services; Chapter 15.0, Transportation; Chapter 16.0, Utilities and Energy).
Food Access	The project would have no environmental impacts related to this issue. The mixed-use project may increase accessibility to food to project residents and others.
Safe and Sanitary Homes	Proposed housing units would not be exposed to substantial pollution sources or hazardous materials. The project site could have soil contamination from residual agricultural chemicals, but mitigation would eliminate any hazard (Chapter 10.0, Hazards; Chapter 12.0, Land Use).
Physical Activity	Project would be located near schools and recreational facilities, along with pedestrian and bicycle facilities (Chapter 14.0, Public Services; Chapter 15.0, Transportation).
Civil or Community Engagement	The project would have no environmental impacts related to this issue. The mixed-use project may increase opportunities for civic engagement in proposed community and banquet facilities.
Improvements and Programs That Address the Needs of Disadvantaged Communities	No project environmental impacts relevant to this issue.

As noted, the project site is not in an area that would be designated a disadvantaged community. It is most likely that any adverse impacts on environmental justice populations in the vicinity would be related to air pollutant emissions, mainly from traffic; Chapter 5.0 of the EIR describes these as less than significant. As described in Chapter 5.0, Air Quality, the project would not involve any substantial air toxic emissions. The project would not have a significant impact on environmental justice issues.

20.0 EIR PREPARERS AND REFERENCES

20.1 EIR PREPARERS

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APPENDIX A
NOTICE OF PREPARATION AND NOP COMMENTS

CITY OF LODI
NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT
REVISED 11-10-21 (Updated heights for 3- and 4-story structures)

DATE: November 9, 2021

TO: Responsible and Trustee Agencies, Organizations, and Interested Parties

FROM: City of Lodi, Community Development Department (Lead Agency)

SUBJECT: **PREPARATION OF ENVIRONMENTAL IMPACT REPORT**

PROJECT TITLE: **LAKEHOUSE HOTEL AND RESIDENTIAL PROJECT**

The City of Lodi will prepare an Environmental Impact Report (EIR) for the Lakehouse Boutique Hotel and Residential Project (the "Project") pursuant to Section 15021 of the California Environmental Quality Act (CEQA) Guidelines. Section 15082 of the CEQA Guidelines requires the City to prepare and distribute a Notice of Preparation (NOP) to the Office of Planning and Research, responsible and trustee agencies, and other interested parties to provide sufficient information describing the Project and its potential environmental effects to enable the agencies and other parties to make a meaningful response. The proposed project, its location and the probable environmental effects of the project are described in Attachment A and the following figures.

As required by CEQA, the NOP will be circulated for a 30-day review period beginning November 9, 2021 and extending to December 8, 2021. A copy of the NOP may be reviewed and/or downloaded at http://www.lodi.gov/169/Community-Development or at https://ceqanet.opr.ca.gov/. The City welcomes your input during the review period.

Public Agencies: In the event the City has not received a response by the end of the review period, the City may presume that the responsible agency has no response to make (CEQA Guidelines Section 15082[b][2]).

If you have any questions regarding this matter or would like to submit comments on behalf of your agency/organization, or as an individual, please address them to:

City of Lodi
Community Development Department
Attention: John Della Monica
221 West Pine Street
Lodi, Ca. 95240
(209) 333-6711 or jdellamonica@lodi.gov

ATTACHMENT A

NOTICE OF PREPARATION
ENVIRONMENTAL IMPACT REPORT
FOR THE LAKEHOUSE HOTEL AND RESIDENTIAL PROJECT
LODI, CA

A.1 PROJECT LOCATION

The proposed project is located at 1018 North Lower Sacramento Road, which is at the northeast corner of Lower Sacramento Road and Turner Road in the City of Lodi, San Joaquin County (Figures 1 through 4). The 10-acre site is identified as Assessor's Parcel Number (APN) 015-64-009. On the U.S. Geological Survey (USGS) Lodi North, California, 7.5-minute quadrangle map, the project site is within Section 34, Township 4 North, Range 6 East, Mt. Diablo Base and Meridian. The approximate latitude of the project site is 38º 08' 48" North, and the approximate longitude is 121º 18' 05" West.

A.2 EXISTING CONDITIONS

The project site is located in the northern portion of Lodi, west of Lodi Lake park and south of the unincorporated community of Woodbridge. See Figures 1 through 4 for the project location.

The project site was historically used as an orchard; it contains a few remnant orchard trees intermixed with numerous native and ornamental trees as well as shrubs, weeds, and grasses. Two corrugated steel utility buildings are located in the western portion of the site. A cellular telephone tower and adjacent utility building are located in the northeastern corner of the site within an existing utility easement. An unused Union Pacific Railroad spur runs along the eastern boundary of the project site. An additional branch spur once serving the General Mills facility to the south passes through the central portion of the project site. There is no other development on the site. The project site is currently designated Industrial by the Lodi General Plan and is zoned M (Industrial) by the City.

The setting of the project site is urban. The site is surrounded by a variety of land uses, including residential, retail, commercial, industrial, open space and public. Land uses surrounding the project site are described below and shown in Figure 4:

> Woodlake Circle is a single-family residential development of approximately 100 homes located immediately west of the project site across Lower Sacramento Road. An additional five single-family homes are located immediately north of the site along the east side of Lower Sacramento Road.

The six-acre Lodi Surface Water Treatment Facility (SWTF) is located approximately 100 feet northeast of the project site across the Union Pacific spur track. The SWTF was constructed in 2012 and is owned and operated by the City. The facility includes treatment facilities, a 3-million-gallon storage tank and administrative offices.

A Northern California Power Agency (NCPA) power generation station borders the project site to the east. The natural gas- and diesel-fueled station runs intermittently during periods of peak electricity demand. Components of the power station include gas compressors, gas receivers, electrical equipment, transformers, a 120,000-gallon aboveground fuel oil storage tank with containment berm, and storage sheds. Access is provided by an existing 15-foot-wide driveway from Turner Road.

An electrical substation, owned and operated by the Lodi Electric Utility (LEU), is located 70 feet east of the project site along Turner Road.

The 66-acre former General Mills breakfast cereal manufacturing plant is located south of the project site across Turner Road. Past industrial uses of this facility consisted of food product manufacturing, warehousing, general service, storage, and distribution activities. The cereal production facility opened in 1947 and closed in 2015. Bond Manufacturing currently occupies approximately 200,000 square feet of the existing building for its distribution and manufacturing operations. The remaining building space is presently unused.

A.3 PROJECT DESCRIPTION

The proposed project includes two basic components:

A 92-suite hotel with meeting rooms, guest amenities, hotel-related retail, a parking structure, and landscaping

A 150-unit apartment complex with 1-, 2- and 3-bedroom units

The layout of the proposed project is shown on the attached *Preliminary* Site Plan, Figure 5. The quantities of development associated with the project are summarized in the following table and discussed in more detail below.

Hotel

The hotel portion of the project would include two adjacent hotel buildings in the southern portion of the site, together providing 92 guest suites in a total of 52,000 square feet of floor area.

LAKEHOUSE PROJECT
SUMMARY OF DEVELOPMENT QUANTITIES

BOUTIQUE HOTEL	
Buildings	2
Building Height	2-4 stories
Hotel Guest Suites	92
Hotel Square Footage	52,000
Hotel, Lobby, Admin	7,000
Hotel Back of House Storage	6,000
Banquet Hall Occupancy	245
Banquet Hall Square Footage	3,600
Restaurant Seating Capacity	70
Restaurant Square Footage	6,000
Covered Parking	180
Surface Parking	35
RETAIL SQUARE FOOTAGE	18,500
APARTMENT COMMUNITY	
Total Units	150
Apartment Buildings	4
Building Height (feet)	46-55
1- bedroom Units, 800 square feet	54
2-bedroom Unita, 1,150 square feet	88
3-bedroom Units, 1,500-1,700 square feet	8
Community Building Square Footage	3,500
Community Building Height	2-story
Covered Parking	130
Surface Parking (including 30 guest spaces)	158

The western hotel building would be two to three stories in height and would consist predominantly of hotel rooms. The eastern hotel building would be three to four stories in height. Along with hotel rooms, this building would include approximately 18,500 square feet of ground floor retail space, the hotel lobby, a 3,600-square foot banquet hall with a maximum occupancy of 245 and a sit-down restaurant of 6,000 square feet with a maximum occupancy of 70. The banquet hall would provide space for conferences, meetings and social events. Alcoholic beverages would be sold at the hotel and

restaurant. Small- and medium-size truck deliveries would be accommodated along the east side of this building.

Apartments

The project proposes development of a 150-unit residential apartment complex in the northern portion of the project site. The complex would consist of four apartment buildings: three four-story buildings with a maximum height of 55 feet and one three-story building with a maximum height of 46 feet. The buildings would be generally arranged along the site boundaries and would enclose a central plaza area.

The residential complex would also include a two-story community building within the plaza area. The community building would include approximately 3,500 square feet of floor area. An outdoor pool and lounge would be a part of the community center. A breakdown of proposed building sizes and types is shown in the table above.

A 30-foot-wide landscaped pedestrian corridor would be provided along the Lower Sacramento Road and Turner Road frontages; the corridor would provide 20 feet of separation between the pedestrian walk and the edge of street. A public garden, landscaped courtyards, entrances, and pedestrian walks would be incorporated into the overall design of the project as shown on the site plan. Other project features include monument sign at the corner of Turner Road and Lower Sacramento Road and water features at the entrances to the hotel and the apartment complex. The project frontages on Lower Sacramento Road and Turner would be enclosed with a 3-foot concrete wall topped with 3 feet of wrought iron fencing.

The project also includes the construction of a 14-foot masonry wall along the boundary with the adjacent NCPA station.

The proposed project would require the following discretionary approvals from the City:

A General Plan Amendment to change the project site designation from Industrial to Mixed Use Center.

A rezoning of the project site from M (Industrial) to MCE (Mixed Use Center).

Site Plan and Design Review of the proposed buildings, landscaping, and site plan.

Conditional Use Permit for the operation of the proposed hotel.

Conditional Use Permit for the sale of alcohol.

Demolition Permit for removal of existing buildings

Approval of growth allocations by the City Council for proposed residential units

Review and approval of erosion control and storm water plans.

Encroachment permits for work in the public right-of-way.

A.4 ISSUES TO BE ANALYZED IN THE EIR

The City of Lodi has determined that an Environmental Impact Report (EIR) will be prepared for the project. The EIR will consider the potential environmental effects of the project, mitigation measures needed to address any potentially significant environmental effects, and alternatives to the proposed project among other subjects. Environmental concerns that will be addressed in the EIR are summarized as follows:

Aesthetics and Visual Resources

The EIR will consider the size, height and architectural character of proposed structures and site improvements, their relationship to surrounding development and consistency with City of Lodi design standards. The EIR will consider potential lighting impacts on surrounding land uses and the night sky.

Agricultural Resources

Although the proposed project is in an urban area, the site was formerly used as an orchard. The EIR will consider direct or indirect impacts on agriculture.

Air Quality

The EIR will quantify construction and operational air pollutant emissions associated with the project, their relationship to state and federal standards, exceedance of applicable emissions thresholds, human health risks and odor impacts. The EIR will include a Health Risk Assessment quantifying health risks associated with existing air toxic emissions generated by existing operation of the adjacent NCPA power generation facility.

Biological Resources

The EIR will document the existing biological resources of the project site and describe the potential impacts of proposed hotel and residential development on those resources. The EIR will consider potential effects on habitat for special-status and migratory species, wetlands, riparian areas and other sensitive habitats as well as mitigation measures that may be needed to address these effects. The analysis will consider the mitigating effect of project participation in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan.

Cultural Resources

The EIR will include the results of a project-specific cultural resources record search and survey, including consideration of the potential impacts of proposed development on any known historical and/or archaeological resources or inadvertent discovery of such

resources during construction. The EIR will also consider the project's potential effects on Tribal Cultural Resources.

Energy

The EIR will consider and discuss predicted energy consumption associated with the project, along with energy conservation measures incorporated into proposed buildings and otherwise associated with the siting and operation of the project. The EIR will identify the project potential, if any, for wasteful or inefficient use of energy.

Geology, Soils, and Mineral Resources

The EIR will describe the general geology of the project area, geotechnical and seismic hazards, soil quality and erosion potential, suitability of soil for development, potential project impact on accessibility of mineral resources, and potential effects on unique geological or paleontological resources.

Greenhouse Gas (GHG) Emissions

The EIR will quantify and identify the significance of construction and operational GHG emissions associated with the project and the project's consistency with applicable GHG reduction plans, including the Lodi Climate Action Plan.

Hazards and Hazardous Materials

The EIR will document the presence or absence of documented environmental contamination on and near the project site, including potential surface soil contamination from historical agricultural use. Use, storage, and transportation of hazardous materials associated with the proposed land uses and potential for environmental contamination during project construction will be evaluated.

Hydrology and Water Quality

The EIR will describe the surface and groundwater hydrologic resources of the project site and vicinity, as well as exposure to 100-year and 200-year flooding hazards. Potential for direct effects to surface and groundwater resources during project construction and operation will be described, as will conformance with applicable water quality plans and standards.

Land Use, Population, and Housing

The EIR will analyze project consistency with the Lodi General Plan, zoning, and any other applicable land use plans and ordinances, along with the potential direct and indirect impacts of the project on population growth, housing needs and housing availability. The EIR will discuss potential effects on the adjacent unincorporated community and potential environmental justice concerns.

Noise

The EIR will consider noise impacts associated with project construction, impacts of increased traffic on roadway noise, and the effects of roadway noise increases resulting from the proposed project on land uses along primary project access routes.

Public Services and Recreation

The EIR will describe existing providers that are or would be responsible for providing services to the project site. The EIR will consider the need for new or expanded facilities required for agencies responsible for fire protection, police protection, schools, and parks and recreation, and the potential impacts of addition of any new or expanded public facilities on the environment.

Transportation

The EIR will describe the location, nature, and operation of existing transportation systems serving the project site and vicinity. The EIR will quantify the generation of traffic from new hotel and residential uses and analyze its impact on citywide Vehicles Miles Traveled; mitigation for significant VMT effects will be described as required. The EIR will also quantify the effects of project-generated traffic on traffic flow on streets and intersections in the project vicinity. The EIR will also evaluate consistency with applicable transportation plans and impacts on or related to alternative travel modes.

Tribal Cultural Resources

The EIR will document identify potential impacts to cultural resources onsite and describe City compliance with SB 18 and AB 52 tribal consultation requirements, including the AB 52 notification process, tribal requests for consultation, impacts on resources of potential importance to local tribes, and the results of the consultation process.

Utilities

The EIR will describe existing and planned utility systems serving the project site and surrounding development. The EIR will identify any necessary extension of water, wastewater, storm drainage, solid waste, and other utilities and the potential environmental impacts of those extensions.

Wildfire

The project is in an urbanized area and is not exposed to wildfire hazards. This will be briefly documented in the EIR.

Cumulative Impacts

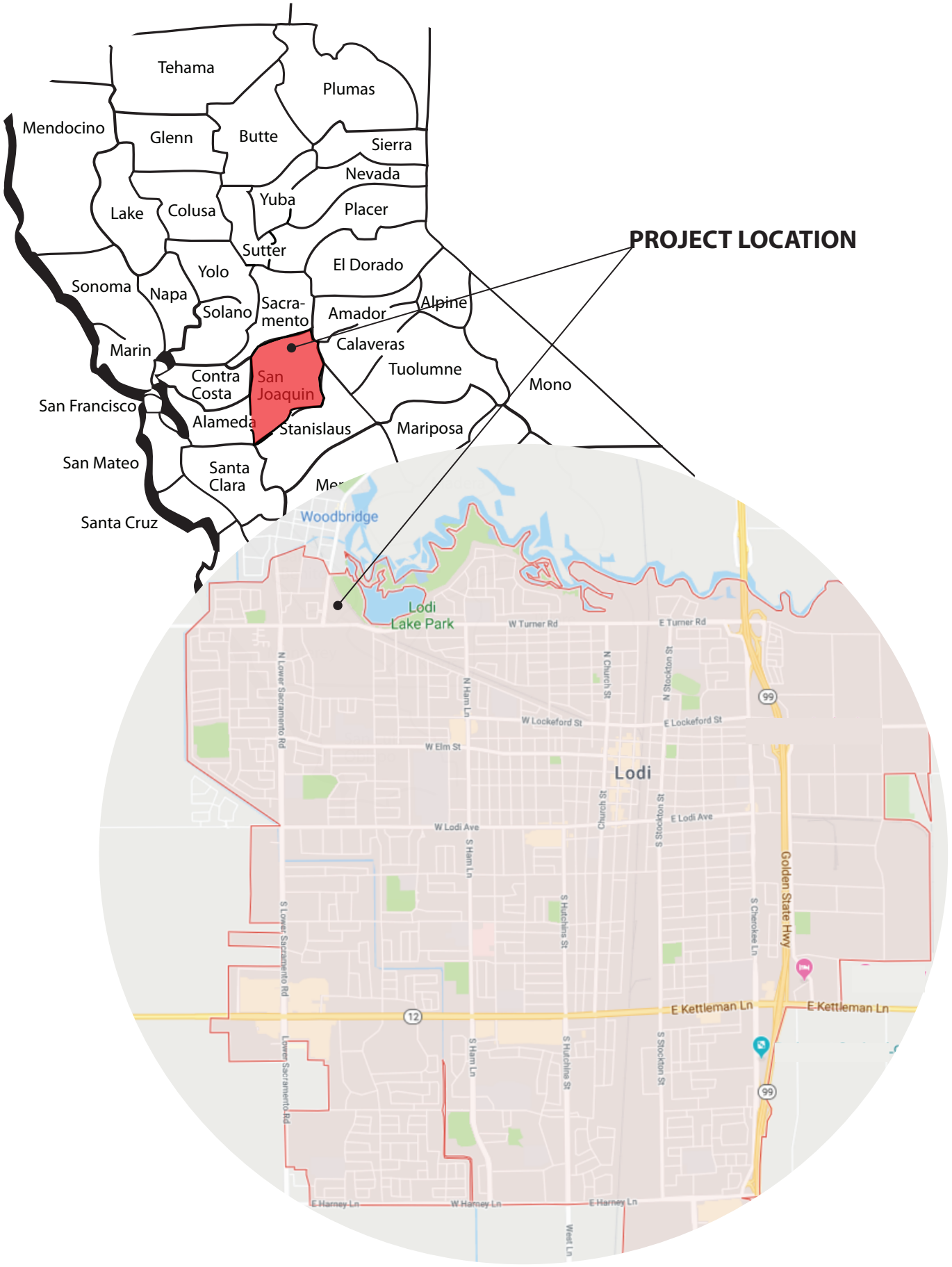
The EIR will consider the potential cumulative impacts of the project in all of the above-listed resource areas, based primarily on the analysis of citywide environmental effects in the Lodi General Plan EIR.

Alternatives to the Proposed Project

The EIR will evaluate the comparative environmental effects of a reasonable range of alternatives to the proposed project, including the required No Project Alternative. The range of alternatives will be determined during EIR preparation.

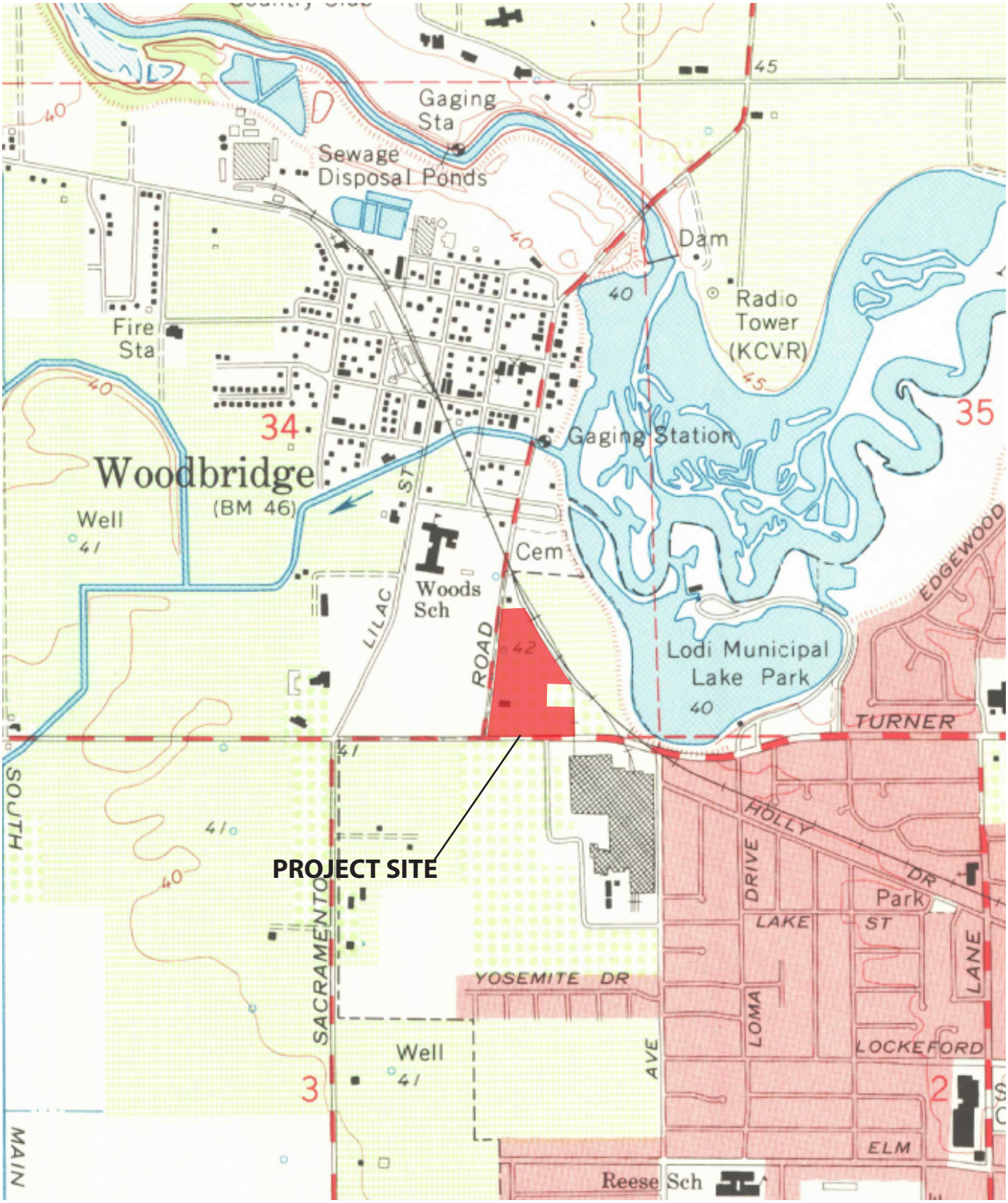
Other CEQA Issues

The EIR will identify any significant and unavoidable impacts and irreversible environmental commitments of the proposed project. It will consider the potential growth-inducing effects of the proposed development. The EIR also will discuss environmental justice issues as they may apply to this project. It will identify any communities that may experience disproportionate adverse environmental impacts resulting from the project and discuss measures to reduce these impacts if warranted.



BaseCamp Environmental

Figure 1
REGIONAL LOCATION MAP



SOURCE: Lodi North Quadrangle, United States Department of the Interior Geological Survey, 1968

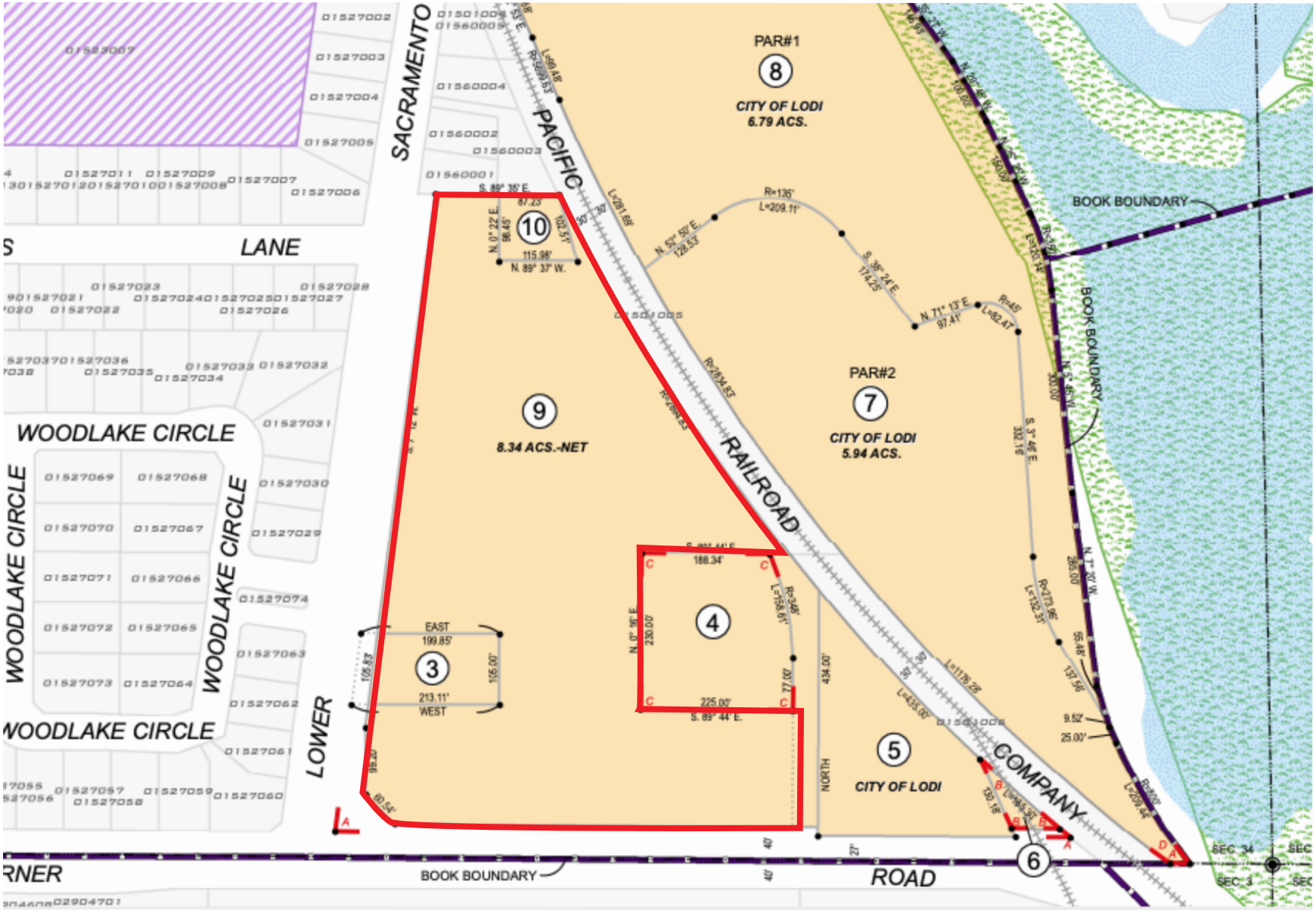


Figure 3
ASSESSOR PARCEL MAP



BaseCamp Environmental

Figure 4
AERIAL PHOTO

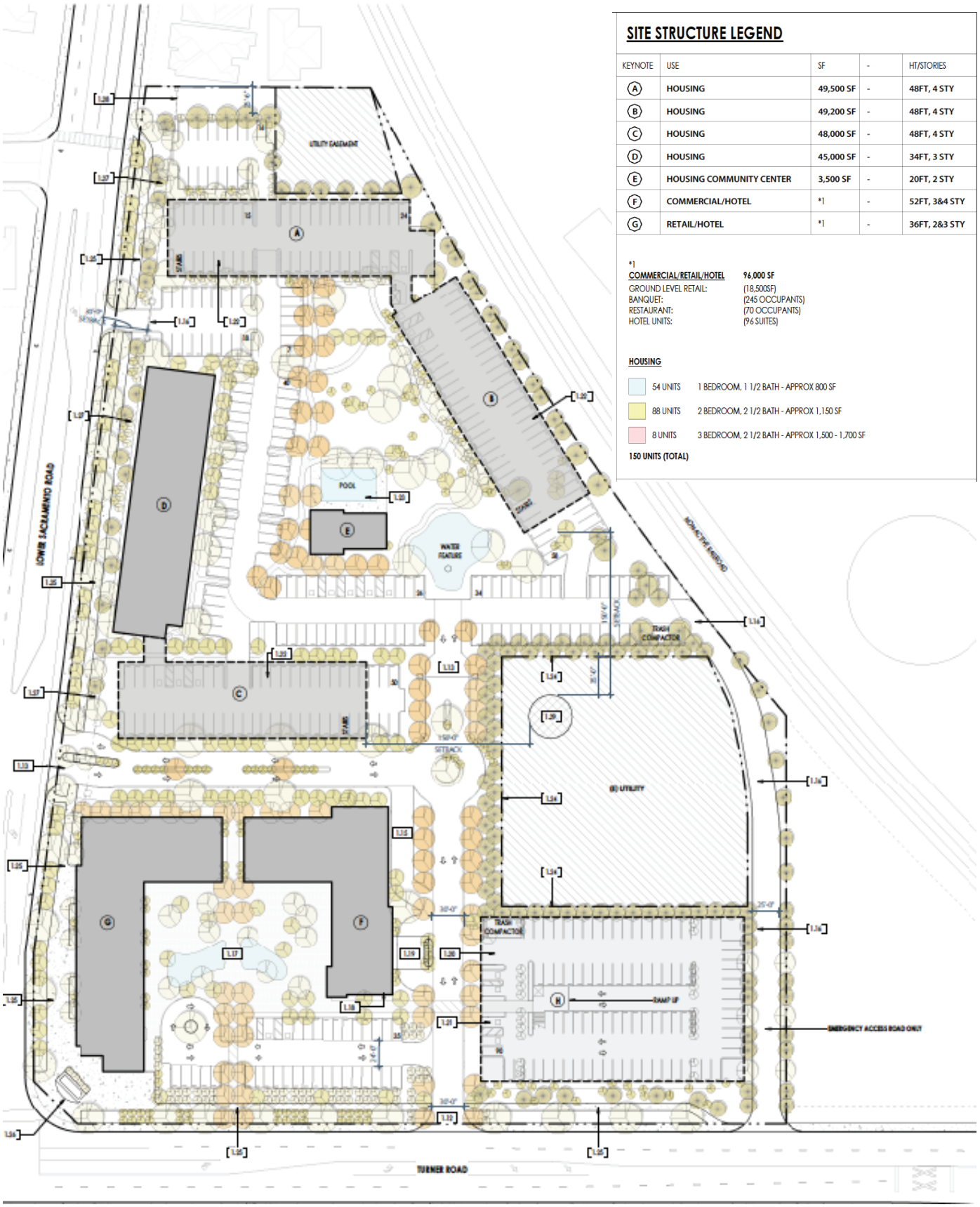


Figure 5
PROPOSED SITE PLAN

DISTRIBUTION LIST – LODI LAKEHOUSE NOP

ALL STATE AGENCIES - STATE CLEARING HOUSE CEQA SUBMIT	Lodi Departments: KARI – PLEASE DISTIBUTE TO LODI IN HOUSE
Jerome Wilverding SJC Administration Office 44 N. San Joaquin St. Stockton, Ca. 95202 jwilverding@sjgov.org	Police
Executive Director San Joaquin COG 555 E. Weber Ave Stockton, Ca. 95202 nguyen@sjcog.org	Clerk
Native American Heritage Commission 1550 W Harbor Blvd, Suite 100 West Sacramento, Ca. 95671 nahc@nahc.ca.gov	PW Director
SJ County CDD 1810 E. Hazelton Ave Stockton, Ca. 95205 planning@sjgov.org	Fire Chief
Samir Sheikh SJVAPCD 1990 Gettysburg Ave. Fresno, Ca. 93726 Samir.sheikh@valleyair.org	Parks and Rec
Steve Mayo Habitat Program Manager 555 W. Weber Ave. Stockton, Ca. 95202 mayo@sjcog.org	CDD Director
Press Release Lodi New Sentinel 125 N. Church St Lodi, Ca. 95240 news@lodinews.com	City Attorney
Lodi Unified School District 1305 E. Vine St. Lodi, Ca. 95240 cwasher@lodiusd.net	City Manager

The Record P.O. Box 900 Stockton, Ca. 95201 Aaron Leathley aleathly@recordnet.com	Building Official
Woodbridge Fire District 400 E. Augusta Woodbridge, CA 95258 Chief: Darin Downey Darin.downey@woodbridgefire.org	Lodi Electric Utility
Woodbridge Irrigation District 18750 N. Lower Sacramento Rd Woodbridge, Ca. 95285 widirrigation@gmail.com	
Buena Vista Rancheria Me-Wuk Indians 1418 20th St, Suite 200 Sacramento, Ca. 95811 (916) 491-0011 roselynn@buenavistatribe.com	Bond Manufacturing 2000 W Turner Road Lodi, Ca. 95242 (209) 368-4164
Ione Ban of Miwok Indians P.O. Box 699 Plymouth, Ca. 95236 (209) 245-5800 culturalcommittee@ionemiwok.org	Omar Khweiss San Joaquin Mosquito and Vector Abatement 7759 S. Airport Way Stockton, Ca. 95206 o.khweiss@sjmosquito.org
Northern Valley Yokuts Tribe 990 North Fine Rd Linden, Ca. 95236 canutes@verizon.net	Pacific Gas & Electric Attn: Land Agents P.O. Box 930 Stockton, Ca. 95201
Torres Martinez Desert Cahuilla Indians PO Box 1160 Thermal, Ca. 92274 rpowell@tmtanf@.org	Comcast 6505 Tam O'Shanter Dr Stockton, Ca. 95210
United Auburn Indian Community of the Auburn Rancheria 10720 Indian Hill Rd Auburn, Ca 95603 rallen@auburnrancheria.com	AT&T California Attn: Engineering 2300 E. Eight Mile Rd Stockton, Ca. 95210
NCPA 651 Commerce Drive Roseville, Ca. 95678 (916) 781-3636	Kuldeep S. Garcha Postmaster U.S. Government Post Office 120 S. School St Lodi, Ca. 95240

	Kuldeep.s.garcha@usps.gov
LIUNA, Local Union 73 3984 Cherokee Road Stockton, Ca. 95215 (209) 466-3356 cbelladona@liuna73.org	Burlington Northern Railroad 817-352-2296
Wilton Rancheria crd@wiltonrancheria-nsn.gov	
City of Stockton Community Development Department – Planning Division 345 N. El Dorado St. Stockton, CA 95202 planning@stocktonca.gov	
San Joaquin County – LAFCO 509 W. Weber Ave., Ste. 420 Stockton, CA 95203 James Glaser, Executive Officer jglaser@sjgov.org	

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 201902909

Project Title: Turner Road- Lake House Mixed Use Development Project

Lead Agency: City of Lodi | Contact Person: John Della Monica
Mailing Address: 221 West Pine Street | Phone: (209) 333-6711
City: Lodi, Ca | Zip: 95240 | County: San Joaquin

Project Location: County: San Joaquin | City/Nearest Community: Lodi
Cross Streets: Lower Sacramento Road and Turner Road | Zip Code: 95242
Longitude/Latitude (degrees, minutes and seconds): 38 ° 08 ' 49.7 " N / 121 ° 18 ' 03 " W Total Acres: 8.8
Assessor's Parcel No.: 121-270--01 through 121-270-14 | Section: 34 | Twp.: 4N | Range: 6E | Base: MDBM
Within 2 Miles: State Hwy #: 99 | Waterways: Mokelumne River/Lodi Lake
Airports: NA | Railways: Union Pacific Spur | Schools: Woodbridge Elementary

Document Type:

CEQA: ☒ NOP ☐ Draft EIR ☐ Early Cons ☐ Supplement/Subsequent EIR ☐ Neg Dec (Prior SCH No.) ☐ Mit Neg Dec Other:
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☒ Rezone ☐ Annexation
☒ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☒ Use Permit ☐ Coastal Permit
☐ Community Plan ☒ Site Plan ☐ Land Division (Subdivision, etc.) ☐ Other:

Development Type:

☒ Residential: Units 150 Acres
☐ Office: Sq.ft. Acres Employees
☒ Commercial: Sq.ft. 18,500 Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type MGD
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☒ Other: 92 Hotel Rooms, Banquet Hall, Restaurant

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☐ Fiscal ☒ Recreation/Parks ☒ Vegetation
☒ Agricultural Land ☒ Flood Plain/Flooding ☒ Schools/Universities ☒ Water Quality
☒ Air Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☐ Water Supply/Groundwater
☒ Archeological/Historical ☒ Geologic/Seismic ☒ Sewer Capacity ☐ Wetland/Riparian
☒ Biological Resources ☐ Minerals ☒ Soil Erosion/Compaction/Grading ☐ Growth Inducement
☐ Coastal Zone ☒ Noise ☐ Solid Waste ☒ Land Use
☐ Drainage/Absorption ☒ Population/Housing Balance ☒ Toxic/Hazardous ☐ Cumulative Effects
☐ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☒ Other: GHG

Present Land Use/Zoning/General Plan Designation:

Vacant Property/Industrial/Industrial

Project Description: *(please use a separate page if necessary)*

The proposed project involves development of a boutique hotel, residential apartment complex and retial commercial space. The four-story hotel would include 92 guest suites with an 80-seat restaurant, 18,500 square feet of retail commercial space and a banquest room for approximately 240 guests.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

_____ Air Resources Board	_____ Office of Historic Preservation
_____ Boating & Waterways, Department of	_____ Office of Public School Construction
_____ California Emergency Management Agency	_____ Parks & Recreation, Department of
_____ California Highway Patrol	_____ Pesticide Regulation, Department of
_____ Caltrans District # _____	_____ Public Utilities Commission
_____ Caltrans Division of Aeronautics	_____ Regional WQCB # _____
_____ Caltrans Planning	_____ Resources Agency
_____ Central Valley Flood Protection Board	_____ Resources Recycling and Recovery, Department of
_____ Coachella Valley Mtns. Conservancy	_____ S.F. Bay Conservation & Development Comm.
_____ Coastal Commission	_____ San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
_____ Colorado River Board	_____ San Joaquin River Conservancy
_____ Conservation, Department of	_____ Santa Monica Mtns. Conservancy
_____ Corrections, Department of	_____ State Lands Commission
_____ Delta Protection Commission	_____ SWRCB: Clean Water Grants
_____ Education, Department of	_____ SWRCB: Water Quality
_____ Energy Commission	_____ SWRCB: Water Rights
_____ Fish & Game Region # _____	_____ Tahoe Regional Planning Agency
_____ Food & Agriculture, Department of	_____ Toxic Substances Control, Department of
_____ Forestry and Fire Protection, Department of	_____ Water Resources, Department of
_____ General Services, Department of	
_____ Health Services, Department of	_____ Other: _____
_____ Housing & Community Development	_____ Other: _____
_____ Native American Heritage Commission	

Local Public Review Period (to be filled in by lead agency)

Starting Date November 9, 2021 Ending Date December 8, 2021

Lead Agency (Complete if applicable):

Consulting Firm: BaseCamp Environental, Inc.
Address: 802 West Lodi Avenue
City/State/Zip: Lodi, Ca. 95240
Contact: Charlie Simpson
Phone: (209) 224-8213

Applicant: City of Lodi
Address: 221 West Pine Street
City/State/Zip: Lodi. Ca, 95240
Phone: (209) 333-6711

Signature of Lead Agency Representative: _____ **Date:** 11-8-21

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

State of California - Department of Fish and Wildlife

2021 ENVIRONMENTAL FILING FEE CASH RECEIPT

DFW 753.5a (REV. 01/01/21) Previously DFG 753.5a

RECEIPT NUMBER: 39-11082021-333

STATE CLEARINGHOUSE NUMBER *(If applicable)*

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY	LEADAGENCY EMAIL	DATE
CITY OF LODI		11/08/2021

COUNTY/STATE AGENCY OF FILING	DOCUMENT NUMBER
SAN JOAQUIN	39-11082021-333

PROJECT TITLE

LAKEHOUSE HOTEL AND RESIDENTIAL PROJECT

PROJECT APPLICANT NAME	PROJECT APPLICANT EMAIL	PHONE NUMBER
CITY OF LODI		(209) 333-6711

PROJECT APPLICANT ADDRESS	CITY	STATE	ZIP CODE
221 WEST PINE STREET	LODI	CA	95240

PROJECT APPLICANT *(Check appropriate box)*

☒ Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

☐ Environmental Impact Report (EIR)	$3,445.25	$
☐ Mitigated/Negative Declaration (MND)(ND)	$2,480.25	$
☐ Certified Regulatory Program (CRP) document - payment due directly to CDFW	$1,171.25	$

☐ Exempt from fee

- ☐ Notice of Exemption (attach)
- ☐ CDFW No Effect Determination (attach)

☐ Fee previously paid (attach previously issued cash receipt copy)

☐ Water Right Application or Petition Fee (State Water Resources Control Board only)	$850.00	$
☐ County documentary handling fee		$
☐ Other		$

PAYMENT METHOD:

☐ Cash ☐ Credit ☐ Check ☒ Other **TOTAL RECEIVED** $ $0.00

SIGNATURE	AGENCY OF FILING PRINTED NAME AND TITLE
X Samantha Landrum	Samantha E. Treat-Landrum ,Deputy

ORIGINAL - PROJECT APPLICANT | COPY - CDFW/ASB | COPY - LEAD AGENCY | COPY - COUNTY CLERK | DFW 753.5a (Rev. 01012021)

APPENDIX B
AIR QUALITY MODELING RESULTS

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Lodi Lakehouse

San Joaquin County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	96.00	Room	3.20	139,392.00	0
Quality Restaurant	2.00	1000sqft	0.05	1,400.00	0
Apartments Mid Rise	150.00	Dwelling Unit	3.95	150,000.00	476
Strip Mall	18.50	1000sqft	0.42	18,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	2			**Operational Year**	2025
Utility Company	Redding Electric Utility				
CO2 Intensity (lb/MWhr)	336.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Electricity provider is Lodi Electric Utility, which is not in CalEEMod. REU factors similar to LEU.

Land Use - Estimated restaurant size.

Construction Phase - Estimated construction schedule.

Grading - Total site acreage.

Trips and VMT -

Architectural Coating - Per SJVAPCD Rule 4601.

Woodstoves - No fireplaces.

Area Coating - Per SJVAPCD Rule 4601.

Land Use Change -

Lodi Lakehouse - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Construction Off-road Equipment Mitigation - CalEEMod defaults.

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_EF_Residential_Exterior	150	50
tblAreaCoating	Area_EF_Residential_Interior	150	50
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	0	55
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	0	55
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	30.00
tblFireplaces	NumberGas	82.50	0.00
tblFireplaces	NumberNoFireplace	67.50	150.00
tblGrading	AcresOfGrading	15.00	9.75
tblGrading	AcresOfGrading	30.00	9.75
tblGrading	MaterialImported	0.00	15,730.00
tblLandUse	LandUseSquareFeet	2,000.00	1,400.00
tblWoodstoves	NumberCatalytic	3.95	0.00
tblWoodstoves	NumberNoncatalytic	3.95	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2057	1.7624	1.9299	4.4900e-003	0.3225	0.0755	0.3980	0.1356	0.0706	0.2062	0.0000	400.9697	400.9697	0.0657	0.0145	406.9260
2024	1.0043	1.3132	1.7469	3.8800e-003	0.1305	0.0542	0.1847	0.0352	0.0510	0.0861	0.0000	345.5663	345.5663	0.0518	0.0114	350.2514
Maximum	**1.0043**	**1.7624**	**1.9299**	**4.4900e-003**	**0.3225**	**0.0755**	**0.3980**	**0.1356**	**0.0706**	**0.2062**	**0.0000**	**400.9697**	**400.9697**	**0.0657**	**0.0145**	**406.9260**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2057	1.7624	1.9299	4.4900e-003	0.2160	0.0755	0.2914	0.0801	0.0706	0.1507	0.0000	400.9694	400.9694	0.0657	0.0145	406.9257
2024	1.0043	1.3132	1.7469	3.8800e-003	0.1305	0.0542	0.1847	0.0352	0.0510	0.0861	0.0000	345.5661	345.5661	0.0518	0.0114	350.2511
Maximum	**1.0043**	**1.7624**	**1.9299**	**4.4900e-003**	**0.2160**	**0.0755**	**0.2914**	**0.0801**	**0.0706**	**0.1507**	**0.0000**	**400.9694**	**400.9694**	**0.0657**	**0.0145**	**406.9257**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**23.52**	**0.00**	**18.28**	**32.48**	**0.00**	**18.97**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**4-1-2023**	**6-30-2023**	0.7540	0.7540
2	**7-1-2023**	**9-30-2023**	0.6109	0.6109
3	**10-1-2023**	**12-31-2023**	0.6157	0.6157
4	**1-1-2024**	**3-31-2024**	0.5725	0.5725
5	**4-1-2024**	**6-30-2024**	0.5678	0.5678
6	**7-1-2024**	**9-30-2024**	1.1657	1.1657
		Highest	1.1657	1.1657

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3253	0.0128	1.1138	6.0000e-005		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	1.8214	1.8214	1.7500e-003	0.0000	1.8651
Energy	0.0295	0.2639	0.1947	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	556.5531	556.5531	0.0315	8.4900e-003	559.8718
Mobile	0.9546	1.3462	8.1908	0.0182	1.8856	0.0151	1.9007	0.5041	0.0141	0.5183	0.0000	1,682.9322	1,682.9322	0.1026	0.0936	1,713.3915
Waste						0.0000	0.0000		0.0000	0.0000	28.9912	0.0000	28.9912	1.7133	0.0000	71.8244
Water						0.0000	0.0000		0.0000	0.0000	4.5005	15.6437	20.1442	0.4638	0.0111	35.0464
Total	**2.3093**	**1.6229**	**9.4992**	**0.0199**	**1.8856**	**0.0416**	**1.9272**	**0.5041**	**0.0407**	**0.5448**	**33.4917**	**2,256.9504**	**2,290.4420**	**2.3130**	**0.1132**	**2,381.9992**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3253	0.0128	1.1138	6.0000e-005		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	1.8214	1.8214	1.7500e-003	0.0000	1.8651
Energy	0.0295	0.2639	0.1947	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	556.5531	556.5531	0.0315	8.4900e-003	559.8718
Mobile	0.7767	0.8467	5.2375	9.2100e-003	0.9153	8.2000e-003	0.9235	0.2447	7.6700e-003	0.2524	0.0000	851.8409	851.8409	0.0750	0.0584	871.1178
Waste						0.0000	0.0000		0.0000	0.0000	7.2478	0.0000	7.2478	0.4283	0.0000	17.9561
Water						0.0000	0.0000		0.0000	0.0000	3.6004	12.5150	16.1154	0.3710	8.8800e-003	28.0371
Total	**2.1314**	**1.1234**	**6.5459**	**0.0109**	**0.9153**	**0.0348**	**0.9501**	**0.2447**	**0.0342**	**0.2789**	**10.8482**	**1,422.7304**	**1,433.5786**	**0.9076**	**0.0758**	**1,478.8479**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**7.70**	**30.78**	**31.09**	**45.27**	**51.46**	**16.53**	**50.70**	**51.46**	**15.88**	**48.80**	**67.61**	**36.96**	**37.41**	**60.76**	**33.07**	**37.92**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-42.0225
Total	**-42.0225**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2023	4/14/2023	5	10	
2	Site Preparation	Site Preparation	4/15/2023	4/28/2023	5	10	
3	Grading	Grading	4/29/2023	6/9/2023	5	30	
4	Building Construction	Building Construction	6/10/2023	8/2/2024	5	300	
5	Paving	Paving	8/3/2024	8/30/2024	5	20	
6	Architectural Coating	Architectural Coating	8/31/2024	9/27/2024	5	20	

Acres of Grading (Site Preparation Phase): 9.75

Acres of Grading (Grading Phase): 9.75

Acres of Paving: 0

Residential Indoor: 303,750; Residential Outdoor: 101,250; Non-Residential Indoor: 238,938; Non-Residential Outdoor: 79,646; Striped Parking Area: 0 (Architectural Coating – sqft)

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	15.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	18.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	20.00	0.00	787.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	171.00	41.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Paving	0	15.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	34.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5000e-003	0.0000	1.5000e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1074	0.0982	1.9000e-004		4.9900e-003	4.9900e-003		4.6400e-003	4.6400e-003	0.0000	16.9960	16.9960	4.7600e-003	0.0000	17.1150
Total	**0.0114**	**0.1074**	**0.0982**	**1.9000e-004**	**1.5000e-003**	**4.9900e-003**	**6.4900e-003**	**2.3000e-004**	**4.6400e-003**	**4.8700e-003**	**0.0000**	**16.9960**	**16.9960**	**4.7600e-003**	**0.0000**	**17.1150**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.4000e-004	1.7100e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4694	0.4694	1.0000e-005	1.0000e-005	0.4738
Total	**2.2000e-004**	**1.4000e-004**	**1.7100e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4694**	**0.4694**	**1.0000e-005**	**1.0000e-005**	**0.4738**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.7000e-004	0.0000	6.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1074	0.0982	1.9000e-004		4.9900e-003	4.9900e-003		4.6400e-003	4.6400e-003	0.0000	16.9960	16.9960	4.7600e-003	0.0000	17.1150
Total	**0.0114**	**0.1074**	**0.0982**	**1.9000e-004**	**6.7000e-004**	**4.9900e-003**	**5.6600e-003**	**1.0000e-004**	**4.6400e-003**	**4.7400e-003**	**0.0000**	**16.9960**	**16.9960**	**4.7600e-003**	**0.0000**	**17.1150**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.4000e-004	1.7100e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4694	0.4694	1.0000e-005	1.0000e-005	0.4738
Total	**2.2000e-004**	**1.4000e-004**	**1.7100e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4694**	**0.4694**	**1.0000e-005**	**1.0000e-005**	**0.4738**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0955	0.0000	0.0955	0.0502	0.0000	0.0502	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0955**	**6.3300e-003**	**0.1018**	**0.0502**	**5.8200e-003**	**0.0560**	**0.0000**	**16.7254**	**16.7254**	**5.4100e-003**	**0.0000**	**16.8606**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686
Total	**2.6000e-004**	**1.7000e-004**	**2.0500e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5633**	**0.5633**	**2.0000e-005**	**2.0000e-005**	**0.5686**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0430	0.0000	0.0430	0.0226	0.0000	0.0226	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0430**	**6.3300e-003**	**0.0493**	**0.0226**	**5.8200e-003**	**0.0284**	**0.0000**	**16.7253**	**16.7253**	**5.4100e-003**	**0.0000**	**16.8606**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5633	0.5633	2.0000e-005	2.0000e-005	0.5686
Total	**2.6000e-004**	**1.7000e-004**	**2.0500e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5633**	**0.5633**	**2.0000e-005**	**2.0000e-005**	**0.5686**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0967	0.0000	0.0967	0.0504	0.0000	0.0504	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0257	0.2690	0.2213	4.4000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	39.0909	39.0909	0.0126	0.0000	39.4070
Total	**0.0257**	**0.2690**	**0.2213**	**4.4000e-004**	**0.0967**	**0.0116**	**0.1083**	**0.0504**	**0.0107**	**0.0611**	**0.0000**	**39.0909**	**39.0909**	**0.0126**	**0.0000**	**39.4070**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3000e-004	0.0492	0.0103	2.3000e-004	6.7100e-003	4.6000e-004	7.1700e-003	1.8500e-003	4.4000e-004	2.2900e-003	0.0000	22.3204	22.3204	1.3000e-004	3.5100e-003	23.3698
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	5.8000e-004	6.8200e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8777	1.8777	6.0000e-005	5.0000e-005	1.8952
Total	**1.7000e-003**	**0.0498**	**0.0171**	**2.5000e-004**	**9.1000e-003**	**4.7000e-004**	**9.5700e-003**	**2.4900e-003**	**4.5000e-004**	**2.9400e-003**	**0.0000**	**24.1981**	**24.1981**	**1.9000e-004**	**3.5600e-003**	**25.2650**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0435	0.0000	0.0435	0.0227	0.0000	0.0227	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0257	0.2690	0.2213	4.4000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	39.0909	39.0909	0.0126	0.0000	39.4069
Total	**0.0257**	**0.2690**	**0.2213**	**4.4000e-004**	**0.0435**	**0.0116**	**0.0551**	**0.0227**	**0.0107**	**0.0334**	**0.0000**	**39.0909**	**39.0909**	**0.0126**	**0.0000**	**39.4069**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3000e-004	0.0492	0.0103	2.3000e-004	6.7100e-003	4.6000e-004	7.1700e-003	1.8500e-003	4.4000e-004	2.2900e-003	0.0000	22.3204	22.3204	1.3000e-004	3.5100e-003	23.3698
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	5.8000e-004	6.8200e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8777	1.8777	6.0000e-005	5.0000e-005	1.8952
Total	**1.7000e-003**	**0.0498**	**0.0171**	**2.5000e-004**	**9.1000e-003**	**4.7000e-004**	**9.5700e-003**	**2.4900e-003**	**4.5000e-004**	**2.9400e-003**	**0.0000**	**24.1981**	**24.1981**	**1.9000e-004**	**3.5600e-003**	**25.2650**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1140	1.0429	1.1777	1.9500e-003		0.0507	0.0507		0.0477	0.0477	0.0000	168.0584	168.0584	0.0400	0.0000	169.0579
Total	**0.1140**	**1.0429**	**1.1777**	**1.9500e-003**		**0.0507**	**0.0507**		**0.0477**	**0.0477**	**0.0000**	**168.0584**	**168.0584**	**0.0400**	**0.0000**	**169.0579**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1400e-003	0.1315	0.0387	6.0000e-004	0.0196	8.4000e-004	0.0205	5.6800e-003	8.0000e-004	6.4800e-003	0.0000	57.2710	57.2710	2.8000e-004	8.6600e-003	59.8583
Worker	0.0360	0.0238	0.2820	8.5000e-004	0.0988	4.9000e-004	0.0992	0.0263	4.5000e-004	0.0267	0.0000	77.5970	77.5970	2.3600e-003	2.2300e-003	78.3199
Total	**0.0392**	**0.1553**	**0.3207**	**1.4500e-003**	**0.1184**	**1.3300e-003**	**0.1197**	**0.0319**	**1.2500e-003**	**0.0332**	**0.0000**	**134.8681**	**134.8681**	**2.6400e-003**	**0.0109**	**138.1782**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1140	1.0429	1.1777	1.9500e-003		0.0507	0.0507		0.0477	0.0477	0.0000	168.0582	168.0582	0.0400	0.0000	169.0577
Total	**0.1140**	**1.0429**	**1.1777**	**1.9500e-003**		**0.0507**	**0.0507**		**0.0477**	**0.0477**	**0.0000**	**168.0582**	**168.0582**	**0.0400**	**0.0000**	**169.0577**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1400e-003	0.1315	0.0387	6.0000e-004	0.0196	8.4000e-004	0.0205	5.6800e-003	8.0000e-004	6.4800e-003	0.0000	57.2710	57.2710	2.8000e-004	8.6600e-003	59.8583
Worker	0.0360	0.0238	0.2820	8.5000e-004	0.0988	4.9000e-004	0.0992	0.0263	4.5000e-004	0.0267	0.0000	77.5970	77.5970	2.3600e-003	2.2300e-003	78.3199
Total	**0.0392**	**0.1553**	**0.3207**	**1.4500e-003**	**0.1184**	**1.3300e-003**	**0.1197**	**0.0319**	**1.2500e-003**	**0.0332**	**0.0000**	**134.8681**	**134.8681**	**2.6400e-003**	**0.0109**	**138.1782**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1141	1.0419	1.2529	2.0900e-003		0.0475	0.0475		0.0447	0.0447	0.0000	179.6831	179.6831	0.0425	0.0000	180.7453
Total	**0.1141**	**1.0419**	**1.2529**	**2.0900e-003**		**0.0475**	**0.0475**		**0.0447**	**0.0447**	**0.0000**	**179.6831**	**179.6831**	**0.0425**	**0.0000**	**180.7453**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2700e-003	0.1407	0.0406	6.3000e-004	0.0210	9.1000e-004	0.0219	6.0700e-003	8.7000e-004	6.9400e-003	0.0000	60.2697	60.2697	2.9000e-004	9.1000e-003	62.9891
Worker	0.0355	0.0224	0.2787	8.7000e-004	0.1056	4.9000e-004	0.1061	0.0281	4.5000e-004	0.0285	0.0000	80.0731	80.0731	2.2700e-003	2.2000e-003	80.7847
Total	**0.0388**	**0.1630**	**0.3193**	**1.5000e-003**	**0.1266**	**1.4000e-003**	**0.1280**	**0.0341**	**1.3200e-003**	**0.0355**	**0.0000**	**140.3428**	**140.3428**	**2.5600e-003**	**0.0113**	**143.7738**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1141	1.0419	1.2529	2.0900e-003		0.0475	0.0475		0.0447	0.0447	0.0000	179.6828	179.6828	0.0425	0.0000	180.7451
Total	**0.1141**	**1.0419**	**1.2529**	**2.0900e-003**		**0.0475**	**0.0475**		**0.0447**	**0.0447**	**0.0000**	**179.6828**	**179.6828**	**0.0425**	**0.0000**	**180.7451**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2700e-003	0.1407	0.0406	6.3000e-004	0.0210	9.1000e-004	0.0219	6.0700e-003	8.7000e-004	6.9400e-003	0.0000	60.2697	60.2697	2.9000e-004	9.1000e-003	62.9891
Worker	0.0355	0.0224	0.2787	8.7000e-004	0.1056	4.9000e-004	0.1061	0.0281	4.5000e-004	0.0285	0.0000	80.0731	80.0731	2.2700e-003	2.2000e-003	80.7847
Total	**0.0388**	**0.1630**	**0.3193**	**1.5000e-003**	**0.1266**	**1.4000e-003**	**0.1280**	**0.0341**	**1.3200e-003**	**0.0355**	**0.0000**	**140.3428**	**140.3428**	**2.5600e-003**	**0.0113**	**143.7738**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.8800e-003**	**0.0953**	**0.1463**	**2.3000e-004**		**4.6900e-003**	**4.6900e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**20.0265**	**20.0265**	**6.4800e-003**	**0.0000**	**20.1885**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144
Total	**4.0000e-004**	**2.5000e-004**	**3.1500e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9063**	**0.9063**	**3.0000e-005**	**2.0000e-005**	**0.9144**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.8800e-003**	**0.0953**	**0.1463**	**2.3000e-004**		**4.6900e-003**	**4.6900e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**20.0265**	**20.0265**	**6.4800e-003**	**0.0000**	**20.1884**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	2.5000e-004	3.1500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9063	0.9063	3.0000e-005	2.0000e-005	0.9144
Total	**4.0000e-004**	**2.5000e-004**	**3.1500e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9063**	**0.9063**	**3.0000e-005**	**2.0000e-005**	**0.9144**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8385					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	**0.8403**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5569**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.1000e-004	5.7000e-004	7.1500e-003	2.0000e-005	2.7100e-003	1.0000e-005	2.7200e-003	7.2000e-004	1.0000e-005	7.3000e-004	0.0000	2.0543	2.0543	6.0000e-005	6.0000e-005	2.0726
Total	**9.1000e-004**	**5.7000e-004**	**7.1500e-003**	**2.0000e-005**	**2.7100e-003**	**1.0000e-005**	**2.7200e-003**	**7.2000e-004**	**1.0000e-005**	**7.3000e-004**	**0.0000**	**2.0543**	**2.0543**	**6.0000e-005**	**6.0000e-005**	**2.0726**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8385					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	**0.8403**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5568**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.1000e-004	5.7000e-004	7.1500e-003	2.0000e-005	2.7100e-003	1.0000e-005	2.7200e-003	7.2000e-004	1.0000e-005	7.3000e-004	0.0000	2.0543	2.0543	6.0000e-005	6.0000e-005	2.0726
Total	**9.1000e-004**	**5.7000e-004**	**7.1500e-003**	**2.0000e-005**	**2.7100e-003**	**1.0000e-005**	**2.7200e-003**	**7.2000e-004**	**1.0000e-005**	**7.3000e-004**	**0.0000**	**2.0543**	**2.0543**	**6.0000e-005**	**6.0000e-005**	**2.0726**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7767	0.8467	5.2375	9.2100e-003	0.9153	8.2000e-003	0.9235	0.2447	7.6700e-003	0.2524	0.0000	851.8409	851.8409	0.0750	0.0584	871.1178
Unmitigated	0.9546	1.3462	8.1908	0.0182	1.8856	0.0151	1.9007	0.5041	0.0141	0.5183	0.0000	1,682.9322	1,682.9322	0.1026	0.0936	1,713.3915

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	816.00	736.50	613.50	2,247,878	1,091,172
Hotel	802.56	786.24	571.20	1,457,583	707,545
Quality Restaurant	167.68	180.08	143.94	196,975	95,616
Strip Mall	819.92	777.74	377.96	1,156,190	561,242
Total	2,606.16	2,480.56	1,706.60	5,058,626	2,455,575

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	45.60	19.00	35.40	86	11	3
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.541920	0.052620	0.169871	0.146633	0.025153	0.006100	0.012627	0.016953	0.000467	0.000322	0.022878	0.001103	0.003353
Hotel	0.541920	0.052620	0.169871	0.146633	0.025153	0.006100	0.012627	0.016953	0.000467	0.000322	0.022878	0.001103	0.003353
Quality Restaurant	0.541920	0.052620	0.169871	0.146633	0.025153	0.006100	0.012627	0.016953	0.000467	0.000322	0.022878	0.001103	0.003353
Strip Mall	0.541920	0.052620	0.169871	0.146633	0.025153	0.006100	0.012627	0.016953	0.000467	0.000322	0.022878	0.001103	0.003353

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	264.7816	264.7816	0.0259	3.1400e-003	266.3665
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	264.7816	264.7816	0.0259	3.1400e-003	266.3665
NaturalGas Mitigated	0.0295	0.2639	0.1947	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	291.7715	291.7715	5.5900e-003	5.3500e-003	293.5053
NaturalGas Unmitigated	0.0295	0.2639	0.1947	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	291.7715	291.7715	5.5900e-003	5.3500e-003	293.5053

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.41243e+006	7.6200e-003	0.0651	0.0277	4.2000e-004		5.2600e-003	5.2600e-003		5.2600e-003	5.2600e-003	0.0000	75.3729	75.3729	1.4400e-003	1.3800e-003	75.8208
Hotel	3.68831e+006	0.0199	0.1808	0.1519	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.8224	196.8224	3.7700e-003	3.6100e-003	197.9920
Quality Restaurant	152614	8.2000e-004	7.4800e-003	6.2800e-003	4.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	8.1441	8.1441	1.6000e-004	1.5000e-004	8.1925
Strip Mall	214230	1.1600e-003	0.0105	8.8200e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4321	11.4321	2.2000e-004	2.1000e-004	11.5001
Total		**0.0295**	**0.2639**	**0.1947**	**1.6000e-003**		**0.0204**	**0.0204**		**0.0204**	**0.0204**	**0.0000**	**291.7715**	**291.7715**	**5.5900e-003**	**5.3500e-003**	**293.5053**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.41243e+006	7.6200e-003	0.0651	0.0277	4.2000e-004		5.2600e-003	5.2600e-003		5.2600e-003	5.2600e-003	0.0000	75.3729	75.3729	1.4400e-003	1.3800e-003	75.8208
Hotel	3.68831e+006	0.0199	0.1808	0.1519	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	196.8224	196.8224	3.7700e-003	3.6100e-003	197.9920
Quality Restaurant	152614	8.2000e-004	7.4800e-003	6.2800e-003	4.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	8.1441	8.1441	1.6000e-004	1.5000e-004	8.1925
Strip Mall	214230	1.1600e-003	0.0105	8.8200e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4321	11.4321	2.2000e-004	2.1000e-004	11.5001
Total		**0.0295**	**0.2639**	**0.1947**	**1.6000e-003**		**0.0204**	**0.0204**		**0.0204**	**0.0204**	**0.0000**	**291.7715**	**291.7715**	**5.5900e-003**	**5.3500e-003**	**293.5053**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	584058	89.2742	8.7400e-003	1.0600e-003	89.8085
Hotel	894897	136.7863	0.0134	1.6200e-003	137.6051
Quality Restaurant	42980	6.5696	6.4000e-004	8.0000e-005	6.6089
Strip Mall	210345	32.1516	3.1500e-003	3.8000e-004	32.3440
Total		**264.7816**	**0.0259**	**3.1400e-003**	**266.3665**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	584058	89.2742	8.7400e-003	1.0600e-003	89.8085
Hotel	894897	136.7863	0.0134	1.6200e-003	137.6051
Quality Restaurant	42980	6.5696	6.4000e-004	8.0000e-005	6.6089
Strip Mall	210345	32.1516	3.1500e-003	3.8000e-004	32.3440
Total		**264.7816**	**0.0259**	**3.1400e-003**	**266.3665**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3253	0.0128	1.1138	6.0000e-005		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	1.8214	1.8214	1.7500e-003	0.0000	1.8651
Unmitigated	1.3253	0.0128	1.1138	6.0000e-005		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	1.8214	1.8214	1.7500e-003	0.0000	1.8651

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0839					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2079					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0335	0.0128	1.1138	6.0000e-005		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	1.8214	1.8214	1.7500e-003	0.0000	1.8651
Total	**1.3253**	**0.0128**	**1.1138**	**6.0000e-005**		**6.1800e-003**	**6.1800e-003**		**6.1800e-003**	**6.1800e-003**	**0.0000**	**1.8214**	**1.8214**	**1.7500e-003**	**0.0000**	**1.8651**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0839					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2079					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0335	0.0128	1.1138	6.0000e-005		6.1800e-003	6.1800e-003		6.1800e-003	6.1800e-003	0.0000	1.8214	1.8214	1.7500e-003	0.0000	1.8651
Total	**1.3253**	**0.0128**	**1.1138**	**6.0000e-005**		**6.1800e-003**	**6.1800e-003**		**6.1800e-003**	**6.1800e-003**	**0.0000**	**1.8214**	**1.8214**	**1.7500e-003**	**0.0000**	**1.8651**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.1154	0.3710	8.8800e-003	28.0371
Unmitigated	20.1442	0.4638	0.0111	35.0464

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	9.7731 / 6.1613	14.4799	0.3196	7.6500e-003	24.7502
Hotel	2.43521 / 0.270579	2.9315	0.0796	1.9000e-003	5.4865
Quality Restaurant	0.607067 / 0.038749	0.7154	0.0198	4.7000e-004	1.3523
Strip Mall	1.37034 / 0.839887	2.0175	0.0448	1.0700e-003	3.4574
Total		**20.1442**	**0.4638**	**0.0111**	**35.0464**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	7.81848 / 4.92904	11.5839	0.2557	6.1200e-003	19.8002
Hotel	1.94817 / 0.216463	2.3452	0.0637	1.5200e-003	4.3892
Quality Restaurant	0.485654 / 0.0309992	0.5723	0.0159	3.8000e-004	1.0818
Strip Mall	1.09627 / 0.671909	1.6140	0.0359	8.6000e-004	2.7660
Total		**16.1154**	**0.3710**	**8.8800e-003**	**28.0371**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.2478	0.4283	0.0000	17.9561
Unmitigated	28.9912	1.7133	0.0000	71.8244

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	69	14.0064	0.8278	0.0000	34.7002
Hotel	52.56	10.6692	0.6305	0.0000	26.4325
Quality Restaurant	1.83	0.3715	0.0220	0.0000	0.9203
Strip Mall	19.43	3.9441	0.2331	0.0000	9.7714
Total		**28.9912**	**1.7133**	**0.0000**	**71.8244**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	17.25	3.5016	0.2069	0.0000	8.6751
Hotel	13.14	2.6673	0.1576	0.0000	6.6081
Quality Restaurant	0.4575	0.0929	5.4900e-003	0.0000	0.2301
Strip Mall	4.8575	0.9860	0.0583	0.0000	2.4428
Total		**7.2478**	**0.4283**	**0.0000**	**17.9561**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-42.0225	0.0000	0.0000	-42.0225

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	9.75 / 0	-42.0225	0.0000	0.0000	-42.0225
Total		**-42.0225**	**0.0000**	**0.0000**	**-42.0225**

APPENDIX C
BIOLOGICAL RESOURCE REPORT

MOORE BIOLOGICAL CONSULTANTS

February 25, 2022

Mr. Charlie Simpson
BaseCamp Environmental
802 West Lodi Avenue
Lodi, CA 95240

Subject: "LAKEHOUSE" PROJECT, LODI, SAN JOAQUIN COUNTY, CALIFORNIA: BIOLOGICAL ASSESSMENT

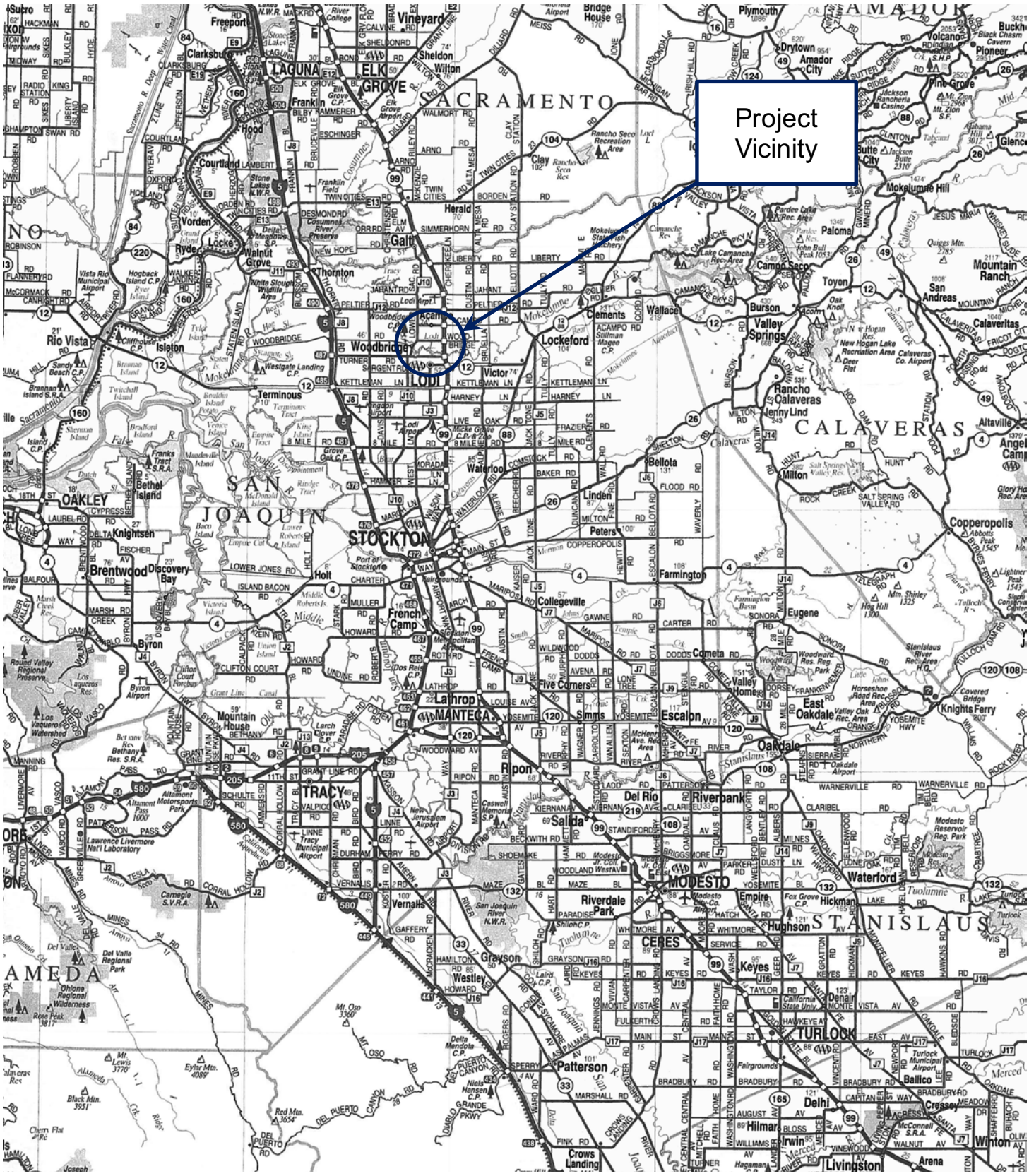
Dear Charlie:

Thank you for asking Moore Biological Consultants to prepare a biological assessment for this 9.3+/- acre site in Lodi, San Joaquin County, California (Figures 1 and 2). The purposes of this assessment are to describe existing biological resources in the project site, identify potentially significant impacts to biological resources from the project, and provide recommendations for how to reduce those impacts to a less-than-significant level. The work involved reviewing databases, aerial photographs, and documents, and conducting a field survey to document vegetation communities, potentially jurisdictional Waters of the U.S. and/or wetlands, and potentially suitable habitat for or presence of special-status species. This report details the methodology and results of our investigation.

Project Overview

The proposed project is a mixed-use hotel/residential project containing a 96-suite "boutique" hotel and 150 one-, two- and three-bedroom apartment units (see Site Plan in Attachment A). The project will provide overnight accommodations for local and regional markets as well as provide an upscale apartment living environment.

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Source: California State Automobile Association

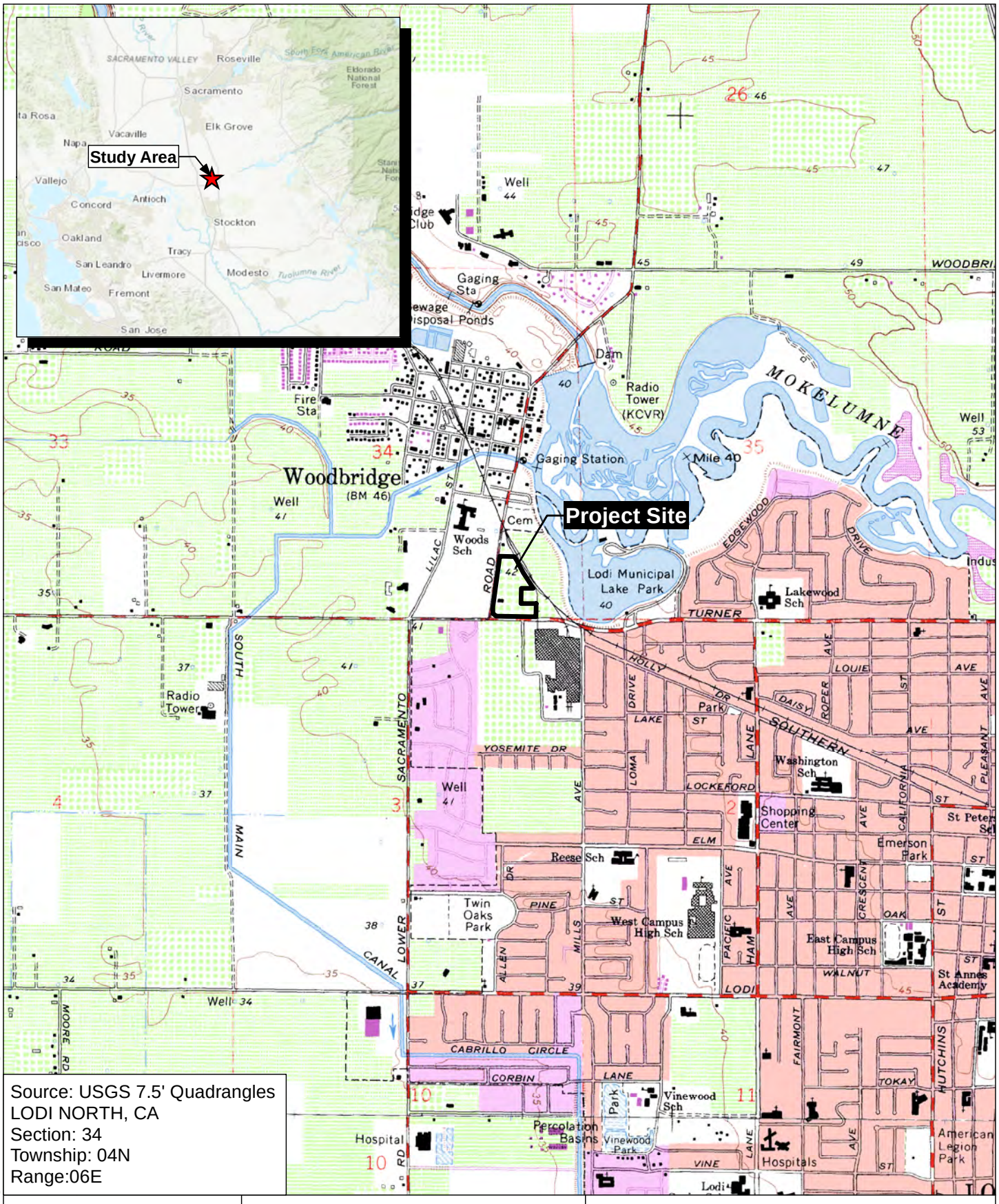
Moore Biological Consultants

N
W E
S

0 9 18 Miles

FIGURE 1

PROJECT VICINITY



Source: USGS 7.5' Quadrangles
LODI NORTH, CA
Section: 34
Township: 04N
Range:06E

Figure 2

Moore Biological Consultants

0 1,000 2,000
Feet

N
W E
S

Map Date: 012/15/2021

USGS

Lakehouse

Lodi, San Joaquin County, CA

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Access to the site will be from two locations on Lower Sacramento Road and one location on Turner Road and the site will be developed with a network of internal roads, associated parking areas, and landscaping. There will be public sidewalks and landscape strips along both the Lower Sacramento Road and Turner Road frontages.

The project will obtain utility services (water, sewer, etc.) from facilities located in the adjoining public streets. An on-site storm drainage collection system will include detention and water quality treatment prior to discharge to existing City storm drain lines in the adjoining streets.

Methods

Prior to the initial field surveys, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, 2019); an updated search was undertaken in December 2021. The CNDDB search was conducted on the USGS 7.5-minute Lodi North, Lodi South, Lockeford and Waterloo topographic quadrangles, encompassing approximately 240+/- square miles surrounding the site (Attachment B). The United States Fish and Wildlife Service (USFWS*)* IPaC Trust Resource Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity was also reviewed (Attachment B). This information was used to identify special-status wildlife and plant species that have been previously documented in the vicinity or have the potential to occur based on suitable habitat and geographical distribution. Additionally, the CNDDB depicts the locations of sensitive habitats. The USFWS on-line-maps of designated critical habitat in the area were also downloaded.

The initial field surveys were conducted on April 9 and May 14, 2019 and an updated survey was conducted on December 17, 2021. The surveys consisted of walking throughout the site making observations of habitat conditions and

noting surrounding land uses, habitat types, and plant and wildlife species. The fieldwork included an assessment of potentially jurisdictional Waters of the U.S. and wetlands as defined by the U.S. Army Corps of Engineers (ACOE, 1987; 2008) and a search for special-status species and suitable habitat for special-status species (e.g., blue elderberry shrubs, vernal pools).

Trees in and near the site were assessed for the potential use by nesting raptors, especially Swainson's hawk (*Buteo swainsoni*). The grassland areas in the site were searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows with evidence of burrowing owl occupancy.

Results

GENERAL SETTING: The project site is in Lodi, in San Joaquin County, California (Figure 1). The site is in Section 34, Township 4 North, Range 6 East of the USGS 7.5-minute Lodi North topographic quadrangle (Figure 2). The site is level and is at an elevation of approximately 40 feet above mean sea level.

Land uses in this part of Lodi are residential, industrial, and recreational (Figure 3). This site is essentially an in-fill parcel that is surrounded by development on all sides. North Lower Sacramento Road bounds the west edge of the site with residential subdivisions further to the west. West Turner Road bounds the south edge of the site, with the former General Mills facility just south of Turner Road. There is a residential area just north of the site. The east edge of the site is bounded by a road associated with the City of Lodi Surface Water Treatment Facility and Lodi Electric Utility substation. There is a Northern California Power Agency (NCPA) facility adjacent to the southeast part of the site (Figure 3 and photographs in Attachment C). Lodi Lake Park is situated further east of the site.

The body of the site contains numerous rows of trees of various varieties with ruderal grassland in between the trees. There are two small storage sheds in the



Figure 3

Moore Biological Consultants

0 100 200
Feet

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Map Date: 12/15/2021
Aerial Source: Google Earth (08/2018)

AERIAL

Lakehouse

Lodi, San Joaquin County, CA

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southwest part of the site and a communication tower in the northeast corner of the site. A set of railroad tracks extends generally north to south through the site. This railway historically extended south across West Turner Road into the old General Mills Facility to the south of the site.

VEGETATION: Due to the amount of disturbance from periodic mowing, spraying and/or disking for weed abatement, and goat grazing, vegetation in the project site is primarily nonnative grass and weed species (see photographs in Attachment C). California annual grassland series (Sawyer and Keeler-Wolf, 1995) best describes the grassland vegetation in the site. Oats (*Avena* sp.), ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*) and foxtail barley (*Hordeum murinum*) are the dominant grass species in the site. Other grassland species such as prickly lettuce (*Lactuca serriola*), common sow-thistle (*Sonchus oleraceus*), milk thistle (*Silybum marianum*), bull thistle (*Cirsium vulgare*), field bindweed (*Convolvulus arvensis*), filaree (*Erodium botrys*), and fireweed (*Epilobium brachycarpum*) are intermixed with the grasses. Table 1 is a list of plant species observed in the site.

There are a variety of trees in the site. Coast redwoods (*Sequoia sempervirens*) line the west and south edges of the site and are intermixed with other species in the body of the site (Figure 3 and photographs in Attachment C). These other tree species include almond (*Prunus dulcis*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), black walnut (*Juglans nigra*), California fan palm (*Washingtonia filifera*), olive (*Olea europaea*), and other ornamental varieties. There is also a large gum (*Eucalyptus* sp.) in the southwest part of the site. There are numerous relatively larger trees along the Mokelumne River and in Lodi Lake Park, just east of the site. There are also some relatively large trees along the Turner Road just south of the site. Additionally, there are several large trees in residential areas adjacent to and surrounding the site.

No blue elderberry (*Sambucus nigra ssp. caerulea*) shrubs were observed in or adjacent to the site.

TABLE 1

PLANT SPECIES OBSERVED IN THE PROJECT SITE

Acer sp.	maple
Avena sp.	oats
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft brome
Carduus pycnocephalus	Italian thistle
Cirsium vulgare	bull thistle
Convolvulus arvensis	field bindweed
Eriobotrya japonica	loquat
Epilobium brachycarpum	fireweed
Erodium botrys	filaree
Eucalyptus sp.	gum tree
Galium aparine	common bedstraw
Geranium dissectum	dissected geranium
Hordeum marinum	seaside barley
Hordeum murinum	foxtail barley
Juglans nigra	black walnut
Lactuca serriola	prickly lettuce
Lolium perenne	perennial ryegrass
Malva neglecta	common mallow
Medicago polymorpha	toothed medick
Olea europaea	European olive
Plantago lanceolata	plantain
Phoenix dactylifera	date palm
Poa annua	annual blue grass
Prunus cerasifera	plum
Prunus dulcis	almond
Pyrus sp.	fruitless pear

TABLE 1
PLANT SPECIES OBSERVED IN THE PROJECT SITE (continued)

Quercus agrifolia	coast live oak
Quercus lobata	valley oak
Ranunculus muricatus	spiny-fruit buttercup
Rumex crispus	curly dock
Sequoia sempervirens	coast redwood
Silybum marianum	milk thistle
Sonchus oleraceus	common sow-thistle
Vulpia myuros	rat-tail six-weeks grass
Washingtonia filifera	California fan palm

WILDLIFE: A variety of bird species were observed during the field surveys; all of which are common species found in urban areas of San Joaquin County (Table 2). American kestrel (*Falco sparverius*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), western bluebird (*Sialia mexicana*), and European starling (*Sturnus vulgaris*) are representative of the avian species observed in the site.

A limited variety of mammals common to urban areas likely occur in the project site. The only mammals observed during the surveys were a western gray squirrel (*Sciurus griseus*) and desert cottontail (*Sylvilagus audubonii*). Black-tailed hare (*Lepus californicus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*) are expected to occur in the project site on occasion. A few California ground squirrel (*Otospermophilus beecheyi*) burrows were observed in the site, primarily along the edges of fence surrounding the NCPA facility.

TABLE 2

WILDLIFE SPECIES DOCUMENTED IN THE PROJECT SITE

Birds	
Mallard	*Anas platyrhynchos*
Turkey vulture	*Cathartes aura*
Red-shouldered hawk	*Buteo lineatus*
Red-tailed hawk	*Buteo jamaicensis*
American kestrel	*Falco sparverius*
Rock dove	*Columba livia*
Mourning dove	*Zenaida macroura*
Acorn woodpecker	*Melanerpes formicivorus*
Nuttall's woodpecker	*Dryobates nuttallii*
Northern flicker	*Colaptes auratus*
Anna's hummingbird	*Calypte anna*
Black phoebe	*Sayornis nigricans*
California scrub jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Western bluebird	*Sialia mexicana*
Northern mockingbird	*Mimus polyglottos*
European starling	*Sturnus vulgaris*
Yellow-rumped warbler	*Setophaga coronata*
Spotted towhee	*Pipilo maculatus*
White-crowned sparrow	*Zonotrichia leucophrys*
Brewer's blackbird	*Euphagus cyanocephalus*
House finch	*Haemorhous mexicanus*
Mammals	
California ground squirrel	*Otospermophilus beecheyi*
Western gray squirrel	*Sciurus griseus*
Desert cottontail	*Sylvilagus audubonii*

Due to lack of suitable habitat, few amphibians and reptiles are expected to use habitats in the site and none were observed during the field surveys. Common species such as western fence lizard (*Sceloporus occidentalis*), Pacific chorus frog (*Pseudacris regilla*) and western terrestrial garter snake (*Thamnophis elegans*) may occur in the site.

There are several potential nest trees within the site that are suitable for nesting raptors and other protected migratory birds, including Swainson's hawk. The most suitable trees in the site are the row of relatively large oaks along the east edge of the site, to the north of the NCPA facility (Figure 3 and photographs in Attachment C). There are numerous large trees in close proximity to site that could also be used for nesting by Swainson's hawk. Due to the presence of large trees in and near the site and suitable raptor foraging habitat (i.e., open fields) in close proximity to site, it is likely one or more pairs of raptors nest in trees in and/or near the site during most years.

The trees in the site also provide nesting habitat for a variety of songbirds. A mallard was observed nesting on the ground in the south part of the site during one of the 2019 surveys. Other ground-nesting songbirds, such as killdeer (*Charadrius vociferus*) and red-winged blackbird (*Agelaius phoeniceus*), may also nest in the grassland habitats in the site.

WATERS OF THE U.S. AND WETLANDS: Waters of the U.S., including wetlands, are broadly defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. Some jurisdictional waters of the U.S. also fall under the jurisdiction of CDFW and/or the California Regional Water Quality Control Board (RWQCB). The Central Valley Flood Protection Board (CVFPB) also has jurisdiction over some waterways.

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes interstate and intrastate rivers and streams, as well as their intermittent tributaries. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. extends to the "ordinary high water mark". The ordinary high water mark is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the ACOE *Wetlands Delineation Manual* and Regional Supplement (ACOE, 1987; 2008). Jurisdictional wetlands are usually adjacent to or hydrologically associated with Waters of the U.S. Isolated wetlands are outside federal jurisdiction, but may be regulated by RWQCB under the State Wetlands Program.

The project site is leveled grasslands that are vegetated with upland grasses and weeds and with soils that appear well draining. No potentially jurisdictional Water of the U.S. or wetlands of any type were observed in the site. There are no areas within the site mapped as aquatic features in the National Wetland Inventory (NWI) (Attachment D).

SPECIAL-STATUS SPECIES: Special-status species are plants and animals that are legally protected under the state and/or federal Endangered Species Act or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations,

nesting or denning locations, communal roosts, and other essential habitats. The presence of species with legal protection under the Endangered Species Act often represents a constraint to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California by the California Native Plant Society (CNPS, 2022). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on List 3 in the CNPS Inventory.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is generally low. Table 3 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

SPECIAL-STATUS PLANTS: Five special-status plants were identified in the CNDDB (2021) search: succulent owl's clover (*Castilleja campestris ssp. succulenta*), legenere (*Legenere limosa*), Mason's lilaeopsis (*Lilaeopsis masonii*), Sanford's arrowhead (*Sagittaria sanfordii*), and Suisun marsh aster (*Symphotrichum lentum*) (Table 3 and Attachment B). No additional special-status plant species are listed on the USFWS IPaC Trust Report.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
PLANTS						
Succulent owl's clover	*Castilleja campestris ssp. succulenta*	T	E	1B	Vernal pools.	Unlikely: there are no vernal pools in the project site. The nearest occurrence of succulent owl's clover in the CNDDB (2021) search area is approximately 8 miles northeast of the site. The site is not within designated critical habitat for this species (USFWS, 2005a).
Legenere	*Legenere limosa*	None	None	1B	Vernal pools.	Unlikely: there are no vernal pools in the project site. The nearest occurrence of this species in the CNDDB (2021) search area is approximately 5 miles northwest of the site.
Mason's lilaeopsis	*Lilaeopsis masonii*	None	R	1B	Marshes, swamps, and riparian scrub.	Unlikely: there is no aquatic habitat in the site. The nearest occurrence of Mason's lilaeopsis in the CNDDB (2021) search area is approximately 10 miles southwest of the site.
Sanford's arrowhead	*Sagittaria sanfordii*	None	None	1B	Standing or slow moving freshwater ponds, marshes, and ditches.	Unlikely: there is no aquatic habitat in the site. The only occurrence of this species in the CNDDB (2021) search area is approximately 7 miles southeast of the site.
Suisun marsh aster	*Symphotrichum lentum*	None	None	1B	Marshes and swamps.	Unlikely: there is no aquatic habitat in the site. The only occurrence of this species in the CNDDB (2021) search area is approximately 7.5 miles southwest of the site.
WILDLIFE						
Birds						
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Nests in large trees along riparian corridors or in open areas. Requires adjacent suitable foraging habitats such as grasslands or alfalfa fields supporting rodents.	Unlikely: the site does not provide suitable Swainson's hawk foraging habitat. Some of the relatively larger trees in and near the site are potentially suitable for nesting. There are many records of nesting Swainson's hawks in in the CNDDB (2021) search area, but most of these records are is agricultural areas several miles from the project site. The nearest record is approximately 1.5 miles west of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Tricolored blackbird	*Agelaius tricolor*	None	T	N/A	Open water and protected nesting substrate, usually cattails and riparian scrub with surrounding foraging habitat.	Unlikely: the site does not provide suitable nesting habitat for this species. The nearest occurrence of nesting tricolored blackbirds in the CNDDB (2021) search area is a historical (1936) record mapped in a nonspecific area just south of the site.
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	T	E	N/A	Nests in riparian forests, along the broad, lower flood-bottoms of larger river systems.	Unlikely: the site does not provide riparian forest habitat for western yellow-billed cuckoo. There are no occurrences of western yellow-billed cuckoo in the CNDDB (2021) search area.
Burrowing owl	*Athene cunicularia*	None	SC	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: no burrowing owls were observed in the site. The grasslands are highly disturbed and periodically maintained. Only a few ground squirrel burrows were observed in the site, none of which had evidence of burrowing owl occupancy. The nearest occurrence of nesting burrowing owls in the CNDDB (2021) search area is approximately 8.5 miles southwest of the site.
Song sparrow ("Modesto Population")	*Melospiza melodia*	None	SC	N/A	Brackish water marshes. Inhabits cattails, tules, and tangles bordering sloughs.	Unlikely: the site does not provide suitable aquatic habitat for this species. The nearest occurrence of the Modesto population of song sparrow in the CNDDB (2021) search area is 5 miles northwest of the site.
Yellow warbler	*Setophaga petechia*	None	SC	N/A	Nests in riparian areas, usually in willows, alders, and cottonwoods.	Unlikely: the site does not provide suitable riparian forest habitat to support this species. The nearest occurrence of yellow warbler in the CNDDB (2021) search area is approximately 9.5 miles northeast of the project site.
Mammals						
Riparian brush rabbit	*Sylvilagus bachmani riparius*	E	E	N/A	Riparian thickets in Stanislaus and southern San Joaquin Counties.	Unlikely: the project site does not provide riparian forest habitat for riparian brush rabbit. There are no recorded occurrences of this species in the CNDDB (2021) search area.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Reptiles & Amphibians						
Giant garter snake	*Thamnophis gigas*	T	T	N/A	Freshwater marshes and low gradient streams. Uses drainage canals and irrigation ditches, primarily for dispersal or migration.	Unlikely: the project site does not provide suitable habitat for giant garter snake. The nearest documented occurrence of this species in the CNDDB (2021) search area is a historic (1976) record approximately 6.5 miles southwest of the project site.
California red-legged frog	*Rana aurora draytonii*	T	SC	N/A	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Unlikely: the project site does not provide suitable habitat for California red-legged frog, which is also presumed extinct on the floor of the Central Valley. There are no occurrences of this species recorded in the CNDDB (2021) in the search area. The site is not in designated critical habitat of this species (USFWS, 2006).
California tiger salamander	*Ambystoma californiense*	T	T	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) and grassland/ woodland habitats with summer refugia (i.e., burrows).	Unlikely: there are no potential breeding ponds in or near the site. The disturbed grasslands in the site do not provide suitable aestivation habitat for this species. The nearest occurrence of California tiger salamander in the CNDDB (2021) search area is approximately 7 miles northeast of the site. The project site is not in designated critical habitat for this species (USFWS, 2005b).
Western pond turtle	*Emys marmorata*	None	SC	N/A	Ponds, marshes, streams, and ditches with emergent aquatic vegetation and basking areas.	Unlikely: there is no aquatic habitat in the site. The nearest documented occurrence of western pond turtle in the CNDDB (2021) search area is approximately 11 miles northeast of the project site.
Foothill yellow-legged frog	*Rana boylii*	None	SC	N/A	Perennial water bodies (i.e., streams and ponds) with abundant riparian vegetation; not found on Central Valley floor.	Unlikely: there is no aquatic habitat in the site. Foothill yellow-legged frog is not known to occur on the valley floor. The only occurrence of this species in the CNDDB (2021) search area is an historical (1958) occurrence approximately 4 miles northwest of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Fish						
Steelhead – Central Valley DPS	*Oncorhynchus mykiss irideus*	T	None	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	None: there is no aquatic habitat in the site. The nearest occurrence of Central Valley steelhead in the CNDDB (2021) search area is in the Mokelumne River, just north of the project site. The project site is not within designated critical habitat for Central Valley steelhead (NOAA, 2005).
Delta smelt	*Hypomesus transpacificus*	T	E	N/A	Shallow lower delta waterways with submersed aquatic plants and other suitable refugia.	None: there is no aquatic habitat in the site. There are no occurrences of this species recorded in the CNDDB (2021) search area. The project site is not in designated critical habitat for delta smelt (USFWS, 1994).
Sacramento splittail	*Pogonichthys macrolepidotus*	None	SC	N/A	Lower Sacramento-San Joaquin Delta in low to moderate salinities.	None: there is no aquatic habitat in the site. The nearest occurrence of Sacramento splittail in the CNDDB (2021) search area is in the Mokelumne River, north of the site.
Invertebrates						
Vernal pool tapole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools	None: there are no vernal pool or seasonal wetlands in the site. The nearest occurrence of vernal pool tadpole shrimp in the CNDDB (2021) search area is a historical (1990) record mapped nonspecifically around Lodi. The site is not in designated critical habitat for this species (USFWS, 2005a).
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools	None: there are no vernal pools or seasonal wetlands the site. The nearest occurrence of vernal pool fairy shrimp in the CNDDB (2021) search area is approximately 6 miles north of the project site. The site is not within designated critical habitat for vernal pool fairy shrimp (USFWS, 2005a).

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Project Site
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs, usually in Central Valley riparian habitats.	None: there are no blue elderberry shrubs in the project site. The nearest occurrence of valley elderberry longhorn beetle in the CNDDB (2021) search area is approximately 7.5 miles northeast of the project site. The site is not within designated critical habitat for valley elderberry longhorn beetle (USFWS, 1980).
Monarch butterfly	*Danaus plexippus*	C	None	N/A	Variety of habitats in California; larvae dependent on milkweed.	Unlikely: there is no suitable habitat in the site to support monarch butterfly and no milkweed was observed in the site. There are no occurrences of this species in the CNDDB (2021) search area.

1 T= Threatened; E = Endangered; C = Candidate for Listing.

2 T = Threatened; E = Endangered; R = Rare; SC = State of California Species of Special Concern

3 CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere.

Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, seasonal wetlands, riparian scrub, and areas with unusual soils. The disked grasslands in the site are highly disturbed and do not provide suitable habitat for any of the plants in Table 3 or any other special-status plants. Due to lack of suitable habitat, no special-status plant species are expected to occur in the site.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of habitats within the project site by special-status wildlife species is low. Special-status wildlife species that have been recorded in greater project vicinity in the CNDDB (2021) include Swainson's hawk, tricolored blackbird (*Agelaius tricolor*), burrowing owl, song sparrow ("Modesto Population") (*Melospiza melodia*), yellow warbler (*Setophaga petechia*), giant garter snake (*Thamnophis gigas*), California tiger salamander (*Ambystoma californiense*), western pond turtle (*Emys marmorata*), foothill yellow-legged frog (*Rana boylii*), Central Valley steelhead (*Oncorhynchus mykiss*), Sacramento splittail (*Pogonichthys macrolepidotus*), vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardi*), and valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). Although not included in the CNDDB within the search area, western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), riparian brush rabbit (*Sylvilagus bachmani riparius*), California red-legged frog (*Rana aurora draytonii*), delta smelt (*Hypomesus transpacificus*), and monarch butterfly (*Danaus plexippus*) are listed in the USFWS IPaC Trust Resource Report (Attachment B).

While the project site may have provided habitat for special-status wildlife species at some time in the past, farming, development, and other human activities have substantially modified natural habitats in the greater project vicinity, including those within the stie. Of the wildlife species identified in the CNDDB, Swainson's hawk and burrowing owl are the only species with potential to occur in the site on more than a transitory or very occasional basis and are discussed below. Other special-status birds, including tricolored blackbird, may

fly over or forage in the area on occasion, but would not be expected to nest in or immediately adjacent to the project site.

SWAINSON'S HAWK: The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The Migratory Bird Treaty Act and Fish and Game Code of California protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through September 15). Swainson's hawk are found in the Central Valley primarily during their breeding season, a population is known to winter in the San Joaquin Valley.

Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, hay, and wheat crops. Most Swainson's hawks are migratory, wintering in Mexico and breeding in California and elsewhere in the western United States. This raptor generally arrives in the Central Valley in mid-March, and begins courtship and nest construction immediately upon arrival at the breeding sites. The young fledge in early July, and most Swainson's hawks leave their breeding territories by late August.

The site is within the nesting range of Swainson's hawks. The CNDDB (2021) contains numerous records of nesting Swainson's hawks in the greater project vicinity (Attachment B), most of which are several miles west of the project site in agricultural areas. The nearest occurrence of nesting Swainson's hawks in the CNDDB (2021) search area is approximately 1.5 miles west of the site. Although not recorded in the CNDDB, Moore Biological Consultants observed Swainson's hawks nesting just approximately 0.5 miles east of the site in 2019 and has observed Swainson's hawks nesting in large trees in Lodi in past years.

The site does not provide suitable Swainson's hawk foraging habitat. However, relatively large trees in and near the site could be used by nesting Swainson's hawks. No Swainson's hawks were observed in the site during the 2019 surveys, which were conducted during the nesting season.

The project will participate in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (HCP) (SJCOG, 2000). Standard Incidental Take Minimization Measures (ITMMs) under the HCP outline protective measures for Swainson's hawk. In the event that construction commences during the nesting season (i.e., if construction starts between March 1 and August 31) and Swainson's hawks are nesting in or adjacent to the site, a construction setback from the nest tree would be required until nesting is complete. The setback is calculated as twice the diameter of the dripline of the nest tree as measured from under the nest, and is usually less than 100 feet.

BURROWING OWL: The Migratory Bird Treaty Act and Fish and Game Code of California protect burrowing owls year-round, as well as their nests during the nesting season (February 1 through August 31). Burrowing owls are a year-long resident in a variety of grasslands as well as scrub lands that have a low density of trees and shrubs with low growing vegetation; burrowing owls that nest in the Central Valley may winter elsewhere.

The primary habitat requirement of the burrowing owl is small mammal burrows for nesting. The owl usually nests in abandoned ground squirrel burrows, although they have been known to dig their own burrows in softer soils. In urban areas, burrowing owls often utilize artificial burrows including pipes, culverts, and piles of concrete pieces. This semi-colonial owl breeds from March through August, and is most active while hunting during dawn and dusk. The nearest record of this species in the CNDDB (2021) search area is approximately 8.5 miles southwest of the site.

The intensity of development surrounding the site reduces the likelihood of burrowing owls using the site for nesting. No burrowing owls were observed in the project site during any of the surveys. Only a few ground squirrel burrows were observed, none of which had evidence of past or current burrowing owl occupancy. The numerous trees in the site also reduce the suitability of the on-site burrows for nesting, as burrowing owls prefer burrows situated in open

grassland areas. Although considered unlikely, burrowing owls may utilize habitats in the site in the future.

Standard ITMMs under the HCP outline protective measures for burrowing owl. If construction is scheduled to commence outside the nesting season (i.e., if construction starts between September 1 and January 31) and burrowing owls are present on-site, they can be passively relocated. In the event that construction commences during the nesting season and burrowing owls are present on-site, a 250-foot construction setback from the natal burrow would be required until nesting is complete.

OTHER SPECIAL-STATUS SPECIES: The site does not provide highly suitable habitat for other special-status wildlife species. A few other special-status birds may fly over or forage in the area on occasion, but would not be expected to nest in the site, primarily due to lack of habitat. For example, the site does not contain riparian vegetation or expansive stands of emergent wetland vegetation to provide suitable nesting habitat for tricolored blackbirds. Similarly, the site does not contain riparian vegetation required by western yellow-billed cuckoo.

The site does not provide riparian forest habitat to support riparian brush rabbit. The site does not provide suitable aquatic habitat for any species of fish, California red-legged frog, California tiger salamander, giant garter snake, western pond turtle, or foothill yellow-legged frog. There are no vernal pools or seasonal wetlands in the site for vernal pool branchiopods (i.e., fairy and tadpole shrimp). There are no blue elderberry shrubs in the site, precluding the potential occurrence of valley elderberry longhorn beetle. Finally, the site does not provide suitable habitat for monarch butterfly and no extensive areas of milkweed, in which monarch larvae is dependent on, was observed in the site during the field surveys.

CRITICAL HABITAT: The Mokelumne River is designated critical habitat for Central Valley steelhead (NOAA, 2005) (Attachment E). Construction of the project will

have no effect on the Mokelumne River and no effect on the suitability of the Mokelumne River for Central Valley steelhead.

The site is not within designated critical habitat for California red-legged frog (USFWS, 2006), California tiger salamander (USFWS, 2005a), federally listed vernal pool shrimp or plants (USFWS, 2005b), delta smelt (USFWS, 1994), valley elderberry longhorn beetle (USFWS, 1980), Central Valley steelhead (NOAA, 2005), or any other federally listed species.

Conclusions and Recommendations

- The site is vegetated in upland grasses and weeds that are periodically disked and/or mowed with several different species of trees. On-site habitats are biologically unremarkable.

- Due to a lack of suitable habitat, it is unlikely that special-status plants occur in the site.

- With the exception of Swainson's hawk and burrowing owls, no special-status wildlife species are expected to occur in the body of the site on more than a very occasional or transitory basis.

- Standard Take Avoidance measures outlined in the HCP for nesting Swainson's hawks and burrowing owl may be required, dependent on SJCOG's Biological Consultant identifying take avoidance measures for these species in the ITMMs that are issued for the project. Standard ITMMs for these species include pre-construction surveys for nesting Swainson's hawks for construction activities between March 1 and September 15 and pre-construction surveys for nesting burrowing owls for construction activities between February 1 through August 31. If the ITMMs include measures for Swainson's hawks and/or burrowing owl,

temporal restrictions on construction specified in the HCP will be required in the event active nests are found. If the ITMMs do not include take avoidance measures for Swainson's hawks and/or burrowing owl, it is recommended the project implement pre-construction surveys and take avoidance measures as outlined it the HCP.

- Trees and grasslands in the site could be used by birds protected by the Migratory Bird Treaty Act of 1918. If vegetation removal or construction commences during the general avian nesting season (March 1 through July 31), a pre-construction survey for all species of nesting birds is recommended. If active nests are found, work in the vicinity of the nests should be delayed until the young fledge.

- The project site is not within an area that is designated as critical habitat for a federally listed species.

We hope this information is useful. Please call me at (209) 745-1159 with any questions.

Sincerely,



Diane S. Moore, M.S.
Principal Biologist

References and Literature Consulted

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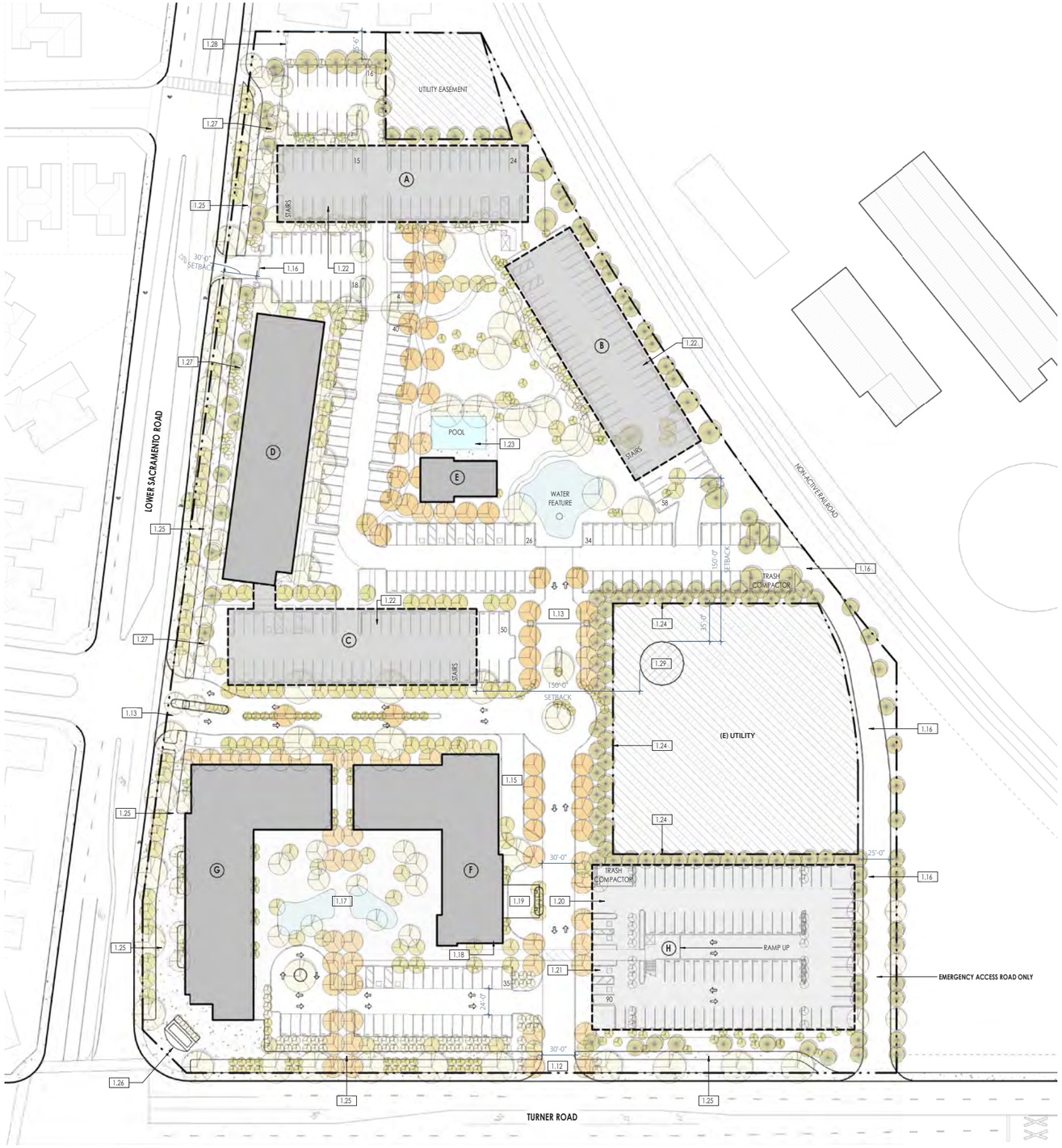
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USFWS. 2006a. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for California Red-Legged Frog, and Special Rule Exemption Associated with Final Listing for Existing Routine Ranching Activities, Final Rule. Federal Register Vol. 71, No. 71, April 13.

Attachment A

Site Plan



SITE STRUCTURE LEGEND

KEYNOTE	USE	SF	-	HT/STORIES
(A)	**HOUSING/ GARAGE**	**63,000 SF**	-	**55'-2" FT, 4 STY**
(B)	**HOUSING/GARAGE**	**63,000 SF**	-	**55'-2" FT, 4 STY**
(C)	**HOUSING/GARAGE**	**63,000 SF**	-	**55'-2" FT, 4 STY**
(D)	**HOUSING**	**49,500 SF**	-	**45'-11" FT, 3 STY**
(E)	**HOUSING COMMUNITY CENTER**	**3,500 SF**	-	**20FT, 2 STY**
(F)	**COMMERCIAL/HOTEL**	*1	-	**52FT, 3&4 STY**
(G)	**RETAIL/HOTEL**	*1	-	**36FT, 2&3 STY**

*1
COMMERCIAL/RETAIL/HOTEL **96,000 SF**
GROUND LEVEL RETAIL: (18,500SF)
BANQUET: (245 OCCUPANTS)
RESTAURANT: (70 OCCUPANTS)
HOTEL UNITS: (96 SUITES)

HOUSING

54 UNITS 1 BEDROOM, 1 1/2 BATH - APPROX 800 SF

88 UNITS 2 BEDROOM, 2 1/2 BATH - APPROX 1,150 SF

8 UNITS 3 BEDROOM, 2 1/2 BATH - APPROX 1,500 - 1,700 SF

150 UNITS (TOTAL)

PARKING REQUIREMENTS

7.12.18 CITY OF LODI CODE OF ORDINANCES CHAPTER 17.32

COMMERCIAL	SQ. FT.	# OF UNITS	OCC LOAD	PRKG CODE	PRKG REQ.
HOTEL	-	96	-	1 PER guest room	96
RETAIL	18,500	-	-	1 PER 500 sf	37
RESTAURANT	-	-	70	1 PER 4 seats	17.5
BANQUET	3,600		245	1 PER 4 seats	62
TOTAL					**213**
HOUSING					
1 Bedroom	-	54		1 PER BEDROOM	54
				(Guest) 1 PER 5	10
2 Bedroom	-	88		1 PER BEDROOM	176
				(Guest) 1 PER 5	18
3 Bedroom	-	8		1 PER BEDROOM	24
				(Guest) 1 PER 5	1
TOTAL					**283**

COMMERCIAL PARKING PROPOSED	
Commercial Uncovered	35
Covered Parking Structure	180
Total	**215**

HOUSING PARKING PROPOSED	
Housing Uncovered	128
Covered Parking	130
Guest Parking	30
Bicycle Parking	(20)
Total	**288**

SITE INFO

APN 015-64-009 & 003

PARCEL SF 439,937 SF
ACRES 10 ACRES

KEYNOTES

1.12	COMMERCIAL HOTEL & RETAIL MAIN ENTRANCE
1.13	HOUSING MAIN ENTRANCE
1.15	SMALL & MEDIUM SIZE TRUCK DELIVERY
1.16	EMERGENCY ACCESS ROAD (ONLY)
1.17	HOTEL & RETAIL PUBLIC GARDENS
1.18	HOTEL LOBBY ENTRANCE
1.19	COVERED HOTEL VECHILE ENTRANCE
1.20	PARKING GARAGE INGRESS EGRESS
1.21	2 LEVEL PARKING GARAGE
1.22	HOUSING STRUCTURE: 3 STORY HOUSING WITH AT GRADE SINGLE LEVEL PARKING STRUCTURE
1.23	OUTDOOR AMENITY POOL & LOUNGE
1.24	14' PROPOSED SOUND WALL (3 SIDES) ADJACENT TO NCPA PROPERTY LINE
1.25	PROPOSED PEDESTRIAN SIDEWALK WITH LANDSCAPING ON BOTH SIDES
1.26	MONUMENT SIGN & LANDSCAPING
1.27	3'-0" SOLID WALL WITH 3'-0" IRON FENCE ALONG RESIDENCE PROPERTY
1.28	UTILITY EASEMENT
1.29	(E) DIESEL TANK, 150'-0" SETBACK PROPOSED FROM ANY STRUCTURE

LEGEND

PROPERTY LINE

PUBLIC UTILITY EASEMENT

LANDSCAPE/ TURF

CONCRETE WALK/ FLAT WORK

PERVIOUS PAVERS

ACCESSIBLE PATH OF TRAVEL.

SITE PLAN

LAKEHOUSE | 10.15.21 | SCHEMATIC DESIGN

NJA

Attachment B

CNDDB Summary Report and Exhibits

& USFWS IPaC Trust Report

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Lodi North (3812123) OR Lodi South (3812113) OR Lockeford (3812122) OR Waterloo (3812112))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Castilleja campestris var. succulenta succulent owl's-clover	PDSCR0D3Z1	Threatened	Endangered	G4?T2T3	S2S3	1B.2
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
Lilaeopsis masonii Mason's lilaeopsis	PDAPI19030	None	Rare	G2	S2	1B.1
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Melospiza melodia song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
Rana boylii foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2

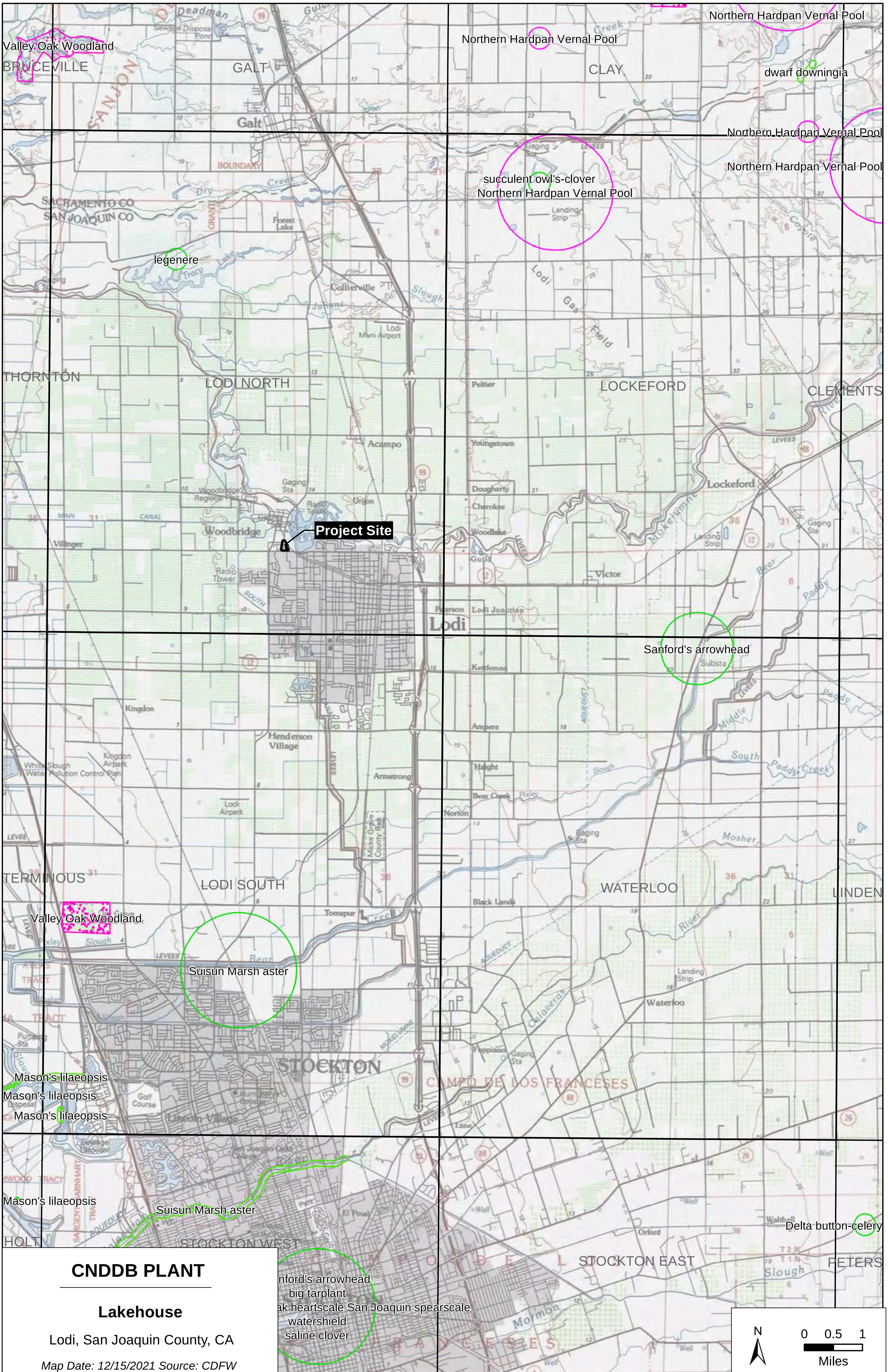
Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
Symphyotrichum lentum Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Valley Oak Woodland Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	

Record Count: 23

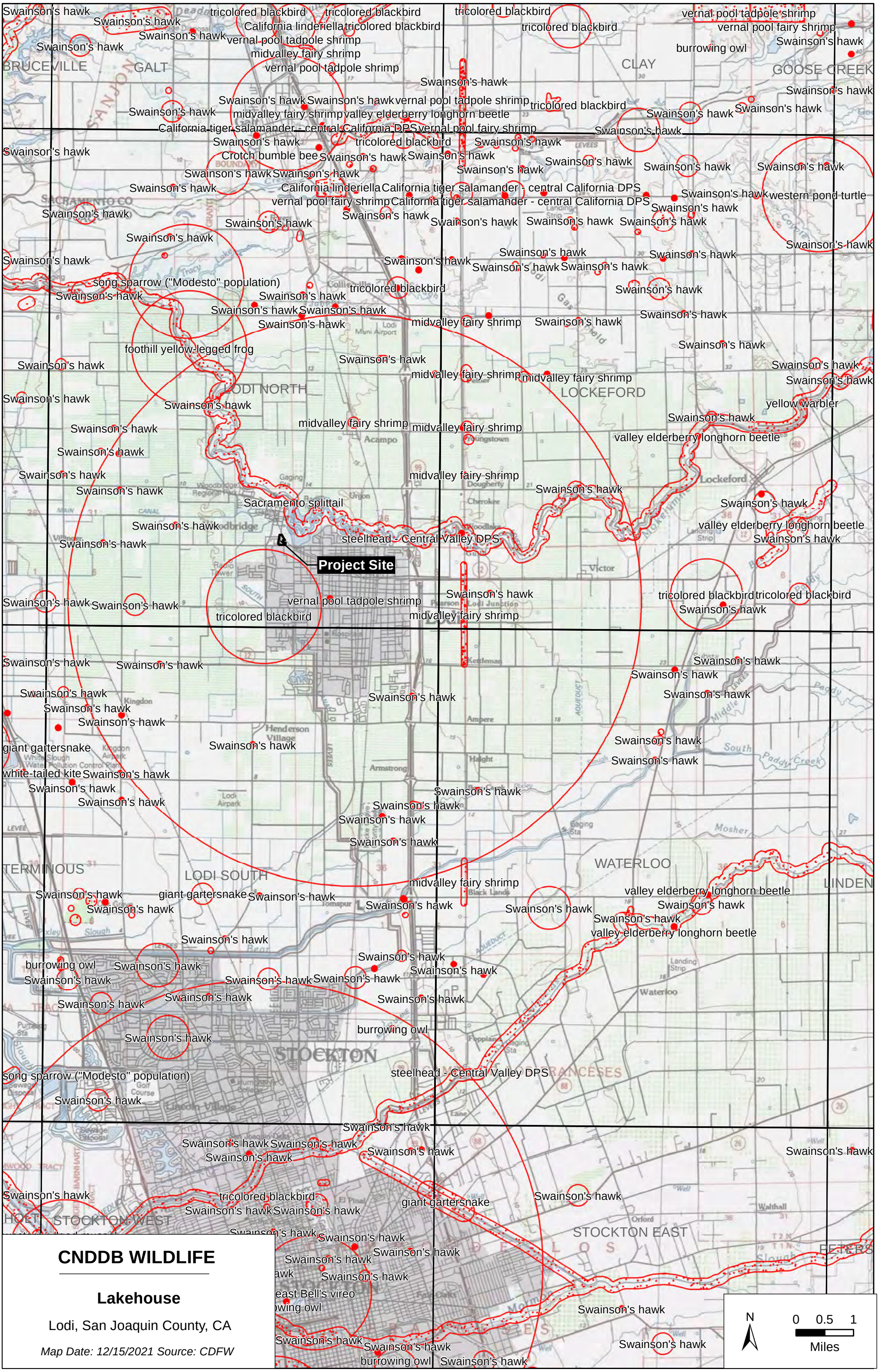


CNDDB PLANT

Lakehouse

Lodi, San Joaquin County, CA

Map Date: 12/15/2021 Source: CDFW


Swainson's hawk
tricolored blackbird
California linderiella
vernal pool tadpole shrimp
midvalley fairy shrimp
valley elderberry longhorn beetle
California tiger salamander - central California DPS
vernal pool fairy shrimp
Crotch bumble bee
western pond turtle
song sparrow ("Modesto" population)
foothill yellow-legged frog
burrowing owl
yellow warbler
giant gartersnake
white-tailed kite
Sacramento splittail
steelhead - Central Valley DPS
Project Site
BRUCEVILLE
GALT
CLAY
GOOSE CREEK
LODI NORTH
LOCKEFORD
TERMINOUS
LODI SOUTH
WATERLOO
LINDEN
STOCKTON
STOCKTON EAST
STOCKTON WEST
Lockeford
Victor
Waterloo
Acampo
Woodbridge
Lodi Airpark
Lodi Muni Airport
Henderson Village
Lincoln Village
Kingdon
Kingdon Airpark
Armstrong
Haight
Ampere
Kettleman
Dougherty
Cherokee
Urgon
Tomspur
Yungstown
Black Lands
Fair Oaks
Walthall
Orford
Mosher
South Paddy Creek
Middle Paddy
Gaging Sta
Landing Strip
SACRAMENTO CO
SAN JOAN
CANAL
AQUEDUCT
LEVEES
CNDDB WILDLIFE
Lakehouse
Lodi, San Joaquin County, CA
Map Date: 12/15/2021 Source: CDFW
N
0 0.5 1
Miles

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

San Joaquin County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NOT FOR CONSULTATION

NAME	STATUS
Riparian Brush Rabbit Sylvilagus bachmani riparius Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6189	Endangered

Birds

NAME	STATUS
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Giant Garter Snake Thamnophis gigas Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/321	Threatened

NOT FOR CONSULTATION

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Fleshy Owl's-clover Castilleja campestris ssp. succulenta Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8095	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

NOT FOR CONSULTATION

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE

NOT FOR CONSULTATION

WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

NOT FOR CONSULTATION

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

NOT FOR CONSULTATION

No Data (–)

A week is marked as having no data if there were no survey events for that week.

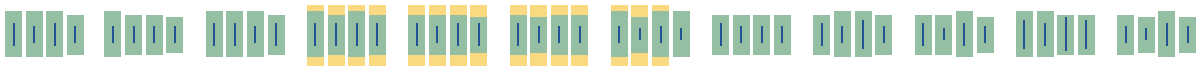
Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

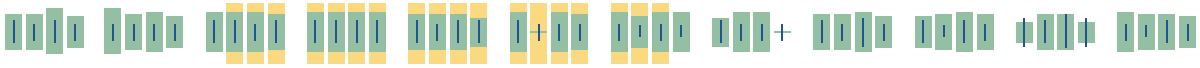


NOT FOR CONSULTATION

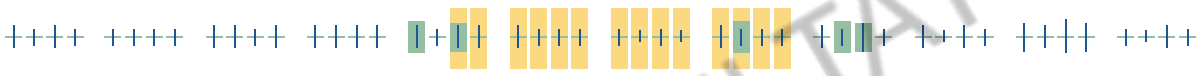
Nuttall's Woodpecker BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



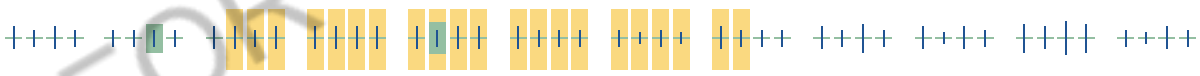
Oak Titmouse BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



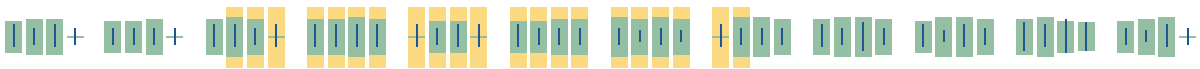
Olive-sided Flycatcher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tricolored Blackbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

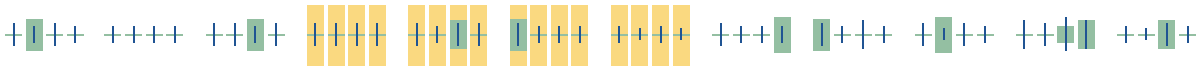


Wrentit BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



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Yellow-billed Magpie BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird

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on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential

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impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

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The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Attachment C

Photographs



Storage shed and asphalt road in the southwest part of the site, looking southeast from the west part of the site; 12/17/21.



Railroad tracks that historically supported a train, looking northeast from the south part of the site; 12/17/21.



Large eucalyptus tree in the south part of the site, looking northeast; 12/17/21.



Rows of trees in the southwest part of the site, looking northwest; 12/17/21.



Cluster of trees in the approximate central part of the site, looking northwest from just west of the power substation adjacent to the site; 12/17/21.



A few large trees along the east edge of the site, looking northeast from just north of the power substation adjacent to the site; 12/17/21.



South edge of the site, looking east from the southwest part of the site; 12/17/21.



East edge of the site, looking northwest from just north of the power substation adjacent to the site; 12/17/21. There are a few large oak trees within the site and just off-site along the east edge.



Cluster of trees in the north part of the site, looking south from the north edge of the site; 12/17/21.



West edge of the site, looking south from the northwest corner of the site; 12/17/21.

Attachment D

National Wetland Inventory Map

U.S. Fish and Wildlife Service
National Wetlands Inventory

Lakehouse



December 15, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment E

Designated Critical Habitat

Steelhead

Delta smelt

Fleshy owl's-clover

Project Site

CRITICAL HABITAT

Lakehouse

Lodi, San Joaquin County, CA

Map Date: 12/15/2021 Source: CDFW

N

0 0.5 1

Miles

APPENDIX D
CULTURAL RESOURCE REPORT

Federal and State law protects cultural resources in part by keeping the location of resources confidential and unavailable to the general public. Reports are available to qualified reviewers at the offices of the Lodi Community Development Department
221 West Pine Street Lodi, CA 95240

APPENDIX E
Tribal Contacts

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

May 29, 2018

Jason Coleman
Solano Archaeological Services

Sent by Email: Jason@solanoarchaeology.com
Number of Pages:

RE: 1018 N. Lower Sacramento Road Hotel, Lodi North, San Joaquin County

Dear Mr. Coleman:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. **Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.**

I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. **By contacting all those on the list, your organization will be better able to respond to claims of failure to consult**. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: Sharaya.Souza@nahc.ca.gov.

Sincerely,

Sharaya Souza
Staff Services Analyst
(916) 573-0168

Native American Heritage Commission
Native American Contacts
5/29/2018

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk / Miwok
Sacramento , CA 95811
rhonda@buenavistatribe.com
(916) 491-0011 Office
(916) 491-0012 Fax

Ione Band of Miwok Indians
Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699 — Miwok
Plymouth , CA 95669
Sara@ionemiwok.net
(209) 245-5800 Office
(209) 245-6377 Fax

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden , CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn , CA 95603 — Miwok
(530) 883-2390 Office
(530) 883-2380 Fax

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove , CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office
(916) 683-6015 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
1018 N. Lower Sacramento Road Hotel, Lodi North, San Joaquin County.

131 Sunset Avenue, Suite E # 120
Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

June 27, 2018

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street
Elk Grove, CA 95624

Dear Mr. Hitchcock:

BaseCamp Environmental, Inc. has recently retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximate 8.8-acre project area in Lodi, San Joaquin County, California, proposed for the development of a mixed-use residential apartment complex and hotel-banquet-restaurant building (Project).

The Project is situated in the southeast corner of Section 34 on the U.S. Geological Survey (USGS) Lodi North, California, 7.5-minute quadrangle map, in Township 4 South, Range 6 East (see attached maps). The 8.8-acre project area is comprised of two parcels (Accessors Parcel Numbers [APN] 015-640-03 and 015-640-02) located at the intersection of Turner Road (Project area's south side) and North Lower Sacramento Road (Project area's west side).

The proposed apartment building will house 150 units (mixed 1-3 bedroom units) with a total of 260 parking stalls, and an additional 2,500 square foot support office containing the main lobby, fitness club, general manager offices, a service elevator, and outdoor pool. The proposed four-story, 54,000 square-foot hotel would be built with a central exterior garden courtyard and includes a 70-seat ground floor restaurant, and 100 guest rooms on the upper three floors. The second floor would feature a 200-person banquet room. A two-story 50,000 square foot parking garage containing a total of 244 parking stalls will be built to accommodate the hotel patronage, and the hotel exterior courtyard will include covered outdoor patios and landscaped raised planting beds at grade. The demolition and removal of the existing ancillary sheds and orchard trees will be necessary to facilitate the construction of the hotel and apartment complex.

The Native American Heritage Commission Sacred Land File search and the archaeological records search at the Central California Information System at California State University, Stanislaus, were both negative for known cultural resources in the project area. However, given the location of the Project a half a mile west of the Mokelumne River, and the past recordation of a prehistoric burial and occupation site (P-39-0172) within a half a mile radius of the project area, SAS considers the project area archaeological sensitive.

We are writing to see if you know of any unrecorded prehistoric cultural resources in the involved parcels. Any input would be greatly appreciated. Please know that this request is for informational purposes only, and is not part of SB 18 or AB 52 review.

Sincerely,

Jason Coleman
Principal Investigator and Owner

Enc. USGS topographic map

131 Sunset Avenue, Suite E # 120
Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

June 27, 2018

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden, CA 95236

Dear Ms. Perez:

BaseCamp Environmental, Inc. has recently retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximate 8.8-acre project area in Lodi, San Joaquin County, California, proposed for the development of a mixed-use residential apartment complex and hotel-banquet-restaurant building (Project).

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Sincerely,

Jason Coleman
Principal Investigator and Owner

Enc. USGS topographic map

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Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

June 27, 2018

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200
Sacramento 95811

Dear Ms. Morningstar Pope:

BaseCamp Environmental, Inc. has recently retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximate 8.8-acre project area in Lodi, San Joaquin County, California, proposed for the development of a mixed-use residential apartment complex and hotel-banquet-restaurant building (Project).

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Sincerely,

Jason Coleman
Principal Investigator and Owner

Enc. USGS topographic map

131 Sunset Avenue, Suite E # 120
Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

June 27, 2018

Ione Band of Miwok Indians
Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699
Plymouth, CA 95669

Dear Ms. Dutschke Setchwaelo:

BaseCamp Environmental, Inc. has recently retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximate 8.8-acre project area in Lodi, San Joaquin County, California, proposed for the development of a mixed-use residential apartment complex and hotel-banquet-restaurant building (Project).

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Sincerely,

Jason Coleman
Principal Investigator and Owner

Enc. USGS topographic map

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Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

June 27, 2018

United Auburn Indian Community of the Auburn Rancheria
Attn. Gene Whitehouse, Chairperson
10720 Indian Hill Road
Auburn, CA 95603

Dear Mr. Whitehouse:

BaseCamp Environmental, Inc. has recently retained Solano Archaeological Services (SAS) to conduct a cultural resources inventory of an approximate 8.8-acre project area in Lodi, San Joaquin County, California, proposed for the development of a mixed-use residential apartment complex and hotel-banquet-restaurant building (Project).

The Project is situated in the southeast corner of Section 34 on the U.S. Geological Survey (USGS) Lodi North, California, 7.5-minute quadrangle map, in Township 4 South, Range 6 East (see attached maps). The 8.8-acre project area is comprised of two parcels (Accessors Parcel Numbers [APN] 015-640-03 and 015-640-02) located at the intersection of Turner Road (Project area's south side) and North Lower Sacramento Road (Project area's west side).

The proposed apartment building will house 150 units (mixed 1-3 bedroom units) with a total of 260 parking stalls, and an additional 2,500 square foot support office containing the main lobby, fitness club, general manager offices, a service elevator, and outdoor pool. The proposed four-story, 54,000 square-foot hotel would be built with a central exterior garden courtyard and includes a 70-seat ground floor restaurant, and 100 guest rooms on the upper three floors. The second floor would feature a 200-person banquet room. A two-story 50,000 square foot parking garage containing a total of 244 parking stalls will be built to accommodate the hotel patronage, and the hotel exterior courtyard will include covered outdoor patios and landscaped raised planting beds at grade. The demolition and removal of the existing ancillary sheds and orchard trees will be necessary to facilitate the construction of the hotel and apartment complex.

The Native American Heritage Commission Sacred Land File search and the archaeological records search at the Central California Information System at California State University, Stanislaus, were both negative for known cultural resources in the project area. However, given the location of the Project a half a mile west of the Mokelumne River, and the past recordation of a prehistoric burial and occupation site (P-39-0172) within a half a mile radius of the project area, SAS considers the project area archaeological sensitive.

We are writing to see if you know of any unrecorded prehistoric cultural resources in the involved parcels. Any input would be greatly appreciated. Please know that this request is for informational purposes only, and is not part of SB 18 or AB 52 review.

Sincerely,

Jason Coleman
Principal Investigator and Owner

Enc. USGS topographic map

APPENDIX F
GEOSEARCH REPORTS

GeoSearch

On time. On target. In touch.™

Radius Report

Satellite view

Target Property:

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin County, California 95242

Prepared For:

BaseCamp Environmental

Order #: 108219
Job #: 237366
Project #: 2941
Date: 05/12/2018

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Unlocatable Report . . . . . See Attachment

Zip Report . . . . . See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR §312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal,state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR §312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

Lodi California
1018 N Lower Sacramento Rd
Lodi, California 95242

Coordinates
Point (-121.30186, 38.146393)
43 feet above sea level

USGS Quadrangle
Lodi North, CA

Geographic Coverage Information

County/Parish: San Joaquin (CA)
ZipCode(s):
Acampo CA: 95220
Lodi CA: 95240, 95242
Woodbridge CA: 95258

Radon
* Target property is located in Radon Zone 3.
Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L (picocuries per liter).

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSCA	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR09	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR09	0	0	0.1250
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000

SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR09	0	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
FACILITY REGISTRY SYSTEM	FRSCA	0	0	TP/AP
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR09	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR09	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR09	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	0	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	0	0	1.0000

SUB-TOTAL		0	0	

Database Summary

STATE (CA) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
DTSC DEED RESTRICTIONS	DTSCDR	0	0	TP/AP
ABOVE GROUND STORAGE TANKS	ABST	0	0	0.2500
ABOVEGROUND STORAGE TANKS PRIOR TO JANUARY 2008	AST2007	1	0	0.2500
HISTORICAL UNDERGROUND STORAGE TANKS	HISTUST	1	0	0.2500
STATEWIDE ENVIRONMENTAL EVALUATION AND PLANNING SYSTEM	SWEEPS	2	0	0.2500
UNDERGROUND STORAGE TANKS	USTCUPA	1	0	0.2500
BROWNFIELD SITES	BF	0	0	0.5000
CALSITES DATABASE	CALSITES	0	0	0.5000
GEOTRACKER CLEANUP SITES	CLEANUPSITES	4	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	4	0	0.5000
SOLID WASTE INFORMATION SYSTEM SITES	SWIS	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM	VCP	0	0	0.5000
ENVIROSTOR CLEANUP SITES	ENVIROSTOR	2	0	1.0000
ENVIROSTOR PERMITTED AND CORRECTIVE ACTION SITES	ENVIROSTORPCA	0	0	1.0000

SUB-TOTAL		15	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
CALIFORNIA HAZARDOUS MATERIAL INCIDENT REPORT SYSTEM	CHMIRS	0	0	TP/AP
CLANDESTINE DRUG LABS	CDL	0	0	TP/AP
EMISSIONS INVENTORY DATA	EMI	0	0	TP/AP
HAZARDOUS WASTE TANNER SUMMARY	HWTS	0	0	TP/AP
LAND DISPOSAL SITES	LDS	0	0	TP/AP
MILITARY CLEANUP SITES	MCS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM FACILITIES	NPDES	0	0	TP/AP
RECORDED ENVIRONMENTAL CLEANUP LIENS	LIENS	0	0	TP/AP
CALIFORNIA MEDICAL WASTE MANAGEMENT PROGRAM FACILITY LIST	MWMP	0	0	0.2500
DTSC REGISTERED HAZARDOUS WASTE TRANSPORTERS	DTSCHWT	0	0	0.2500
DRY CLEANER FACILITIES	CLEANER	2	0	0.2500
MINES LISTING	MINES	0	0	0.2500

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SPILLS, LEAKS, INVESTIGATION & CLEANUP RECOVERY LISTING	SLIC	0	0	0.2500
CORTESE LIST	CORTESE	0	0	0.5000
EXPEDITED REMOVAL ACTION PROGRAM SITES	ERAP	0	0	0.5000
HISTORICAL CORTESE LIST	HISTCORTESE	3	0	0.5000
LISTING OF CERTIFIED DROPOFF, COLLECTION, AND COMMUNITY SERVICE PROGRAMS	DROP	0	0	0.5000
LISTING OF CERTIFIED PROCESSORS	PROC	0	0	0.5000
NO FURTHER ACTION DETERMINATION	NFA	0	0	0.5000
RECYCLING CENTERS	SWRCY	0	0	0.5000
REFERRED TO ANOTHER LOCAL OR STATE AGENCY	REF	0	0	0.5000
SITES NEEDING FURTHER EVALUATION	NFE	0	0	0.5000
WASTE MANAGEMENT UNIT DATABASE	WMUDS	0	0	0.5000
TOXIC PITS CLEANUP ACT SITES	TOXPITS	0	0	1.0000

SUB-TOTAL		5	0	

Database Summary

LOCAL LISTING

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SAN JOAQUIN COUNTY CUPA	SJCCUPA	21	0	0.5000
SUB-TOTAL		21	0	

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR09	0	0	0.2500
ILLEGAL DUMP SITES ON THE TORRES MARTINEZ RESERVATION	TORRESDUMPSITES	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR09	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	

TOTAL		41	0	

Database Radius Summary

FEDERAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
ECHOR09	0.0200	0	NS	NS	NS	NS	NS	0
ERNSCA	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
FRSCA	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR09	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR09	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR09	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR09	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
RCRANGR09	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	0	NS	NS	NS	0
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
DNPL	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NLRRCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
SEMS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMSARCH	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
NMS	1.0000	0	0	0	0	0	NS	0
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
PNPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RCRASUBC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RODS	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0

Database Radius Summary

STATE (CA) LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
CDL	0.0200	0	NS	NS	NS	NS	NS	0
CHMIRS	0.0200	0	NS	NS	NS	NS	NS	0
DTSCDR	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
EMI	0.0200	0	NS	NS	NS	NS	NS	0
HWTS	0.0200	0	NS	NS	NS	NS	NS	0
LDS	0.0200	0	NS	NS	NS	NS	NS	0
LIENS	0.0200	0	NS	NS	NS	NS	NS	0
MCS	0.0200	0	NS	NS	NS	NS	NS	0
NPDES	0.0200	0	NS	NS	NS	NS	NS	0
ABST	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
AST2007	**0.2500**	**0**	**1**	**0**	**NS**	**NS**	**NS**	**1**
CLEANER	0.2500	0	0	2	NS	NS	NS	2
DTSCHWT	0.2500	0	0	0	NS	NS	NS	0
HISTUST	**0.2500**	**0**	**0**	**1**	**NS**	**NS**	**NS**	**1**
MINES	0.2500	0	0	0	NS	NS	NS	0
MWMP	0.2500	0	0	0	NS	NS	NS	0
SLIC	0.2500	0	0	0	NS	NS	NS	0
SWEEPS	**0.2500**	**0**	**0**	**2**	**NS**	**NS**	**NS**	**2**
USTCUPA	**0.2500**	**0**	**0**	**1**	**NS**	**NS**	**NS**	**1**
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
CALSITES	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
CLEANUPSITES	**0.5000**	**0**	**0**	**3**	**1**	**NS**	**NS**	**4**
CORTESE	0.5000	0	0	0	0	NS	NS	0
DROP	0.5000	0	0	0	0	NS	NS	0
ERAP	0.5000	0	0	0	0	NS	NS	0
HISTCORTESE	0.5000	0	0	3	0	NS	NS	3
LUST	**0.5000**	**0**	**0**	**3**	**1**	**NS**	**NS**	**4**
NFA	0.5000	0	0	0	0	NS	NS	0
NFE	0.5000	0	0	0	0	NS	NS	0
PROC	0.5000	0	0	0	0	NS	NS	0
REF	0.5000	0	0	0	0	NS	NS	0
SWIS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SWRCY	0.5000	0	0	0	0	NS	NS	0
VCP	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
WMUDS	0.5000	0	0	0	0	NS	NS	0

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ENVIROSTOR	**1.0000**	**0**	**0**	**0**	**0**	**2**	**NS**	**2**
ENVIROSTORPCA	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
TOXPITS	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	1	15	2	2	0	20

Database Radius Summary

LOCAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
SJCCUPA	0.5000	0	4	4	13	NS	NS	21
SUB-TOTAL		0	4	4	13	0	0	21

Database Radius Summary

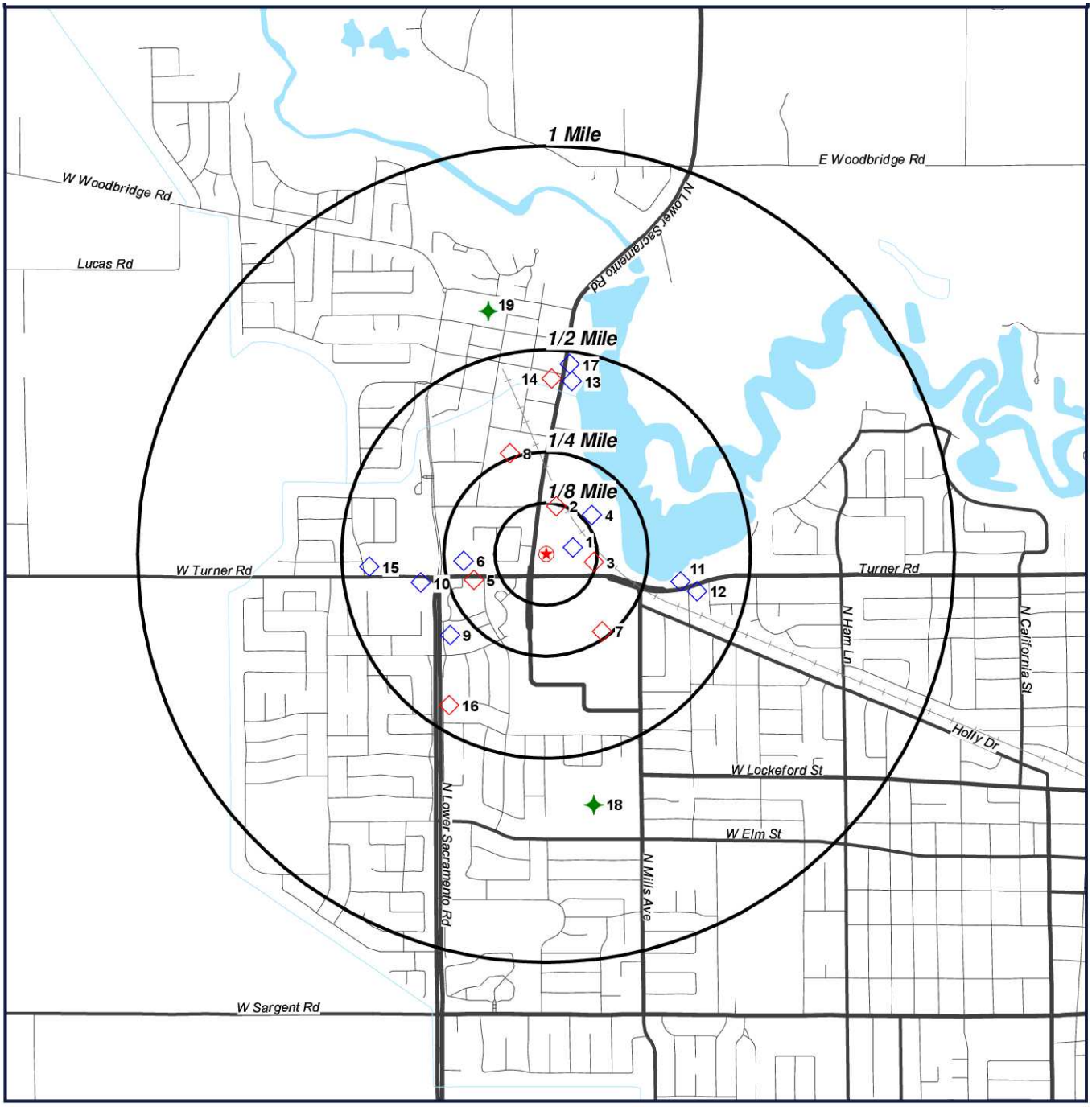
TRIBAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR09	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
LUSTR09	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
ODINDIAN	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
TORRESDUMPSITES	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	5	19	15	2	0	41

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



Target Property (TP)
SJCCUPA
ENVIROSTOR

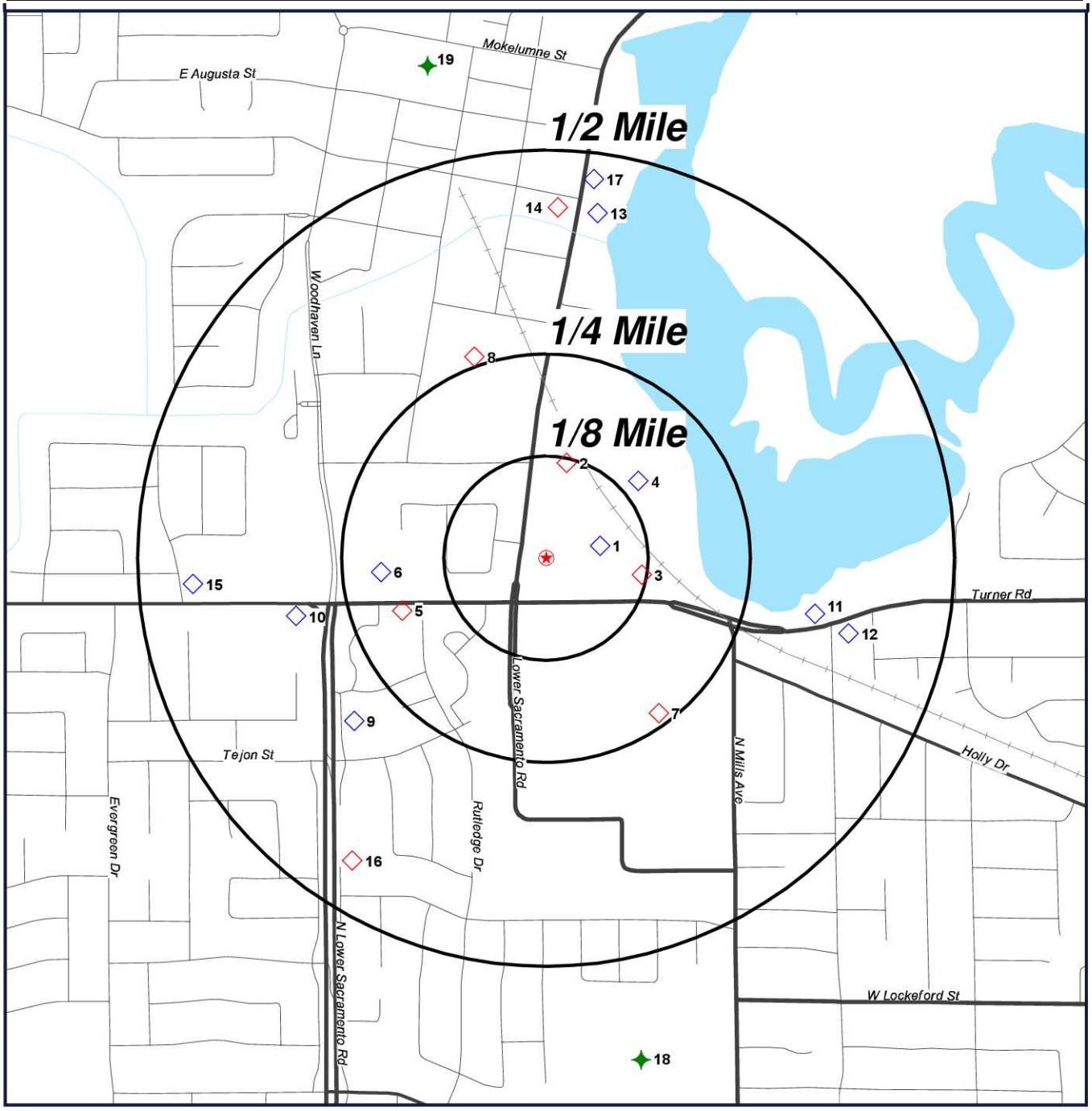
Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

[Click here to access Satellite view]

Radius Map 2



Target Property (TP)
SJCCUPA
ENVIROSTOR

Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

N
W E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

[Click here to access Satellite view]

Ortho Map



Target Property (TP)
SJCCUPA
ENVIROSTOR

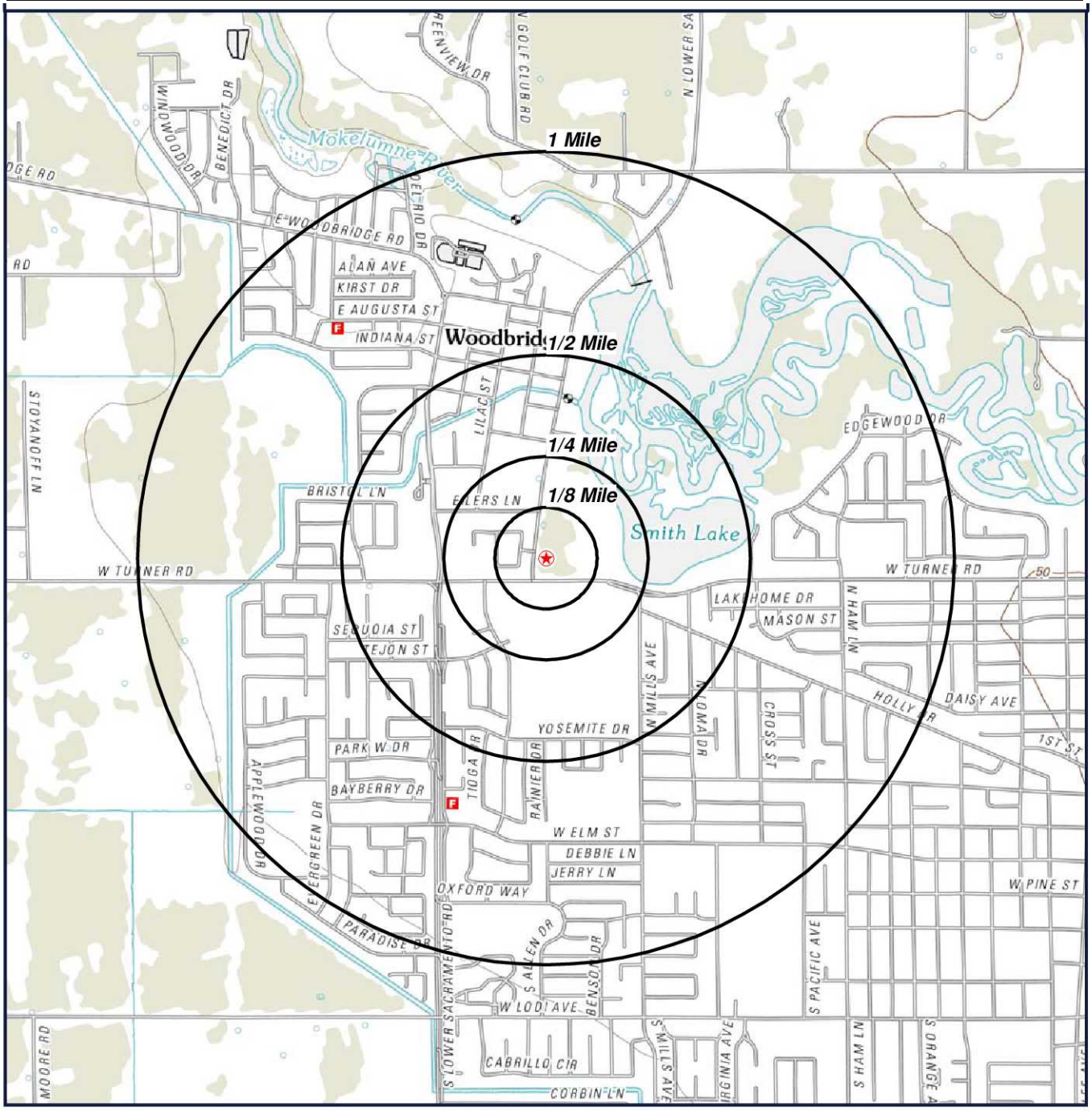
Quadrangle(s): Lodi North
Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

N
W E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Click here to access Satellite view

Topographic Map



Target Property (TP)

Quadrangle(s): Lodi North
Source: USGS, 03/22/2012
Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Click here to access Satellite view

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	***AST2007***	***2155589739***	***Higher (44 ft.)***	***0.068 mi. E (359 ft.)***	***NCPA CT NO.1 (LODI FACILITY)***	***2131 W. TURNER RD., LODI, CA 94240***	***22***
1	SJCCUPA	FA0009893	Higher (44 ft.)	0.068 mi. E (359 ft.)	NORTHERN CALIF POWER - LODI	2131 W TURNER RD, LODI, CA 95240	23
2	SJCCUPA	FA0022547	Equal (43 ft.)	0.119 mi. NNE (628 ft.)	AT&T MOBILITY - EAST HWY 4 - STANLEY ROAD (USID47627)	1100 N LOWER SACRAMENTO RD, LODI, CA 95242	25
3	SJCCUPA	FA0010268	Higher (44 ft.)	0.12 mi. E (634 ft.)	LODI ELEC UTIL	2101 W TURNER RD, LODI, CA 95242	26
3	SJCCUPA	FA0010717	Higher (44 ft.)	0.12 mi. E (634 ft.)	LODI WATER DIV WELL #7	2101 W TURNER RD, LODI, CA 95242	28
4	SJCCUPA	FA0023261	Equal (43 ft.)	0.147 mi. ENE (776 ft.)	SURFACE WATER TREATMENT FACILITY	2001 W TURNER RD, LODI, CA 95242	30
5	***CLEANUPSITES***	***T0607700800***	***Equal (43 ft.)***	***0.187 mi. WSW (987 ft.)***	***PLAZA LIQUORS***	***2420 TURNER RD, LODI, CA 95242***	***31***
5	HISTCORTESE	390979COR	Equal (43 ft.)	0.187 mi. WSW (987 ft.)	PLAZA LIQUORS	2420 TURNER, LODI, CA 95242	34
5	***LUST***	***T0607700800***	***Equal (43 ft.)***	***0.187 mi. WSW (987 ft.)***	***PLAZA LIQUORS***	***2420 TURNER RD, LODI, CA 95242***	***35***
5	SJCCUPA	FA0004139	Equal (43 ft.)	0.187 mi. WSW (987 ft.)	PLAZA LIQUOR AND GAS	2420 W TURNER RD, LODI, CA 95242	36
5	***USTCUPA***	***3481902658***	***Equal (43 ft.)***	***0.187 mi. WSW (987 ft.)***	***PLAZA LIQUOR AND GAS***	***2420 W TURNER RD, LODI, CA 95242***	***38***
6	CLEANER	CAD982053886	Equal (43 ft.)	0.202 mi. W (1067 ft.)	WOODLAKE CLEANERS	2401 W TURNER RD, LODI, CA 95240	39
6	CLEANER	CAL000268547	Equal (43 ft.)	0.202 mi. W (1067 ft.)	WOODLAKE CLEANERS INC.	2401 W TURNER RD, LODI, CA 95242	40
6	SJCCUPA	FA0009801	Equal (43 ft.)	0.202 mi. W (1067 ft.)	WOODLAKE CLEANERS INC.	2401 W TURNER RD, LODI, CA 95242	41
7	***CLEANUPSITES***	***T0607700115***	***Higher (44 ft.)***	***0.236 mi. SE (1246 ft.)***	***GENERAL MILLS LODI CASE #1***	***2000 TURNER RD W, LODI, CA 95240***	***43***
7	***CLEANUPSITES***	***T0607700885***	***Higher (44 ft.)***	***0.236 mi. SE (1246 ft.)***	***GENERAL MILLS - CASE #2***	***2000 TURNER RD W, LODI, CA 95242***	***44***
7	HISTCORTESE	390165COR	Higher (44 ft.)	0.236 mi. SE (1246 ft.)	GENERAL MILLS LODI CASE	2000 TURNER, LODI, CA 95242	46
7	HISTCORTESE	391069COR	Higher (44 ft.)	0.236 mi. SE (1246 ft.)	GENERAL MILLS - CASE #2	2000 TURNER, LODI, CA 95242	47
7	***HISTUST***	***0002FC85***	***Higher (44 ft.)***	***0.236 mi. SE (1246 ft.)***	***GENERAL MILLS INC LODI PLANT***	***2000 W TURNER ROAD, LODI, CA 95241***	***48***
7	***LUST***	***T0607700115***	***Higher (44 ft.)***	***0.236 mi. SE (1246 ft.)***	***GENERAL MILLS LODI CASE #1***	***2000 TURNER RD W, LODI, CA 95240***	***52***
7	***LUST***	***T0607700885***	***Higher (44 ft.)***	***0.236 mi. SE (1246 ft.)***	***GENERAL MILLS - CASE #2***	***2000 TURNER RD W, LODI, CA 95242***	***53***
7	SJCCUPA	FA0003881	Higher (44 ft.)	0.236 mi. SE (1246 ft.)	GENERAL MILLS	2000 W TURNER RD, LODI, CA 95242	54

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
7	***SWEEPS***	***A39-000-1381***	***Higher (44 ft.)***	***0.236 mi. SE (1246 ft.)***	***GENERAL MILLS***	***2000 W TURNER ROAD, LODI, CA 95241***	***56***
7	***SWEEPS***	***I39-000-1381***	***Higher (44 ft.)***	***0.236 mi. SE (1246 ft.)***	***GENERAL MILLS***	***2000 W TURNER ROAD, LODI, CA 95240***	***57***
8	SJCCUPA	FA0003187	Equal (43 ft.)	0.261 mi. NNW (1378 ft.)	LODI USD-WOODBRIDGE SCHOOL	1290 LILAC ST, LODI, CA 95242	58
9	SJCCUPA	FA0024012	Equal (43 ft.)	0.308 mi. SW (1626 ft.)	LODI CITY WELL #15	830 N LOWER SACRAMENTO RD, LODI, CA 95242	59
10	SJCCUPA	FA0003846	Equal (43 ft.)	0.314 mi. W (1658 ft.)	VERIZON BUSINESS: LDIKCA	2500 W TURNER RD, LODI, CA 95242	60
10	SJCCUPA	FA0005202	Equal (43 ft.)	0.314 mi. W (1658 ft.)	GENERAL ELECTRIC	2500 W TURNER RD, LODI, CA 95240	63
10	SJCCUPA	FA0010201	Equal (43 ft.)	0.314 mi. W (1658 ft.)	MCIT (TURNER)	2500 W TURNER RD, LODI, CA 95242	64
11	SJCCUPA	FA0000608	Higher (47 ft.)	0.337 mi. E (1779 ft.)	LODI LAKE PARK	1301 W TURNER RD, LODI, CA 95242	66
12	SJCCUPA	FA0003933	Higher (47 ft.)	0.382 mi. E (2017 ft.)	SNOW WHITE DRIVE INN	1210 W TURNER RD, LODI, CA 95242	67
13	SJCCUPA	FA0010211	Equal (43 ft.)	0.426 mi. N (2249 ft.)	WOODBRIDGE IRRIGATION DIST-SIT	18750 N LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258	68
14	SJCCUPA	FA0009319	Equal (43 ft.)	0.429 mi. N (2265 ft.)	WOODBRIDGE IRRIGATION DIST-SIT	18777 N LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258	69
15	SJCCUPA	FA0024024	Lower (42 ft.)	0.433 mi. W (2286 ft.)	LODI CITY WELL #26	1020 BRIDGETOWNE DR, LODI, CA 95242	71
16	SJCCUPA	FA0006264	Equal (43 ft.)	0.441 mi. SW (2328 ft.)	MARTHA WAGNER	520 LOWER SACRAMENTO RD, LODI, CA 95240	72
17	***CLEANUPSITES***	***T10000010016***	***Equal (43 ft.)***	***0.467 mi. N (2466 ft.)***	***JAS'S ENTERPRISES INC.***	***18806 NORTH LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258***	***73***
17	***LUST***	***T10000010016***	***Equal (43 ft.)***	***0.467 mi. N (2466 ft.)***	***JAS'S ENTERPRISES INC.***	***18806 NORTH LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258***	***75***
17	SJCCUPA	FA0003607	Equal (43 ft.)	0.467 mi. N (2466 ft.)	WOODBRIDGE AM PM*	18806 N LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258	76
17	SJCCUPA	FA0013572	Equal (43 ft.)	0.467 mi. N (2466 ft.)	WIGHT ENTERPRISES 2 LLC	18806 LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258	78
18	***ENVIROSTOR***	***39010028***	***Equal (43 ft.)***	***0.626 mi. SSE (3305 ft.)***	***MILLSWOOD MIDDLE SCHOOL***	***233 NORTH MILLS AVENUE, LODI, CA 95242***	***79***
19	***ENVIROSTOR***	***39510035***	***Lower (42 ft.)***	***0.629 mi. NNW (3321 ft.)***	***CALIFORNIA FUELS***	***838 MOKELUMNE STREET, WOODBRIDGE, CA 95258***	***80***

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 43 ft.

*NOTE: Standard environmental records are displayed in **bold**.*

EQUAL/HIGHER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	***AST2007***	***44 ft.***	***NCPA CT NO.1 (LODI FACILITY)***	***2131 W. TURNER RD., LODI, CA 94240***	***22***
1	SJCCUPA	44 ft.	NORTHERN CALIF POWER - LODI	2131 W TURNER RD, LODI, CA 95240	23
2	SJCCUPA	43 ft.	AT&T MOBILITY - EAST HWY 4 - STANLEY ROAD (USID47627)	1100 N LOWER SACRAMENTO RD, LODI, CA 95242	25
3	SJCCUPA	44 ft.	LODI ELEC UTIL	2101 W TURNER RD, LODI, CA 95242	26
3	SJCCUPA	44 ft.	LODI WATER DIV WELL #7	2101 W TURNER RD, LODI, CA 95242	28
4	SJCCUPA	43 ft.	SURFACE WATER TREATMENT FACILITY	2001 W TURNER RD, LODI, CA 95242	30
5	***CLEANUPSITES***	***43 ft.***	***PLAZA LIQUORS***	***2420 TURNER RD, LODI, CA 95242***	***31***
5	HISTCORTESE	43 ft.	PLAZA LIQUORS	2420 TURNER, LODI, CA 95242	34
5	***LUST***	***43 ft.***	***PLAZA LIQUORS***	***2420 TURNER RD, LODI, CA 95242***	***35***
5	SJCCUPA	43 ft.	PLAZA LIQUOR AND GAS	2420 W TURNER RD, LODI, CA 95242	36
5	***USTCUPA***	***43 ft.***	***PLAZA LIQUOR AND GAS***	***2420 W TURNER RD, LODI, CA 95242***	***38***
6	CLEANER	43 ft.	WOODLAKE CLEANERS	2401 W TURNER RD, LODI, CA 95240	39
6	CLEANER	43 ft.	WOODLAKE CLEANERS INC.	2401 W TURNER RD, LODI, CA 95242	40
6	SJCCUPA	43 ft.	WOODLAKE CLEANERS INC.	2401 W TURNER RD, LODI, CA 95242	41
7	***CLEANUPSITES***	***44 ft.***	***GENERAL MILLS LODI CASE #1***	***2000 TURNER RD W, LODI, CA 95240***	***43***
7	***CLEANUPSITES***	***44 ft.***	***GENERAL MILLS - CASE #2***	***2000 TURNER RD W, LODI, CA 95242***	***44***
7	HISTCORTESE	44 ft.	GENERAL MILLS LODI CASE	2000 TURNER, LODI, CA 95242	46
7	HISTCORTESE	44 ft.	GENERAL MILLS - CASE #2	2000 TURNER, LODI, CA 95242	47
7	***HISTUST***	***44 ft.***	***GENERAL MILLS INC LODI PLANT***	***2000 W TURNER ROAD, LODI, CA 95241***	***48***
7	***LUST***	***44 ft.***	***GENERAL MILLS LODI CASE #1***	***2000 TURNER RD W, LODI, CA 95240***	***52***
7	***LUST***	***44 ft.***	***GENERAL MILLS - CASE #2***	***2000 TURNER RD W, LODI, CA 95242***	***53***
7	SJCCUPA	44 ft.	GENERAL MILLS	2000 W TURNER RD, LODI, CA 95242	54
7	***SWEEPS***	***44 ft.***	***GENERAL MILLS***	***2000 W TURNER ROAD, LODI, CA 95241***	***56***
7	***SWEEPS***	***44 ft.***	***GENERAL MILLS***	***2000 W TURNER ROAD, LODI, CA 95240***	***57***
8	SJCCUPA	43 ft.	LODI USD-WOODBRIDGE SCHOOL	1290 LILAC ST, LODI, CA 95242	58
9	SJCCUPA	43 ft.	LODI CITY WELL #15	830 N LOWER SACRAMENTO RD, LODI, CA 95242	59
10	SJCCUPA	43 ft.	VERIZON BUSINESS: LDIKCA	2500 W TURNER RD, LODI, CA 95242	60
10	SJCCUPA	43 ft.	GENERAL ELECTRIC	2500 W TURNER RD, LODI, CA 95240	63
10	SJCCUPA	43 ft.	MCIT (TURNER)	2500 W TURNER RD, LODI, CA 95242	64
11	SJCCUPA	47 ft.	LODI LAKE PARK	1301 W TURNER RD, LODI, CA 95242	66
12	SJCCUPA	47 ft.	SNOW WHITE DRIVE INN	1210 W TURNER RD, LODI, CA 95242	67
13	SJCCUPA	43 ft.	WOODBRIDGE IRRIGATION DIST-SIT	18750 N LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258	68
14	SJCCUPA	43 ft.	WOODBRIDGE IRRIGATION DIST-SIT	18777 N LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258	69
16	SJCCUPA	43 ft.	MARTHA WAGNER	520 LOWER SACRAMENTO RD, LODI, CA 95240	72

Elevation Summary

Map ID#	Database Name	Elevation	Site Name	Address	Page #
17	***CLEANUPSITES***	***43 ft.***	***JAS'S ENTERPRISES INC.***	***18806 NORTH LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258***	***73***
17	***LUST***	***43 ft.***	***JAS'S ENTERPRISES INC.***	***18806 NORTH LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258***	***75***
17	SJCCUPA	43 ft.	WOODBRIDGE AM PM*	18806 N LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258	76
17	SJCCUPA	43 ft.	WIGHT ENTERPRISES 2 LLC	18806 LOWER SACRAMENTO RD, WOODBRIDGE, CA 95258	78
18	***ENVIROSTOR***	***43 ft.***	***MILLSWOOD MIDDLE SCHOOL***	***233 NORTH MILLS AVENUE, LODI, CA 95242***	***79***

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
15	SJCCUPA	42 ft.	LODI CITY WELL #26	1020 BRIDGETOWNE DR, LODI, CA 95242	71
19	***ENVIROSTOR***	***42 ft.***	***CALIFORNIA FUELS***	***838 MOKELUMNE STREET, WOODBRIDGE, CA 95258***	***80***

Aboveground Storage Tanks Prior to January 2008 (AST2007)

MAP ID# 1

Distance from Property: 0.068 mi. (359 ft.) E
Elevation: 44 ft. (Higher than TP)

SITE INFORMATION

GEOSEARCH ID#: **2155589739**

NAME: **NCPA CT NO.1 (LODI FACILITY)**

ADDRESS: **2131 W. TURNER RD.**
LODI, CA 94240

TOTAL GALLONS: **122000**

OWNER INFORMATION

OWNER NAME: **NORTHERN CALIF. POWER AGENCY**

Back to Report Summary

MAP ID# 1

Distance from Property: 0.068 mi. (359 ft.) E
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0009893**
FACILITY ID: **FA0009893**
FACILITY NAME: **NORTHERN CALIF POWER - LODI**
ADDRESS: **2131 W TURNER RD**
LODI, CA 95240
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0509893**
CERS ID: **10183001**
APN: **NOT REPORTED**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-333-6373**
EMAIL: **ACCTSPAYABLE@NCPA.COM**
OWNER: **NORTHERN CALIFORNIA POWER AGENCY**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6373**

PROGRAM ID: **PR0512181**
CERS ID: **10183001**
APN: **NOT REPORTED**
PE: **2224**
DESCRIPTION: **HAZ MAT BUSINESS PLAN AUTHORIZATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-333-6373**
EMAIL: **ACCTSPAYABLE@NCPA.COM**
OWNER: **NORTHERN CALIFORNIA POWER AGENCY**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6373**

PROGRAM ID: **PR0514087**
CERS ID: **10183001**
APN: **NOT REPORTED**
PE: **2220**
DESCRIPTION: **SM HW GEN <5 TONS/YR**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-333-6373**
EMAIL: **ACCTSPAYABLE@NCPA.COM**
OWNER: **NORTHERN CALIFORNIA POWER AGENCY**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6373**

PROGRAM ID: **PR0519940**
CERS ID: **10183001**
APN: **NOT REPORTED**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-333-6373**
EMAIL: **ACCTSPAYABLE@NCPA.COM**
OWNER: **NORTHERN CALIFORNIA POWER AGENCY**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6373**

PROGRAM ID: **PR0535925**
CERS ID: **10183001**
APN: **NOT REPORTED**
PE: **2833**
DESCRIPTION: **AST FAC 100 K + 1 - </=1 M GAL CUMULATIVE**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-333-6373**
EMAIL: **ACCTSPAYABLE@NCPA.COM**
OWNER: **NORTHERN CALIFORNIA POWER AGENCY**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6373**

PROGRAM ID: **PR0514691**
CERS ID: **10183001**
APN: **NOT REPORTED**
PE: **2226**
DESCRIPTION: **CALARP PROGRAM**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-333-6373**
EMAIL: **ACCTSPAYABLE@NCPA.COM**
OWNER: **NORTHERN CALIFORNIA POWER AGENCY**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6373**

Back to Report Summary

San Joaquin County CUPA (SJCCUPA)

MAP ID# 2

Distance from Property: 0.119 mi. (628 ft.) NNE
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0022547**
FACILITY ID: **FA0022547**
FACILITY NAME: **AT&T MOBILITY - EAST HWY 4 - STANLEY ROAD (USID47627)**
ADDRESS: **1100 N LOWER SACRAMENTO RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0539442**
CERS ID: **10479913**
APN: **NOT REPORTED**
PE: **1926**
DESCRIPTION: **HMBP-REMOTE NETWORK LOCATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **800-638-2822**
EMAIL: **NOT REPORTED**
OWNER: **NEW CINGULAR WIRELESS PCS, LLC DBA AT&T MOBILITY**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **214-464-2626**

Back to Report Summary

MAP ID# 3

Distance from Property: 0.12 mi. (634 ft.) E
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0010268**
FACILITY ID: **FA0010268**
FACILITY NAME: **LODI ELEC UTIL**
ADDRESS: **2101 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0510268**
CERS ID: **10183385**
APN: **1523013**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-368-3766**
EMAIL: **KENGELMANN@LODIELECTRIC.COM**
OWNER: **CITY OF LODI**
HOME PHONE: **209-333-6709**
WORK PHONE: **209-333-3800**

PROGRAM ID: **PR0512556**
CERS ID: **10183385**
APN: **1523013**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-368-3766**
EMAIL: **KENGELMANN@LODIELECTRIC.COM**
OWNER: **CITY OF LODI**
HOME PHONE: **209-333-6709**
WORK PHONE: **209-333-3800**

PROGRAM ID: **PR0514263**
CERS ID: **10183385**
APN: **01523013**
PE: **2220**
DESCRIPTION: **SM HW GEN <5 TONS/YR**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-368-3766**
EMAIL: **KENGELMANN@LODIELECTRIC.COM**
OWNER: **CITY OF LODI**
HOME PHONE: **209-333-6709**
WORK PHONE: **209-333-3800**

PROGRAM ID: **PR0512556**
CERS ID: **10183385**
APN: **01523013**
PE: **1926**
DESCRIPTION: **HMBP-REMOTE NETWORK LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-368-3766**
EMAIL: **KENGELMANN@LODIELECTRIC.COM**
OWNER: **CITY OF LODI**
HOME PHONE: **209-333-6709**
WORK PHONE: **NOT REPORTED**

Back to Report Summary

MAP ID# 3

Distance from Property: 0.12 mi. (634 ft.) E
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0010717**
FACILITY ID: **FA0010717**
FACILITY NAME: **LODI WATER DIV WELL #7**
ADDRESS: **2101 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0513005**
CERS ID: **10183775**
APN: **1523013**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-333-6800**
EMAIL: **BCOOPER@LODI.GOV**
OWNER: **CITY OF LODI**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6800**

PROGRAM ID: **PR0528453**
CERS ID: **10183775**
APN: **01523013**
PE: **2840**
DESCRIPTION: **AST EXEMPT FAC < 1,320 GAL**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-333-6800**
EMAIL: **BCOOPER@LODI.GOV**
OWNER: **CITY OF LODI**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6800**

PROGRAM ID: **PR0513005**
CERS ID: **10183775**
APN: **01523013**
PE: **1926**
DESCRIPTION: **HMBP-REMOTE NETWORK LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209--33-3-67**
EMAIL: **BCOOPER@LODI.GOV**
OWNER: **CITY OF LODI**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6740**

Back to Report Summary

San Joaquin County CUPA (SJCCUPA)

MAP ID# 4

Distance from Property: 0.147 mi. (776 ft.) ENE
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0023261**
FACILITY ID: **FA0023261**
FACILITY NAME: **SURFACE WATER TREATMENT FACILITY**
ADDRESS: **2001 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0540690**
CERS ID: **10655026**
APN: **NOT REPORTED**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-333-6878**
EMAIL: **NOT REPORTED**
OWNER: **CITY OF LODI - ATTN: TRAVIS KAHRS**
HOME PHONE: **209-333-6878**
WORK PHONE: **209-333-6841**

Back to Report Summary

MAP ID# 5

Distance from Property: 0.187 mi. (987 ft.) WSW
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T0607700800**
URL LINK: CLICK HERE
BUSINESS NAME: **PLAZA LIQUORS**
ADDRESS: **2420 TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **390979**
STATUS: **COMPLETED - CASE CLOSED 02/06/2013**
POTENTIAL CONTAMINATION:
BENZENE, * CHLORINATED HYDROCARBONS, * FUEL OXYGENATES, GASOLINE, MTBE / TBA / OTHER FUEL OXYGENATES, * * TERT-BUTYL ALCOHOL (TBA), * TERT-BUTYL ALCOHOL (TBA)
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY
SITE HISTORY:
IN 1997, 4 USTS WERE REMOVED AND CONTAMINATION WAS DISCOVERED. THE USTS WERE REPLACED. A SOIL AND GROUND WATER INVESTIGATION (11 MWS) WAS COMPLETED, CORRECTIVE ACTION WAS CONDUCTED VIA 12 SVE/AS WELLS. GROUND WATER CONCENTRATIONS ARE DECLINING. SITE NFAR LETTER ISSUED AND SITE CLOSED.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	01/01/50	LEAK DISCOVERY
OTHER	01/01/50	LEAK REPORTED
OTHER	01/01/50	LEAK STOPPED
REMEDIATION	01/01/50	EXCAVATION
REMEDIATION	01/01/50	SOIL VAPOR EXTRACTION (SVE)
ENFORCEMENT	02/06/2013	CLOSURE/NO FURTHER ACTION LETTER
ENFORCEMENT	01/31/2013	FILE REVIEW - CLOSURE
ENFORCEMENT	01/29/2013	FILE REVIEW - CLOSURE
ENFORCEMENT	01/04/2013	FILE REVIEW - CLOSURE
ENFORCEMENT	12/10/2012	FILE REVIEW - CLOSURE
ENFORCEMENT	10/11/2012	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	10/01/2012	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	09/09/2012	STAFF LETTER
ENFORCEMENT	08/20/2012	LOP CASE CLOSURE SUMMARY TO RB
ENFORCEMENT	07/03/2012	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	06/26/2012	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
RESPONSE	03/29/2012	CLEAN UP FUND - 5-YEAR REVIEW SUMMARY
ENFORCEMENT	10/04/2011	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	02/25/2011	FILE REVIEW
ENFORCEMENT	11/23/2010	CLEAN UP FUND - LETTER TO RP
RESPONSE	08/23/2010	CLEAN UP FUND - 5-YEAR REVIEW SUMMARY
ENFORCEMENT	08/02/2010	FILE REVIEW

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	02/22/2010	FILE REVIEW
ENFORCEMENT	07/21/2009	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	06/23/2009	FILE REVIEW
RESPONSE	05/07/2009	CLEAN UP FUND - 5-YEAR REVIEW SUMMARY
REMEDIATION	04/24/2009	SOIL VAPOR EXTRACTION (SVE)
REMEDIATION	04/02/2009	SOIL VAPOR EXTRACTION (SVE)
ENFORCEMENT	12/31/2008	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	07/21/2008	STAFF LETTER - #07/21/2008
RESPONSE	05/30/2008	CLEAN UP FUND - 5-YEAR REVIEW SUMMARY
ENFORCEMENT	01/02/2008	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER - #01/02/2008
ENFORCEMENT	11/12/2004	OTHER REPORT
ENFORCEMENT	10/01/2004	OTHER REPORT
ENFORCEMENT	07/28/2004	OTHER REPORT
ENFORCEMENT	07/20/2004	OTHER REPORT
ENFORCEMENT	02/25/2004	OTHER REPORT
ENFORCEMENT	11/05/2003	OTHER REPORT
ENFORCEMENT	06/19/2003	OTHER REPORT
ENFORCEMENT	05/01/2003	OTHER REPORT
ENFORCEMENT	08/22/2002	OTHER REPORT
ENFORCEMENT	06/03/2002	OTHER REPORT
ENFORCEMENT	05/16/2002	OTHER REPORT
ENFORCEMENT	03/04/2002	OTHER REPORT
ENFORCEMENT	01/24/2002	OTHER REPORT
ENFORCEMENT	12/21/2001	OTHER REPORT
ENFORCEMENT	08/27/2001	OTHER REPORT
ENFORCEMENT	08/08/2001	OTHER REPORT
ENFORCEMENT	05/29/2001	OTHER REPORT
ENFORCEMENT	02/19/2001	OTHER REPORT
ENFORCEMENT	10/30/2000	OTHER REPORT
ENFORCEMENT	06/07/2000	OTHER REPORT
ENFORCEMENT	06/06/1997	NOTICE OF RESPONSIBILITY
REMEDIATION	06/04/1997	EXCAVATION
OTHER	05/29/1997	LEAK REPORTED
OTHER	05/23/1997	LEAK DISCOVERY
OTHER	05/16/1997	LEAK STOPPED

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	02/06/2013
OPEN - ELIGIBLE FOR CLOSURE	09/09/2012
OPEN - VERIFICATION MONITORING	12/30/2011
OPEN - REMEDIATION	08/11/2009
OPEN - SITE ASSESSMENT	02/23/2000

STATUS:	DATE:
OPEN - SITE ASSESSMENT	**06/06/1997**
OPEN - CASE BEGIN DATE	**05/16/1997**

CONTACT DETAILS

ORGANIZATION: **CENTRAL VALLEY RWQCB (REGION 5S)**
ADDRESS: **11020 SUN CENTER DRIVE #200**
CITY: **RANCHO CORDOVA**
CONTACT NAME: **ALAN BUEHLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ALAN.BUEHLER@WATERBOARDS.CA.GOV**

Back to Report Summary

Historical Cortese List (HISTCORTESE)

MAP ID# 5

Distance from Property: 0.187 mi. (987 ft.) WSW
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **390979COR**
ID#: **390979**
NAME: **PLAZA LIQUORS**
ADDRESS: **2420 TURNER**
LODI, CA 95242

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 5

Distance from Property: 0.187 mi. (987 ft.) WSW
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T0607700800**
URL LINK: CLICK HERE
BUSINESS NAME: **PLAZA LIQUORS**
ADDRESS: **2420 TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **390979**
STATUS: **02/06/2013**
POTENTIAL CONTAMINATION:
BENZENE, * CHLORINATED HYDROCARBONS, * FUEL OXYGENATES, GASOLINE, MTBE / TBA / OTHER FUEL OXYGENATES, * * TERT-BUTYL ALCOHOL (TBA), * TERT-BUTYL ALCOHOL (TBA)
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY
SITE HISTORY:
IN 1997, 4 USTS WERE REMOVED AND CONTAMINATION WAS DISCOVERED. THE USTS WERE REPLACED. A SOIL AND GROUND WATER INVESTIGATION (11 MWS) WAS COMPLETED, CORRECTIVE ACTION WAS CONDUCTED VIA 12 SVE/AS WELLS. GROUND WATER CONCENTRATIONS ARE DECLINING. SITE NFAR LETTER ISSUED AND SITE CLOSED.

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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MAP ID# 5

Distance from Property: 0.187 mi. (987 ft.) WSW
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0004139**
FACILITY ID: **FA0004139**
FACILITY NAME: **PLAZA LIQUOR AND GAS**
ADDRESS: **2420 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0231382**
CERS ID: **10181595**
APN: **NOT REPORTED**
PE: **2361**
DESCRIPTION: **UST FACILITY**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-369-1960**
EMAIL: **PLAZA101@HOTMAIL.COM**
OWNER: **RUPINDER PADDA**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-914-8735**

PROGRAM ID: **PR0507581**
CERS ID: **10181595**
APN: **NOT REPORTED**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-1960**
EMAIL: **PLAZA101@HOTMAIL.COM**
OWNER: **RUPINDER PADDA**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-914-8735**

PROGRAM ID: **PR0507754**
CERS ID: **10181595**
APN: **NOT REPORTED**
PE: **2301**
DESCRIPTION: **UST STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-1960**
EMAIL: **PLAZA101@HOTMAIL.COM**
OWNER: **RUPINDER PADDA**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-914-8735**

PROGRAM ID: **PR0512132**
CERS ID: **10181595**
APN: **NOT REPORTED**
PE: **2224**
DESCRIPTION: **HAZ MAT BUSINESS PLAN AUTHORIZATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-1960**
EMAIL: **PLAZA101@HOTMAIL.COM**
OWNER: **RUPINDER PADDA**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-914-8735**

PROGRAM ID: **PR0518103**
CERS ID: **10181595**
APN: **NOT REPORTED**
PE: **2220**
DESCRIPTION: **SM HW GEN <5 TONS/YR**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-369-1960**
EMAIL: **PLAZA101@HOTMAIL.COM**
OWNER: **RUPINDER PADDA**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-914-8735**

PROGRAM ID: **PR0519912**
CERS ID: **10181595**
APN: **NOT REPORTED**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-369-1960**
EMAIL: **PLAZA101@HOTMAIL.COM**
OWNER: **RUPINDER PADDA**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-914-8735**

Back to Report Summary

Underground Storage Tanks (USTCUPA)

MAP ID# 5

Distance from Property: 0.187 mi. (987 ft.) WSW
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **3481902658** FACILITY ID: **10181595**

NAME: **PLAZA LIQUOR AND GAS**

ADDRESS: **2420 W TURNER RD**
LODI, CA 95242

COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

OTHER FACILITY NAME(S) LISTED FOR THIS SITE: **PLAZA LIQUOR AND GAS**

PERMIT AGENCY: **SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH**

FACILITY DETAILS LINK: *Click Here*

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Dry Cleaner Facilities (CLEANER)

MAP ID# 6

Distance from Property: 0.202 mi. (1,067 ft.) W
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **CAD982053886**
PERMIT ID: **CAD982053886**
FACILITY NAME: **WOODLAKE CLEANERS**
ADDRESS: **2401 W TURNER RD**
LODI, CA 95240-0000
COUNTY: **SAN JOAQUIN**
STATUS: **INACTIVE**
URL LINK: CLICK HERE

FACILITY DETAILS

SIC CODE: **7211**
SIC DESCRIPTION: **POWER LAUNDRIES, FAMILY AND COMMERCIAL**
NAICS CODE: **812321**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

SIC CODE: **7212**
SIC DESCRIPTION: **GARMENT PRESSING, AND AGENTS FOR LAUNDRIES AND DRYCLEANERS**
NAICS CODE: **812321**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

SIC CODE: **7216**
SIC DESCRIPTION: **DRYCLEANING PLANTS, EXCEPT RUG CLEANING**
NAICS CODE: **812321**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

SIC CODE: **7219**
SIC DESCRIPTION: **LAUNDRY AND GARMENT SERVICES, NOT ELSEWHERE CLASSIFIED**
NAICS CODE: **812321**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

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Dry Cleaner Facilities (CLEANER)

MAP ID# 6

Distance from Property: 0.202 mi. (1,067 ft.) W
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **CAL000268547**
PERMIT ID: **CAL000268547**
FACILITY NAME: **WOODLAKE CLEANERS INC.**
ADDRESS: **2401 W TURNER RD**
LODI, CA 95242-2182
COUNTY: **SAN JOAQUIN**
STATUS: **ACTIVE**
URL LINK: CLICK HERE

FACILITY DETAILS

SIC CODE: **7211**
SIC DESCRIPTION: **POWER LAUNDRIES, FAMILY AND COMMERCIAL**
NAICS CODE: **81232**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

SIC CODE: **7212**
SIC DESCRIPTION: **GARMENT PRESSING, AND AGENTS FOR LAUNDRIES AND DRYCLEANERS**
NAICS CODE: **81232**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

SIC CODE: **7216**
SIC DESCRIPTION: **DRYCLEANING PLANTS, EXCEPT RUG CLEANING**
NAICS CODE: **81232**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

SIC CODE: **7219**
SIC DESCRIPTION: **LAUNDRY AND GARMENT SERVICES, NOT ELSEWHERE CLASSIFIED**
NAICS CODE: **81232**
SIC DESCRIPTION: **DRYCLEANING AND LAUNDRY SERVICES**

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MAP ID# 6

Distance from Property: 0.202 mi. (1,067 ft.) W
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0009801**
FACILITY ID: **FA0009801**
FACILITY NAME: **WOODLAKE CLEANERS INC.**
ADDRESS: **2401 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0509801**
CERS ID: **10182919**
APN: **1530006**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-334-1648**
EMAIL: **WOODLAKECLEANERS@YAHOO.COM**
OWNER: **WOODLAKE CLEANERS INC.**
HOME PHONE: **209-334-1648**
WORK PHONE: **209-334-1648**

PROGRAM ID: **PR0512089**
CERS ID: **10182919**
APN: **01530006**
PE: **2224**
DESCRIPTION: **HAZ MAT BUSINESS PLAN AUTHORIZATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-334-1648**
EMAIL: **WOODLAKECLEANERS@YAHOO.COM**
OWNER: **WOODLAKE CLEANERS INC.**
HOME PHONE: **209-334-1648**
WORK PHONE: **209-334-1648**

PROGRAM ID: **PR0514040**
CERS ID: **10182919**
APN: **01530006**
PE: **2220**
DESCRIPTION: **SM HW GEN <5 TONS/YR**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-334-1648**
EMAIL: **WOODLAKECLEANERS@YAHOO.COM**
OWNER: **WOODLAKE CLEANERS INC.**
HOME PHONE: **209-334-1648**
WORK PHONE: **209-334-1648**

PROGRAM ID: **PR0519878**
CERS ID: **10182919**
APN: **1530006**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-334-1648**
EMAIL: **WOODLAKECLEANERS@YAHOO.COM**
OWNER: **WOODLAKE CLEANERS INC.**
HOME PHONE: **209-334-1648**
WORK PHONE: **209-334-1648**

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GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0607700115**
URL LINK: CLICK HERE
BUSINESS NAME: **GENERAL MILLS LODI CASE #1**
ADDRESS: **2000 TURNER RD W**
LODI, CA 95240
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **390165**
STATUS: **COMPLETED - CASE CLOSED 10/06/1995**
POTENTIAL CONTAMINATION:
KEROSENE
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY
SITE HISTORY:
NOT REPORTED

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	**01/01/50**	**LEAK DISCOVERY**
OTHER	**01/01/50**	**LEAK REPORTED**
OTHER	**01/14/1988**	**LEAK REPORTED**
OTHER	**01/12/1988**	**LEAK DISCOVERY**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**10/06/1995**
OPEN - CASE BEGIN DATE	**03/03/1986**
OPEN - SITE ASSESSMENT	**03/03/1986**

CONTACT DETAILS

ORGANIZATION: **CENTRAL VALLEY RWQCB (REGION 5S)**
ADDRESS: **11020 SUN CENTER DRIVE #200**
CITY: **RANCHO CORDOVA**
CONTACT NAME: **ALAN BUEHLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **NOT REPORTED**
EMAIL: **ALAN.BUEHLER@WATERBOARDS.CA.GOV**

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MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0607700885**
URL LINK: CLICK HERE
BUSINESS NAME: **GENERAL MILLS - CASE #2**
ADDRESS: **2000 TURNER RD W**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **391069**
STATUS: **COMPLETED - CASE CLOSED 12/29/2015**
POTENTIAL CONTAMINATION:
DIESEL
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY
SITE HISTORY:
SITE HAS 4 MWS THAT ARE BEING SAMPLED SEMI-ANNUALLY. ONLY ONE MW AFFECTED; CONCENTRATIONS ARE DECREASING.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
OTHER	01/01/50	LEAK DISCOVERY
OTHER	01/01/50	LEAK REPORTED
OTHER	01/01/50	LEAK STOPPED
REMEDIATION	01/01/50	MONITORED NATURAL ATTENUATION
ENFORCEMENT	12/29/2015	CLOSURE/NO FURTHER ACTION LETTER
RESPONSE	11/20/2015	WELL DESTRUCTION REPORT
ENFORCEMENT	07/08/2015	STAFF LETTER
ENFORCEMENT	11/20/2014	STAFF LETTER
ENFORCEMENT	07/30/2014	NOTIFICATION - PUBLIC PARTICIPATION DOCUMENT
ENFORCEMENT	06/19/2014	STAFF LETTER
ENFORCEMENT	09/23/2013	FILE REVIEW - CLOSURE
ENFORCEMENT	08/23/2013	FILE REVIEW - CLOSURE
ENFORCEMENT	07/22/2013	FILE REVIEW - CLOSURE
ENFORCEMENT	05/30/2013	STAFF LETTER
ENFORCEMENT	05/14/2013	TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER
ENFORCEMENT	05/13/2013	LOP CASE CLOSURE SUMMARY TO RB
ENFORCEMENT	05/10/2013	LETTER - NOTICE
ENFORCEMENT	05/08/2013	FILE REVIEW - CLOSURE
ENFORCEMENT	05/02/2013	FILE REVIEW - CLOSURE
ENFORCEMENT	04/25/2013	FILE REVIEW - CLOSURE
RESPONSE	04/08/2013	REQUEST FOR CLOSURE - REGULATOR RESPONDED
ENFORCEMENT	03/15/2013	FILE REVIEW - CLOSURE
ENFORCEMENT	12/18/2012	MEETING

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**11/14/2012**	**MEETING**
ENFORCEMENT	**10/09/2012**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**09/23/2012**	**FILE REVIEW - CLOSURE**
ENFORCEMENT	**06/29/2012**	**FILE REVIEW - CLOSURE**
ENFORCEMENT	**10/03/2011**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
RESPONSE	**09/15/2011**	**CLEAN UP FUND - 5-YEAR REVIEW SUMMARY**
ENFORCEMENT	**09/12/2011**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**03/04/2011**	**FILE REVIEW**
ENFORCEMENT	**11/23/2010**	**CLEAN UP FUND - LETTER TO RP**
ENFORCEMENT	**06/15/2010**	**FILE REVIEW**
ENFORCEMENT	**10/19/2009**	**FILE REVIEW**
ENFORCEMENT	**08/05/2009**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**07/22/2009**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
ENFORCEMENT	**04/29/2009**	**FILE REVIEW**
ENFORCEMENT	**07/02/2008**	**TECHNICAL CORRESPONDENCE / ASSISTANCE / OTHER**
REMEDIATION	**06/06/2000**	**MONITORED NATURAL ATTENUATION**
ENFORCEMENT	**03/21/2000**	**NOTICE OF RESPONSIBILITY**
OTHER	**07/12/1999**	**LEAK REPORTED**
OTHER	**04/01/1999**	**LEAK DISCOVERY**
OTHER	**04/01/1999**	**LEAK STOPPED**

STATUS HISTORY

STATUS:	DATE:
COMPLETED - CASE CLOSED	**12/29/2015**
OPEN - ELIGIBLE FOR CLOSURE	**11/15/2015**
OPEN - REMEDIATION	**08/16/2015**
OPEN - ELIGIBLE FOR CLOSURE	**11/15/2012**
OPEN - SITE ASSESSMENT	**05/16/2000**
OPEN - SITE ASSESSMENT	**03/21/2000**
OPEN - CASE BEGIN DATE	**04/01/1999**

CONTACT DETAILS

ORGANIZATION: **CENTRAL VALLEY RWQCB (REGION 5S)**
ADDRESS: **11020 SUN CENTER DRIVE #200**
CITY: **RANCHO CORDOVA**
CONTACT NAME: **EMILY CUSHMAN**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**
CONTACT PHONE: **9164644696**
EMAIL: **EMILY.CUSHMAN@WATERBOARDS.CA.GOV**

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Historical Cortese List (HISTCORTESE)

MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **390165COR**
ID#: **390165**
NAME: **GENERAL MILLS LODI CASE**
ADDRESS: **2000 TURNER**
LODI, CA 95242

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Historical Cortese List (HISTCORTESE)

MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **391069COR**
ID#: **391069**
NAME: **GENERAL MILLS - CASE #2**
ADDRESS: **2000 TURNER**
LODI, CA 95242

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MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

GENERAL MILLS INC LODI PLANT, 2000 W TURNER ROAD, LODI, CA 95241
UNIQUE ID: **0002FC85**

PAGE 1341 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SAN JOAQUIN COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
GENERAL MILLS INC.
9200 WAYZATA BLVD. MINNEAPOLIS MN 55246

II FACILITY

	MAILING ADDRESS	DEALER/FOREMAN/SUPERVISOR	TYPE OF BUSINESS
GENERAL MILLS INC. LODI PLANT	TOWNSHIP/RANGE/SECTION	TELEPHONE	NO. OF CONTAINERS
2000 W. TURNER ROAD			
LODI CA 952411906	P.O. BOX 3002	J. MARTIN MAINT. MGR.	MANUFACTURING
	LODI CA 952411906	(209) 369-3541	6
CROSS STREET : MILLS AVENUE			

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: J. MARTIN (209) 334-7025 NIGHT: SECURITY (209) 334-7039

********** OWNER ASSIGNED CONTAINER NUMBER: 6 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 000000647B2001 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: WESTERN WATER SERVICE /1981
C. YEAR INSTALLED : 1981
D. CAPACITY (GALLONS) : 550
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: DIESEL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 1/4 INCHES B. VAULTING: NON-VAULTED C. WALLING: SINGLE
D. MATERIAL : CARBON STEEL
E. LINING : UNLINED
F. WRAPPING : NONE

VI PIPING
A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
STOCK INVENTORY P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12034 DIESEL MOTOR VEHICLE FUEL

*** C15 ***

PAGE 13\2 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SAN JOAQUIN COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 5 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000064782002 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: XERXES /1983
C. YEAR INSTALLED : 1983
D. CAPACITY (GALLONS) : 10,000
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: JP- JET FUEL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 0.27 INCHES B. VAULTING: VAULTED C. WALLING: SINGLE
D. MATERIAL : FIBERGLASS
E. LINING : GLASS
F. WRAPPING : NONE

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
STOCK INVENTORY P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
NONE

********** OWNER ASSIGNED CONTAINER NUMBER: 4 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000064782003 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: XERXES /1983
C. YEAR INSTALLED : 1983
D. CAPACITY (GALLONS) : 10,000
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: JP-1-JET FUEL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 0.27 INCHES B. VAULTING: VAULTED C. WALLING: SINGLE
D. MATERIAL : FIBERGLASS
E. LINING : GLASS
F. WRAPPING : NONE

VI PIPING
A. ABOVEGROUND PIPING : B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
STOCK INVENTORY P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
NONE

*** 015 ***

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HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SAN JOAQUIN COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 4 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000064782004 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: MODESTO WELDING /1967
C. YEAR INSTALLED : 1967
D. CAPACITY (GALLONS) : 12,000
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : NO CONTAINS:

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 1/4 INCHES B. VAULTING: NON-VAULTED C. WALLING: SINGLE
D. MATERIAL : CARBON STEEL
E. LINING : UNLINED
F. WRAPPING : NONE

VI PIPING
A. ABOVEGROUND PIPING : UNKNOWN B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
STOCK INVENTORY P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
#6 FUEL OIL

********** OWNER ASSIGNED CONTAINER NUMBER: 2 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000064782005 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: MODESTO WELDING /1967
C. YEAR INSTALLED : 1967
D. CAPACITY (GALLONS) : 12,000
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : NO CONTAINS:

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 1/4 INCHES B. VAULTING: NON-VAULTED C. WALLING: SINGLE
D. MATERIAL : CARBON STEEL
E. LINING : UNLINED
F. WRAPPING : NONE

VI PIPING
A. ABOVEGROUND PIPING : UNKNOWN B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
STOCK INVENTORY P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
#6 FUEL OIL

*** E15 ***

PAGE 1344 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SAN JOAQUIN COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 00000064782006 **********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: MODESTO WELDING /1967
C. YEAR INSTALLED : 1967
D. CAPACITY (GALLONS) : 12,000
E. REPAIRS : NONE IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : NO CONTAINS:

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS: 1/4 INCHES B. VAULTING: NON-VAULTED C. WALLING: SINGLE
D. MATERIAL : CARBON STEEL
E. LINING : UNLINED
F. WRAPPING : NONE

VI PIPING
A. ABOVEGROUND PIPING : UNKNOWN B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : NONE IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
STOCK INVENTORY P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
#6 FUEL OIL

*** F15 ***

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Leaking Underground Storage Tanks (LUST)

MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0607700115**
URL LINK: CLICK HERE
BUSINESS NAME: **GENERAL MILLS LODI CASE #1**
ADDRESS: **2000 TURNER RD W**
LODI, CA 95240
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **390165**
STATUS: **10/06/1995**
POTENTIAL CONTAMINATION:
KEROSENE
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY
SITE HISTORY:
NOT REPORTED

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

Leaking Underground Storage Tanks (LUST)

MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GLOBAL ID: **T0607700885**
URL LINK: CLICK HERE
BUSINESS NAME: **GENERAL MILLS - CASE #2**
ADDRESS: **2000 TURNER RD W**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **391069**
STATUS: **12/29/2015**
POTENTIAL CONTAMINATION:
DIESEL
POTENTIAL MEDIA AFFECTED:
AQUIFER USED FOR DRINKING WATER SUPPLY
SITE HISTORY:
SITE HAS 4 MWS THAT ARE BEING SAMPLED SEMI-ANNUALLY. ONLY ONE MW AFFECTED; CONCENTRATIONS ARE DECREASING.

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

Back to Report Summary

MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0003881**
FACILITY ID: **FA0003881**
FACILITY NAME: **GENERAL MILLS**
ADDRESS: **2000 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0231381**
CERS ID: **10181505**
APN: **2903013**
PE: **2361**
DESCRIPTION: **UST FACILITY**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-3541**
EMAIL: **WADE.BROUGHTON@GENMILLS.COM**
OWNER: **GENERAL MILLS OPERATIONS, INC**
HOME PHONE: **209-334-7139**
WORK PHONE: **763-293-2755**

PROGRAM ID: **PR0507513**
CERS ID: **10181505**
APN: **2903013**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-3541**
EMAIL: **WADE.BROUGHTON@GENMILLS.COM**
OWNER: **GENERAL MILLS OPERATIONS, INC**
HOME PHONE: **209-334-7139**
WORK PHONE: **763-293-2755**

PROGRAM ID: **PR0511808**
CERS ID: **10181505**
APN: **02903013**
PE: **2224**
DESCRIPTION: **HAZ MAT BUSINESS PLAN AUTHORIZATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-3541**
EMAIL: **WADE.BROUGHTON@GENMILLS.COM**
OWNER: **GENERAL MILLS OPERATIONS, INC**
HOME PHONE: **209-334-7139**
WORK PHONE: **763-293-2755**

PROGRAM ID: **PR0517864**
CERS ID: **10181505**
APN: **02903013**
PE: **2227**
DESCRIPTION: **GEN 13<25 TONS PERMIT**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-3541**
EMAIL: **WADE.BROUGHTON@GENMILLS.COM**
OWNER: **GENERAL MILLS OPERATIONS, INC**
HOME PHONE: **209-334-7139**
WORK PHONE: **763-293-2755**

PROGRAM ID: **PR0519696**
CERS ID: **10181505**
APN: **2903013**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-3541**
EMAIL: **WADE.BROUGHTON@GENMILLS.COM**
OWNER: **GENERAL MILLS OPERATIONS, INC**
HOME PHONE: **209-334-7139**
WORK PHONE: **763-293-2755**

PROGRAM ID: **PR0536417**
CERS ID: **10181505**
APN: **02903013**
PE: **2831**
DESCRIPTION: **AST FAC >/= 1,320 - <10 K GAL CUMULATIVE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-3541**
EMAIL: **WADE.BROUGHTON@GENMILLS.COM**
OWNER: **GENERAL MILLS OPERATIONS, INC**
HOME PHONE: **209-334-7139**
WORK PHONE: **763-293-2755**

Back to Report Summary

MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

FACILITY #: **1381**
BOE: **44-024673**
NAME: **GENERAL MILLS**
ADDRESS: **2000 W TURNER ROAD**
LODI, CA 95241

STATUS: **ACTIVE**
JURISDICTION: **SAN JOAQUIN COUNTY**
AGENCY: **ENVIRONMENTAL HEALTH**

TANK INFORMATION

TANK #: **000003**
INSTALLED: **NOT REPORTED**
TANK USE: **M.V. FUEL**
CONTENT: **JET FUEL**

CAPACITY: **10000**
REMOVED: **NOT REPORTED**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **NOT REPORTED**

Back to Report Summary

MAP ID# 7

Distance from Property: 0.236 mi. (1,246 ft.) SE
Elevation: 44 ft. (Higher than TP)

FACILITY INFORMATION

FACILITY #: **1381**
BOE: **44-024673**
NAME: **GENERAL MILLS**
ADDRESS: **2000 W TURNER ROAD**
LODI, CA 95240

STATUS: **INACTIVE**
JURISDICTION: **SAN JOAQUIN COUNTY**
AGENCY: **ENVIRONMENTAL HEALTH**

TANK INFORMATION

TANK #: **000001**
INSTALLED: **01-01-81**
TANK USE: **M.V. FUEL**
CONTENT: **DIESEL**
CAPACITY: **550**
REMOVED: **01-01-81**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **BARE STEEL**

TANK #: **000002**
INSTALLED: **01-01-83**
TANK USE: **M.V. FUEL**
CONTENT: **JET FUEL**
CAPACITY: **10000**
REMOVED: **01-01-83**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **FIBERGLASS**

TANK #: **000004**
INSTALLED: **01-01-67**
TANK USE: **OIL**
CONTENT: **FUEL OIL #6**
CAPACITY: **12000**
REMOVED: **01-01-67**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **BARE STEEL**

TANK #: **000005**
INSTALLED: **01-01-67**
TANK USE: **OIL**
CONTENT: **FUEL OIL #6**
CAPACITY: **12000**
REMOVED: **01-01-67**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **BARE STEEL**

TANK #: **000006**
INSTALLED: **01-01-67**
TANK USE: **OIL**
CONTENT: **FUEL OIL #6**
CAPACITY: **12000**
REMOVED: **01-01-67**
STORAGE TYPE: **PRODUCT**
CONTAINMENT: **BARE STEEL**

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San Joaquin County CUPA (SJCCUPA)

MAP ID# 8

Distance from Property: 0.261 mi. (1,378 ft.) NNW
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0003187**
FACILITY ID: **FA0003187**
FACILITY NAME: **LODI USD-WOODBRIDGE SCHOOL**
ADDRESS: **1290 LILAC ST**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0504649**
CERS ID: **NOT REPORTED**
APN: **1517010**
PE: **2381**
DESCRIPTION: **UST FACILITY (BEFORE 1/84) - OBSOLETE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**
OWNER: **LODI UNIFIED SCHOOL DISTRICT**
HOME PHONE: **209-331-7159**
WORK PHONE: **209-331-7000**

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San Joaquin County CUPA (SJCCUPA)

MAP ID# 9

Distance from Property: 0.308 mi. (1,626 ft.) SW
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0024012**
FACILITY ID: **FA0024012**
FACILITY NAME: **LODI CITY WELL #15**
ADDRESS: **830 N LOWER SACRAMENTO RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0541866**
CERS ID: **10729024**
APN: **NOT REPORTED**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-333-6800**
EMAIL: **NOT REPORTED**
OWNER: **CITY OF LODI**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6800**

Back to Report Summary

MAP ID# 10

Distance from Property: 0.314 mi. (1,658 ft.) W
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0003846**
FACILITY ID: **FA0003846**
FACILITY NAME: **VERIZON BUSINESS: LDIKCA**
ADDRESS: **2500 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0232507**
CERS ID: **10403278**
APN: **029-030-39**
PE: **2361**
DESCRIPTION: **UST FACILITY**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-367-2688**
EMAIL: **TODD.HARRIS@VERIZONBUSINESS.COM**
OWNER: **MCI DBA VERIZON BUSINESS**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **909-879-2712**

PROGRAM ID: **PR0507498**
CERS ID: **10403278**
APN: **029-030-39**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-367-2688**
EMAIL: **TODD.HARRIS@VERIZONBUSINESS.COM**
OWNER: **MCI DBA VERIZON BUSINESS**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **909-879-2712**

PROGRAM ID: **PR0513055**
CERS ID: **10403278**
APN: **029-030-39**
PE: **2224**
DESCRIPTION: **HAZ MAT BUSINESS PLAN AUTHORIZATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-367-2688**
EMAIL: **TODD.HARRIS@VERIZONBUSINESS.COM**
OWNER: **MCI DBA VERIZON BUSINESS**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **909-879-2712**

PROGRAM ID: **PR0515551**
CERS ID: **10403278**
APN: **029-030-39**
PE: **2301**
DESCRIPTION: **UST STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-367-2688**
EMAIL: **TODD.HARRIS@VERIZONBUSINESS.COM**
OWNER: **MCI DBA VERIZON BUSINESS**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **909-879-2712**

PROGRAM ID: **PR0520477**
CERS ID: **10403278**
APN: **029-030-39**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-367-2688**
EMAIL: **TODD.HARRIS@VERIZONBUSINESS.COM**
OWNER: **MCI DBA VERIZON BUSINESS**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **909-879-2712**

PROGRAM ID: **PR0535120**
CERS ID: **10403278**
APN: **029-030-39**
PE: **2220**
DESCRIPTION: **SM HW GEN <5 TONS/YR**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-367-2688**
EMAIL: **TODD.HARRIS@VERIZONBUSINESS.COM**
OWNER: **MCI DBA VERIZON BUSINESS**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **909-879-2712**

PROGRAM ID: **PR0514863**
CERS ID: **10403278**
APN: **029-030-39**
PE: **2226**
DESCRIPTION: **CALARP PROGRAM**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-367-2688**
EMAIL: **TODD.HARRIS@VERIZONBUSINESS.COM**
OWNER: **MCI DBA VERIZON BUSINESS**

San Joaquin County CUPA (SJCCUPA)

HOME PHONE: **NOT REPORTED**
WORK PHONE: **909-879-2712**

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San Joaquin County CUPA (SJCCUPA)

MAP ID# 10

Distance from Property: 0.314 mi. (1,658 ft.) W
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0005202**
FACILITY ID: **FA0005202**
FACILITY NAME: **GENERAL ELECTRIC**
ADDRESS: **2500 W TURNER RD**
LODI, CA 95240
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0501728**
CERS ID: **NOT REPORTED**
APN: **NOT REPORTED**
PE: **2381**
DESCRIPTION: **UST FACILITY (BEFORE 1/84) - OBSOLETE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**
OWNER: **GENERAL ELECTRIC**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **NOT REPORTED**

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MAP ID# 10

Distance from Property: 0.314 mi. (1,658 ft.) W
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0010201**
FACILITY ID: **FA0010201**
FACILITY NAME: **MCIT (TURNER)**
ADDRESS: **2500 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0510201**
CERS ID: **NOT REPORTED**
APN: **029-03-039**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-367-2628**
EMAIL: **NOT REPORTED**
OWNER: **MCIT (TURNER)**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **972-729-5671**

PROGRAM ID: **PR0512489**
CERS ID: **NOT REPORTED**
APN: **029-03-039**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-367-2628**
EMAIL: **NOT REPORTED**
OWNER: **MCIT (TURNER)**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **972-729-5671**

PROGRAM ID: **PR0514736**
CERS ID: **NOT REPORTED**
APN: **029-03-039**
PE: **2226**
DESCRIPTION: **CALARP PROGRAM**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-367-2628**
EMAIL: **NOT REPORTED**
OWNER: **MCIT (TURNER)**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **972-729-5671**

Back to Report Summary

San Joaquin County CUPA (SJCCUPA)

MAP ID# 11

Distance from Property: 0.337 mi. (1,779 ft.) E
Elevation: 47 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0000608**
FACILITY ID: **FA0000608**
FACILITY NAME: **LODI LAKE PARK**
ADDRESS: **1301 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0505592**
CERS ID: **NOT REPORTED**
APN: **1523015**
PE: **2381**
DESCRIPTION: **UST FACILITY (BEFORE 1/84) - OBSOLETE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-333-6888**
EMAIL: **NOT REPORTED**
OWNER: **CITY OF LODI - ATTN: TRAVIS KAHRS**
HOME PHONE: **209-333-6878**
WORK PHONE: **209-333-6841**

Back to Report Summary

San Joaquin County CUPA (SJCCUPA)

MAP ID# 12

Distance from Property: 0.382 mi. (2,017 ft.) E
Elevation: 47 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0003933**
FACILITY ID: **FA0003933**
FACILITY NAME: **SNOW WHITE DRIVE INN**
ADDRESS: **1210 W TURNER RD**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0232030**
CERS ID: **NOT REPORTED**
APN: **3903022**
PE: **2381**
DESCRIPTION: **UST FACILITY (BEFORE 1/84) - OBSOLETE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-5314**
EMAIL: **NOT REPORTED**
OWNER: **GHORISHINEJAD, MOHAMMAD**
HOME PHONE: **916-289-7720**
WORK PHONE: **209-369-5314**

Back to Report Summary

San Joaquin County CUPA (SJCCUPA)

MAP ID# 13

Distance from Property: 0.426 mi. (2,249 ft.) N
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0010211**
FACILITY ID: **FA0010211**
FACILITY NAME: **WOODBRIDGE IRRIGATION DIST-SIT**
ADDRESS: **18750 N LOWER SACRAMENTO RD**
WOODBRIDGE, CA 95258-9155
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0512499**
CERS ID: **NOT REPORTED**
APN: **01516010**
PE: **2224**
DESCRIPTION: **HAZ MAT BUSINESS PLAN AUTHORIZATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-369-6808**
EMAIL: **NOT REPORTED**
OWNER: **WOODBRIDGE IRRIGATION DIST**
HOME PHONE: **209-625-8438**
WORK PHONE: **209-625-8438**

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MAP ID# 14

Distance from Property: 0.429 mi. (2,265 ft.) N
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0009319**
FACILITY ID: **FA0009319**
FACILITY NAME: **WOODBRIDGE IRRIGATION DIST-SIT**
ADDRESS: **18777 N LOWER SACRAMENTO RD**
WOODBRIDGE, CA 95258-9122
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0509319**
CERS ID: **10182593**
APN: **1516009**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-625-8438**
EMAIL: **WID2000@SOFTCOM.NET**
OWNER: **WOODBRIDGE IRRIGATION DIST**
HOME PHONE: **209-625-8438**
WORK PHONE: **209-625-8438**

PROGRAM ID: **PR0511607**
CERS ID: **10182593**
APN: **01516009**
PE: **2224**
DESCRIPTION: **HAZ MAT BUSINESS PLAN AUTHORIZATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-625-8438**
EMAIL: **WID2000@SOFTCOM.NET**
OWNER: **WOODBRIDGE IRRIGATION DIST**
HOME PHONE: **209-625-8438**
WORK PHONE: **209-625-8438**

PROGRAM ID: **PR0513770**
CERS ID: **10182593**
APN: **01516009**
PE: **2220**
DESCRIPTION: **SM HW GEN <5 TONS/YR**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-625-8438**
EMAIL: **WID2000@SOFTCOM.NET**
OWNER: **WOODBRIDGE IRRIGATION DIST**
HOME PHONE: **209-625-8438**
WORK PHONE: **209-625-8438**

PROGRAM ID: **PR0519544**
CERS ID: **10182593**
APN: **1516009**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-625-8438**
EMAIL: **WID2000@SOFTCOM.NET**
OWNER: **WOODBRIDGE IRRIGATION DIST**
HOME PHONE: **209-625-8438**
WORK PHONE: **209-625-8438**

PROGRAM ID: **PR0528944**
CERS ID: **10182593**
APN: **01516009**
PE: **2831**
DESCRIPTION: **AST FAC >/= 1,320 - <10 K GAL CUMULATIVE**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-625-8438**
EMAIL: **WID2000@SOFTCOM.NET**
OWNER: **WOODBRIDGE IRRIGATION DIST**
HOME PHONE: **209-625-8438**
WORK PHONE: **209-625-8438**

PROGRAM ID: **PR0514562**
CERS ID: **10182593**
APN: **01516009**
PE: **2226**
DESCRIPTION: **CALARP PROGRAM**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-625-8438**
EMAIL: **WID2000@SOFTCOM.NET**
OWNER: **WOODBRIDGE IRRIGATION DIST**
HOME PHONE: **209-625-8438**
WORK PHONE: **209-625-8438**

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San Joaquin County CUPA (SJCCUPA)

MAP ID# 15

Distance from Property: 0.433 mi. (2,286 ft.) W
Elevation: 42 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0024024**
FACILITY ID: **FA0024024**
FACILITY NAME: **LODI CITY WELL #26**
ADDRESS: **1020 BRIDGETOWNE DR**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0541885**
CERS ID: **10729045**
APN: **NOT REPORTED**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-333-6800**
EMAIL: **NOT REPORTED**
OWNER: **CITY OF LODI**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **209-333-6800**

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San Joaquin County CUPA (SJCCUPA)

MAP ID# 16

Distance from Property: 0.441 mi. (2,328 ft.) SW
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0006264**
FACILITY ID: **FA0006264**
FACILITY NAME: **MARTHA WAGNER**
ADDRESS: **520 LOWER SACRAMENTO RD**
LODI, CA 95240
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0504622**
CERS ID: **NOT REPORTED**
APN: **NOT REPORTED**
PE: **2381**
DESCRIPTION: **UST FACILITY (BEFORE 1/84) - OBSOLETE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**
OWNER: **WAGNER, MARTHA**
HOME PHONE: **NOT REPORTED**
WORK PHONE: **NOT REPORTED**

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MAP ID# 17

Distance from Property: 0.467 mi. (2,466 ft.) N
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T10000010016**
URL LINK: CLICK HERE
BUSINESS NAME: **JAS'S ENTERPRISES INC.**
ADDRESS: **18806 NORTH LOWER SACRAMENTO RD**
WOODBRIDGE, CA 95258
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **392002**
STATUS: **OPEN - SITE ASSESSMENT 01/10/2017**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
NOT REPORTED
SITE HISTORY:
IN DECEMBER 2016, A REPORT DETAILING SOIL GAS SAMPLING AT THE SITE WAS FORWARDED TO CENTRAL VALLEY WATER BOARD STAFF BY SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPT STAFF. WHILE THE SOIL GAS CONCENTRATIONS DO NOT APPEAR TO POSE AN IMMEDIATE RISK, THE PRESENCE OF HYDROCARBONS IN SOIL GAS INDICATES THAT A PETROLEUM RELEASE LIKELY OCCURRED AT THE SITE. THE SITE PROPERTY IS AN ACTIVE COMMERCIAL PETROLEUM FUELING FACILITY, AND CURRENTLY HAS TWO (2) 12,000-GALLON UNLEADED GASOLINE UNDERGROUND STORAGE TANKS (USTS), ONE (1) 12,000-GALLON DIESEL UST, FOUR (4) DISPENSER ISLANDS UNDER A CANOPY, AND A CONVENIENCE STORE BUILDING.

REGULATORY ACTIVITIES

TYPE OF ACTION:	DATE:	ACTION:
ENFORCEMENT	**10/19/2017**	**STAFF LETTER**
ENFORCEMENT	**10/17/2017**	**OTHER REPORT**
ENFORCEMENT	**07/31/2017**	**STAFF LETTER**
RESPONSE	**07/24/2017**	**SITE INVESTIGATION WORKPLAN - REGULATOR RESPONDED**
ENFORCEMENT	**01/23/2017**	**STAFF LETTER**
ENFORCEMENT	**12/20/2016**	**OTHER REPORT**
OTHER	**12/20/2016**	**LEAK REPORTED**
OTHER	**11/28/2016**	**LEAK DISCOVERY**

STATUS HISTORY

STATUS:	DATE:
OPEN - SITE ASSESSMENT	**01/10/2017**
OPEN - CASE BEGIN DATE	**11/28/2016**

CONTACT DETAILS

ORGANIZATION: **CENTRAL VALLEY RWQCB (REGION 5S)**
ADDRESS: **11020 SUN CENTER DR**
CITY: **RANCHO CORDOVA**
CONTACT NAME: **ALAN M. BUEHLER**
CONTACT TYPE: **REGIONAL BOARD CASEWORKER**

CONTACT PHONE: **9164644615**

EMAIL: **ALAN.BUEHLER@WATERBOARDS.CA.GOV**

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Leaking Underground Storage Tanks (LUST)

MAP ID# 17

Distance from Property: 0.467 mi. (2,466 ft.) N
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GLOBAL ID: **T10000010016**
URL LINK: CLICK HERE
BUSINESS NAME: **JAS'S ENTERPRISES INC.**
ADDRESS: **18806 NORTH LOWER SACRAMENTO RD**
WOODBRIDGE, CA 95258
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

CASE TYPE: **LUST CLEANUP SITE**
CASE NUMBER: **392002**
STATUS: **01/10/2017**
POTENTIAL CONTAMINATION:
NOT REPORTED
POTENTIAL MEDIA AFFECTED:
NOT REPORTED
SITE HISTORY:
IN DECEMBER 2016, A REPORT DETAILING SOIL GAS SAMPLING AT THE SITE WAS FORWARDED TO CENTRAL VALLEY WATER BOARD STAFF BY SAN JOAQUIN COUNTY ENVIRONMENTAL HEALTH DEPT STAFF. WHILE THE SOIL GAS CONCENTRATIONS DO NOT APPEAR TO POSE AN IMMEDIATE RISK, THE PRESENCE OF HYDROCARBONS IN SOIL GAS INDICATES THAT A PETROLEUM RELEASE LIKELY OCCURRED AT THE SITE. THE SITE PROPERTY IS AN ACTIVE COMMERCIAL PETROLEUM FUELING FACILITY, AND CURRENTLY HAS TWO (2) 12,000-GALLON UNLEADED GASOLINE UNDERGROUND STORAGE TANKS (USTS), ONE (1) 12,000-GALLON DIESEL UST, FOUR (4) DISPENSER ISLANDS UNDER A CANOPY, AND A CONVENIENCE STORE BUILDING.

HISTORICAL FACILITY DETAILS

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

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MAP ID# 17

Distance from Property: 0.467 mi. (2,466 ft.) N
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0003607**
FACILITY ID: **FA0003607**
FACILITY NAME: **WOODBRIDGE AM PM***
ADDRESS: **18806 N LOWER SACRAMENTO RD**
WOODBRIDGE, CA 95258
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0232388**
CERS ID: **10181237**
APN: **1543010**
PE: **2361**
DESCRIPTION: **UST FACILITY**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-339-8238**
EMAIL: **WOODBRIDGEAMPM@YAHOO.COM**
OWNER: **JASS ENTERPRISES INC**
HOME PHONE: **916-689-6631**
WORK PHONE: **209-339-8238**

PROGRAM ID: **PR0507365**
CERS ID: **10181237**
APN: **1543010**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-339-8238**
EMAIL: **WOODBRIDGEAMPM@YAHOO.COM**
OWNER: **JASS ENTERPRISES INC**
HOME PHONE: **916-689-6631**
WORK PHONE: **209-339-8238**

PROGRAM ID: **PR0508285**
CERS ID: **10181237**
APN: **1543010**
PE: **2301**
DESCRIPTION: **UST STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-339-8238**
EMAIL: **WOODBRIDGEAMPM@YAHOO.COM**
OWNER: **JASS ENTERPRISES INC**
HOME PHONE: **916-689-6631**
WORK PHONE: **209-339-8238**

PROGRAM ID: **PR0512269**
CERS ID: **10181237**
APN: **01543010**
PE: **2224**
DESCRIPTION: **HAZ MAT BUSINESS PLAN AUTHORIZATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **209-339-8238**
EMAIL: **WOODBRIDGEAMPM@YAHOO.COM**
OWNER: **JASS ENTERPRISES INC**
HOME PHONE: **916-689-6631**
WORK PHONE: **209-339-8238**

PROGRAM ID: **PR0517889**
CERS ID: **10181237**
APN: **01543010**
PE: **2220**
DESCRIPTION: **SM HW GEN <5 TONS/YR**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-339-8238**
EMAIL: **WOODBRIDGEAMPM@YAHOO.COM**
OWNER: **JASS ENTERPRISES INC**
HOME PHONE: **916-689-6631**
WORK PHONE: **209-339-8238**

PROGRAM ID: **PR0521113**
CERS ID: **10181237**
APN: **1543010**
PE: **1921**
DESCRIPTION: **HMBP-REGULAR-PRIMARY LOCATION**
BILLING STATUS: **ACTIVE, BILLABLE**
PHONE: **209-339-8238**
EMAIL: **WOODBRIDGEAMPM@YAHOO.COM**
OWNER: **JASS ENTERPRISES INC**
HOME PHONE: **916-689-6631**
WORK PHONE: **209-339-8238**

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MAP ID# 17

Distance from Property: 0.467 mi. (2,466 ft.) N
Elevation: 43 ft. (Equal to TP)

FACILITY INFORMATION

GEOSEARCH ID: **FA0013572**
FACILITY ID: **FA0013572**
FACILITY NAME: **WIGHT ENTERPRISES 2 LLC**
ADDRESS: **18806 LOWER SACRAMENTO RD**
WOODBRIDGE, CA 95258
COUNTY: **SAN JOAQUIN**

FACILITY DETAILS

PROGRAM ID: **PR0517734**
CERS ID: **NOT REPORTED**
APN: **NOT REPORTED**
PE: **2224**
DESCRIPTION: **HAZ MAT BUSINESS PLAN AUTHORIZATION**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**
OWNER: **WIGHT, LAWRENCE A**
HOME PHONE: **209-466-6633**
WORK PHONE: **209-993-7825**

PROGRAM ID: **PR0517735**
CERS ID: **NOT REPORTED**
APN: **NOT REPORTED**
PE: **2399**
DESCRIPTION: **UNIFIED PROGRAM FAC STATE SURCHARGE FEE**
BILLING STATUS: **INACTIVE, NON-BILLABLE**
PHONE: **NOT REPORTED**
EMAIL: **NOT REPORTED**
OWNER: **WIGHT, LAWRENCE A**
HOME PHONE: **209-466-6633**
WORK PHONE: **209-993-7825**

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MAP ID# 18

Distance from Property: 0.626 mi. (3,305 ft.) SSE
Elevation: 43 ft. (Equal to TP)

SITE INFORMATION

ID #: **39010028** ASSESSOR'S PARCEL #: **02940004**
URL LINK: CLICK HERE
NAME: **MILLSWOOD MIDDLE SCHOOL**
ADDRESS: **233 NORTH MILLS AVENUE**
LODI, CA 95242
COUNTY: **SAN JOAQUIN**
SITE SIZE (ACRES): **19.72**
LEAD AGENCY: **DTSC**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **CHARLES RIDENOUR**
DTSC DIVISION BRANCH: **NORTHERN CALIFORNIA SCHOOLS & SANTA SUSANA**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **SCHOOL INVESTIGATION**
SITE TYPE DESCRIPTION
SCHOOL: IDENTIFIES PROPOSED AND EXISTING SCHOOL SITES THAT ARE BEING EVALUATED BY DTSC FOR POSSIBLE HAZARDOUS MATERIALS CONTAMINATION. SCHOOL SITES ARE FURTHER DEFINED AS "CLEANUP" (REMEDIAL ACTIONS OCCURRED) OR "EVALUATION" (NO REMEDIAL ACTION OCCURRED) BASED ON COMPLETED ACTIVITIES. ALL PROPOSED SCHOOL SITES THAT WILL RECEIVE STATE FUNDING FOR ACQUISITION OR CONSTRUCTION ARE REQUIRED TO GO THROUGH A RIGOROUS ENVIRONMENTAL REVIEW AND CLEANUP PROCESS UNDER DTSC'S OVERSIGHT.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 09/10/2001)
NO FURTHER ACTION - IDENTIFIES COMPLETED SITES WHERE DTSC DETERMINED AFTER INVESTIGATION, GENERALLY A PEA (AN INITIAL ASSESSMENT), THAT THE PROPERTY DOES NOT POSE A PROBLEM TO PUBLIC HEALTH OR THE ENVIRONMENT
PAST USE/S THAT CAUSED THE CONTAMINATION
AGRICULTURAL - ROW CROPS
CONFIRMED CONTAMINANTS OF CONCERN
30001 - ARSENIC
30004 - CHLORDANE
30006 - DDD
30007 - DDE
30008 - DDT
30013 - LEAD

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EnviroStor Cleanup Sites (ENVIROSTOR)

MAP ID# 19

Distance from Property: 0.629 mi. (3,321 ft.) NNW
Elevation: 42 ft. (Lower than TP)

SITE INFORMATION

ID #: **39510035** ASSESSOR'S PARCEL #: **NONE SPECIFIED**
URL LINK: CLICK HERE
NAME: **CALIFORNIA FUELS**
ADDRESS: **838 MOKELUMNE STREET**
WOODBRIDGE, CA 95258
COUNTY: **SAN JOAQUIN**
SITE SIZE (ACRES): **1**
LEAD AGENCY: **NONE SPECIFIED**
DTSC PROJECT MANAGER: **NOT REPORTED**
DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**
DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**
NPL LISTED: **NO** RESTRICTED LAND USE: **NO**
SITE TYPE: **EVALUATION**
SITE TYPE DESCRIPTION
EVALUATION: IDENTIFIES SUSPECTED, BUT UNCONFIRMED, CONTAMINATED SITES THAT NEED OR HAVE GONE THROUGH AN INVESTIGATION AND ASSESSMENT PROCESS. IF A SITE IS FOUND TO HAVE CONFIRMED CONTAMINATION, IT WILL CHANGE FROM EVALUATION TO EITHER A STATE RESPONSE OR VOLUNTARY CLEANUP SITE TYPE. SITES FOUND TO HAVE NO CONTAMINATION AT THE COMPLETION OF THE INVESTIGATION AND ASSESSMENT PROCESS RESULT IN A NO ACTION REQUIRED (FOR PHASE 1 ASSESSMENTS) OR NO FURTHER ACTION (FOR PHASE 2 ASSESSMENTS) DETERMINATION.
DTSC's CURRENT INVOLVEMENT AT SITE (as of 04/27/1992)
REFER: RWQCB -
PAST USE/S THAT CAUSED THE CONTAMINATION
NONE SPECIFIED
CONFIRMED CONTAMINANTS OF CONCERN
NONESPECIFIED - NONE SPECIFIED

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Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance.

BRS Biennial Reporting System

VERSION DATE: 12/31/11

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 07/01/16

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 08/03/15

This database includes site locations where Engineering and/or Institutional Controls have been identified as part

of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR09 Enforcement and Compliance History Information

VERSION DATE: 08/26/17

The EPA's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSCA Emergency Response Notification System

VERSION DATE: 10/15/17

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSCA Facility Registry System

VERSION DATE: 09/06/17

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR09 Hazardous Materials Incident Reporting System

VERSION DATE: 03/27/18

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 09/23/17

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 07/09/17

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements.

NPDESR09 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from December 2002 until April 2007. Refer to the PCS and/or ICIS-NPDES database as source of current data.This database includes permitted facilities located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

PADS PCB Activity Database System

VERSION DATE: 07/18/17

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are

required to notify the EPA of such activities.

PCSR09 Permit Compliance System

VERSION DATE: 08/01/12

The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the United States Environmental Protection Agency's Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels. This database includes permitted facilities located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa. PCS has been modernized, and no longer exists. National Pollutant Discharge Elimination System (ICIS-NPDES) data can now be found in Integrated Compliance Information System (ICIS).

RCRASC RCRA Sites with Controls

VERSION DATE: 03/21/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS SEMS Lien on Property

VERSION DATE: 12/11/17

The U.S. Environmental Protections Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete.

SSTS Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/16

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/12

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site.

RCRAGR09 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

RCRANGR09 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

ALTFUELS Alternative Fueling Stations

VERSION DATE: 01/22/18

Nationwide list of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 09/23/17

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 09/01/17

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF Brownfields Management System

VERSION DATE: 03/26/18

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 04/11/18

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/01/18

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An “open dump” is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

SEMS Superfund Enterprise Management System

VERSION DATE: 04/11/18

The U.S. Environmental Protections Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/11/18

The Superfund Enterprise Management System Archive listing (SEMS-ARCHIVE) has replaced the CERCLIS NFRAP reporting system in 2015. This listing reflect sites that have been assessed and no further remediation is planned and is of no further interest under the Superfund program.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 08/25/17

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 06/01/15

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/01/18

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites.
During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL National Priorities List

VERSION DATE: 04/11/18

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 04/11/18

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS Record of Decision System

VERSION DATE: 12/11/17

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

CDL Clandestine Drug Labs

VERSION DATE: 06/30/17

The California Department of Toxic Substance Control (DTSC) provides this listing of illegal drug laboratories. Pursuant to Section 25354.5 of the California Health and Safety Code, DTSC conducts emergency removal actions at clandestine drug labs at the request of State and local law enforcement agencies. DTSC's contractors typically remove hazardous substances that may pose an immediate threat to public health and the environment while the enforcement officials are on scene. During the emergency removal actions, contractors remove and properly dispose of contaminated lab equipment, chemicals used to make the illegal drugs (usually methamphetamine), lab chemical wastes, and other grossly contaminated materials. DTSC does not perform additional assessment work beyond standard emergency removal actions and makes no further determination regarding the need for future cleanup work at the emergency removal location. The reported location information may or may not include the actual location of the illegal drug lab. The DTSC does not guarantee the accuracy of the address or location information or the condition of the location listed.

CHMIRS California Hazardous Material Incident Report System

VERSION DATE: 05/09/17

The California Hazardous Material Incident Report System database is provided by the California Emergency Management Agency. This database contains accidental or spill release information from reported hazardous material incidents since 1993.

DTSCDR DTSC Deed Restrictions

VERSION DATE: 01/21/18

The California Department of Toxic Substances Control (DTSC) maintains this listing of sites with deed restrictions. According to the DTSC, restricted land use indicates whether the site or area within the site has an environmental restriction recorded and/or other institutional control preventing certain types of land use or activities. The land use restrictions listed under the site management requirements are only an abbreviated summary of the land use restrictions, and may not encompass all restrictions and notification requirements placed on a property. For complete land use restriction information please contact the DTSC to review associated Land Use Restriction documents.

EMI Emissions Inventory Data

VERSION DATE: 12/31/15

The Air Resources Board's Emissions Inventory Database contains criteria pollutant data and toxic data on facilities throughout the state of California for the 2012-2000 inventory years.

HWTS Hazardous Waste Tanner Summary

VERSION DATE: 12/31/16

This data is prepared from information extracted from copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. The Hazardous Waste Summary Report (Tanner Report) currently includes manifest data from the 1993 through the 2016 reporting years.

LDS Land Disposal Sites

VERSION DATE: 01/21/18

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

LIENS Recorded Environmental Cleanup Liens

VERSION DATE: 02/20/18

The California Department of Toxic Substance Control (DTSC) maintains this listing of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

MCS Military Cleanup Sites

VERSION DATE: 04/16/18

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater

NPDES National Pollutant Discharge Elimination System Facilities

VERSION DATE: 03/12/18

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

ABST Above Ground Storage Tanks

VERSION DATE: 03/22/18

This database, provided by the California Environmental Protection Agency's (CalEPA) Regulated Site Portal, contains aboveground petroleum storage tank facilities originating from the California Environmental Reporting System (CERS). These facilities store petroleum in aboveground storage tanks with oversight by local agencies. As of January 1, 2008, Assembly Bill No. 1130 of the Aboveground Petroleum Storage Act (APSA) authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. CalEPA Data Disclaimer: Information displayed in the portal is collected from separate agency databases and displayed unaltered. Information that is considered confidential, trade secret, or is otherwise protected by the agency that

manages the database is not loaded into the portal. For more detail about information displayed in the portal, please visit the data source sites. Please refer to AST2007 database for aboveground storage tank information obtained from the California State Water Resources Control Board prior to 2008 APSA requirements.

AST2007 Aboveground Storage Tanks Prior to January 2008

VERSION DATE: 12/01/07

This database contains aboveground storage tank facilities registered with the California State Water Resources Control Board (SWRCB) between 2007 and 2003. Since 2006, tanks were required to contain a minimum (even as cumulative) of 1320 gallons to be in the program. As of January 1, 2008, the SWRCB no longer maintains a list of registered aboveground storage tanks, due to effective Assembly Bill No. 1130 (Laird) of the Aboveground Petroleum Storage Act (APSA). This Bill authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. Please refer to ABST database as a current source for aboveground petroleum storage tank data.

CLEANER Dry Cleaner Facilities

VERSION DATE: 03/13/18

This database, created by accessing the California Department of Toxic Substances Control's (DTSC) Hazardous Waste Tracking System, includes dry cleaner facilities that have registered EPA identification numbers. These facilities are categorized with one of the following NAICS Codes: 81231 or 81232. This database may also include facilities other than dry cleaners who also register with these same NAICS Codes. Not all companies report their NAICS/SIC Codes to the DTSC and therefore this database may exclude registered dry cleaner facilities with incomplete classification information.

DTSCHWT DTSC Registered Hazardous Waste Transporters

VERSION DATE: 02/06/18

The Department of Toxic Substances Control provides this list of Registered Hazardous Waste Transporters.

HISTUST Historical Underground Storage Tanks

VERSION DATE: 12/31/87

The Hazardous Substance Storage Container Database is a historical list of Underground Storage Tank sites, compiled from tank survey and registration information collected at one time between 1984 and 1987 by the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials.

MINES Mines Listing

VERSION DATE: 02/11/18

This database includes mine site locations from the California Office of Mine Reclamation.

MWMP California Medical Waste Management Program Facility List

VERSION DATE: 04/13/18

To protect the public and the environment from potential infectious exposure to disease causing agents, the Medical Waste Management Program (MWMP), in the Environmental Management Branch of the California Department of Public Health, regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations.

SLIC Spills, Leaks, Investigation & Cleanup Recovery Listing

VERSION DATE: 06/16/08

These records are maintained by the California Regional Water Quality Control Board (RWQCB). This list includes contaminated sites that impact groundwater or have the potential to impact ground water. Please refer to CLEANUPSITES database as source of current data.

SWEEPS Statewide Environmental Evaluation and Planning System

VERSION DATE: 10/01/94

The Statewide Environmental Evaluation and Planning System (SWEEPS) contains a historical listing of active and inactive underground storage tank locations from the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials. Refer to CUPA listing for source of current data.

USTCUPA Underground Storage Tanks

VERSION DATE: 02/11/18

An underground storage tank is an individual tank or group of tanks that store hazardous substances. Underground storage tanks are completely or considerably below the ground surface. This database contains UST permit data submitted from the Certified Unified Program Agencies (CUPA) directly to the State Water Resources Control Board. CUPA's are local agencies that have been certified by the California EPA to implement state environmental programs within the local agency's jurisdiction.

BF Brownfield Sites

VERSION DATE: 03/06/18

This database includes Brownfield sites from the State Water Resources Control Board. These are sites that have gone through the Moratorium of Agreement (MOA) process.

Environmental Records Definitions - STATE (CA)

CALSITES CALSITES Database

VERSION DATE: 05/01/04

This historical database was maintained by the Department of Toxic Substance Control for more than a decade. CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

CLEANUPSITES GeoTracker Cleanup Sites

VERSION DATE: 04/16/18

This GeoTracker Cleanup Sites database is maintained by the California Regional Water Quality Control Board (RWQCB). The database contains contaminated sites that impact groundwater or have the potential to impact ground water, including spills, investigations, cleanup recoveries and reported leaking underground storage tank incidents.

CORTESE Cortese List

VERSION DATE: 02/11/18

This active listing includes hazardous waste and substances sites designated by the State Water Resources Control Board , the Integrated Waste Board, and the Department of Toxic Substance Control. The Cortese List is utilized by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites.

DROP Listing of Certified Dropoff, Collection, and Community Service Programs

VERSION DATE: 02/06/18

Listing of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

ERAP Expedited Removal Action Program Sites

VERSION DATE: 01/29/18

The Expedited Remedial Action Program is a pilot project administered by the Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program to promote the cleanup of up to 30 hazardous substance release sites. ERAP provides significant incentives for redevelopment of contaminated properties by promoting cleanups based on the planned land use, by providing a covenant not to sue, and by outlining a fair and equitable liability scheme.

HISTCORTESE Historical Cortese List

VERSION DATE: 11/02/02

This historical listing includes hazardous waste and substances sites designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substance Control. The Cortese List was utilized by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. See CACORTESE for an updated version of this database.

LUST Leaking Underground Storage Tanks

VERSION DATE: 04/16/18

This database is maintained by the State Water Resources Control Board. LUST records contain an inventory of reported leaking underground storage tank incidents. Please refer to the CLEANUPSITES database as source of current data.

NFA No Further Action Determination

VERSION DATE: 07/01/05

The NFA listing contains properties at which the Department of Toxic Substance Control has made a clear determination that the property does not pose a problem to the environment or to public health.

NFE Sites Needing Further Evaluation

VERSION DATE: 07/01/05

The NFE listing contains properties that the Department of Toxic Substance Control suspects with possible contamination. These are unconfirmed contaminated properties that need further assessment.

PROC Listing of Certified Processors

VERSION DATE: 02/19/18

Listing of Certified Processors that are operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

REF Referred to Another Local or State Agency

VERSION DATE: 07/01/05

The REF listing contains properties where contamination has not been confirmed and which were determined as not requiring direct Department of Toxic Substance Control Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

SWIS Solid Waste Information System Sites

VERSION DATE: 04/18/18

The Solid Waste Information System (SWIS) database includes information on solid waste facilities, operations, and disposal sites located in California. This database is maintained by the California Department of Resources Recycling and Recovery.

SWRCY Recycling Centers

VERSION DATE: 02/20/18

Listing of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

VCP Voluntary Cleanup Program

VERSION DATE: 04/23/18

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

WMUDS Waste Management Unit Database

VERSION DATE: 01/01/00

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

ENVIROSTOR EnviroStor Cleanup Sites

VERSION DATE: 04/23/18

The Department of Toxic Substances Control (DTSC) has developed the EnviroStor database system to evaluate and track sites with confirmed or potential contamination and sites where further investigation may be necessary. This EnviroStor database of cleanup sites contains the following: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. Sites where DTSC has made a "No Action Required" determination are not included in this database, as these sites had assessments that revealed no evidence of recognized environmental conditions in connection with the property.

ENVIROSTORPCA EnviroStor Permitted and Corrective Action Sites

VERSION DATE: 02/05/18

Environmental Records Definitions - STATE (CA)

The Department of Toxic Substances Control (DTSC) has developed the EnviroStor database system to evaluate and track sites with confirmed or potential contamination and sites where further investigation may be necessary. This EnviroStor database contains detailed information on hazardous waste permitted and corrective action facilities. Investigation and cleanup activities at hazardous waste facilities (either Resource Conservation and Recovery Act (RCRA) or State-only) that either were eligible for a permit or received a permit are called "corrective action." These facilities treated stored, disposed and/or transferred hazardous waste.

TOXPITS Toxic Pits Cleanup Act Sites

VERSION DATE: 07/01/95

Toxic Pits are sites with possible contamination of hazardous substances where cleanup is necessary. This listing is no longer updated by the State Water Resources Control Board.

Environmental Records Definitions - LOCAL

SJCCUPA San Joaquin County CUPA

VERSION DATE: 03/01/18

The San Joaquin County Environmental Health Department (EHD) was approved by the State as the Certified Unified Program Agency for San Joaquin County. The EHD administers the Hazardous Waste Generator, Hazardous Waste Onsite Treatment (Tiered Permitting) and Underground Storage Tank programs.

USTR09 Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/13/17

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

LUSTR09 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/13/17

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

TORRESDUMPSITES Illegal Dump Sites on the Torres Martinez Reservation

VERSION DATE: 10/29/07

This listing of illegal dump site locations on the Torres Martinez Reservation is maintained by the United States Environmental Protection Agency, Region IX. These dump sites contain unlawfully discarded household waste such as landscaping and wood wastes with no known soil or groundwater contamination. A majority of the sites have already been cleaned up through the collaborative efforts of the EPA, The California Integrated Waste Management Board and the Torres Martinez Tribe.

INDIANRES Indian Reservations

VERSION DATE: 01/01/00

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

GeoSearch

On time. On target. In touch.™

Historical Topographic Maps

Target Property:

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin, California 95242

Prepared For:

BaseCamp Environmental

Order #: 108219
Job #: 237368
Project #: 2941
Date: 5/11/2018

Target Property Summary

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin, California 95242

USGS Quadrangle: ***Lodi North***
Target Property Geometry: ***Point***

Target Property Longitude(s)/Latitude(s):
(-121.301861400, 38.146393500)

Topographic Map Summary

Date	Quadrangle	Scale
	Lodi South, CA (2012)	1" = 2000'
	Lodi North, CA (2012)	
1968 PHOTOREVISED 1976	Lodi North, CA	1" = 2000'
1968	Lodi North, CA	1" = 2000'
1953	Lodi North, CA	1" = 2000'
1942	Lodi, CA	1" = 5208'
1939	Lodi, CA	1" = 5208'
1910	Woodbridge, CA	1" = 2640'
1894	Lodi, CA	1" = 10420'

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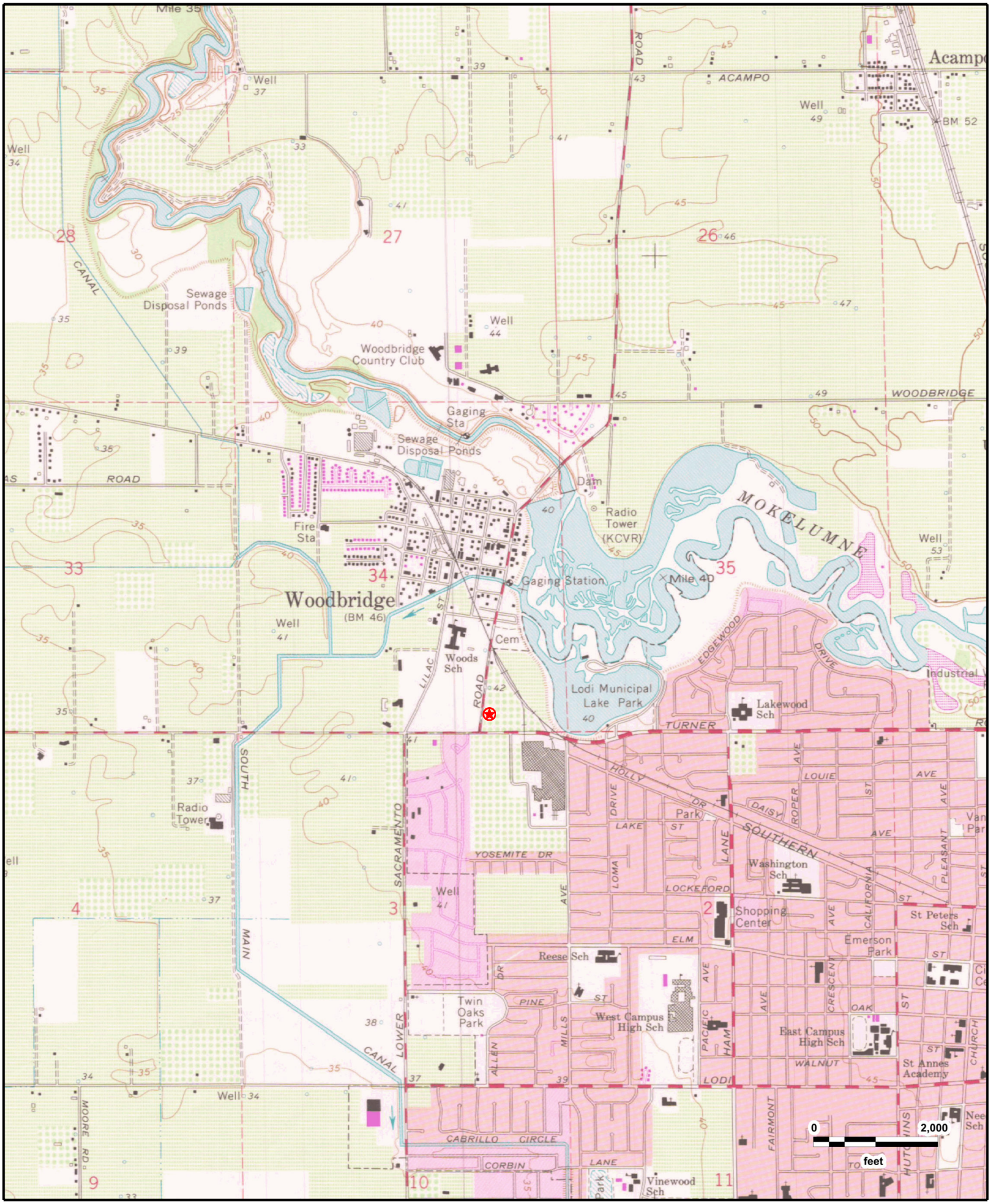


N
W E
S

Lodi California
Lodi South, CA (2012), Lodi North, CA (2012)

GeoSearch

JOB #: 237368 - 05/11/2018

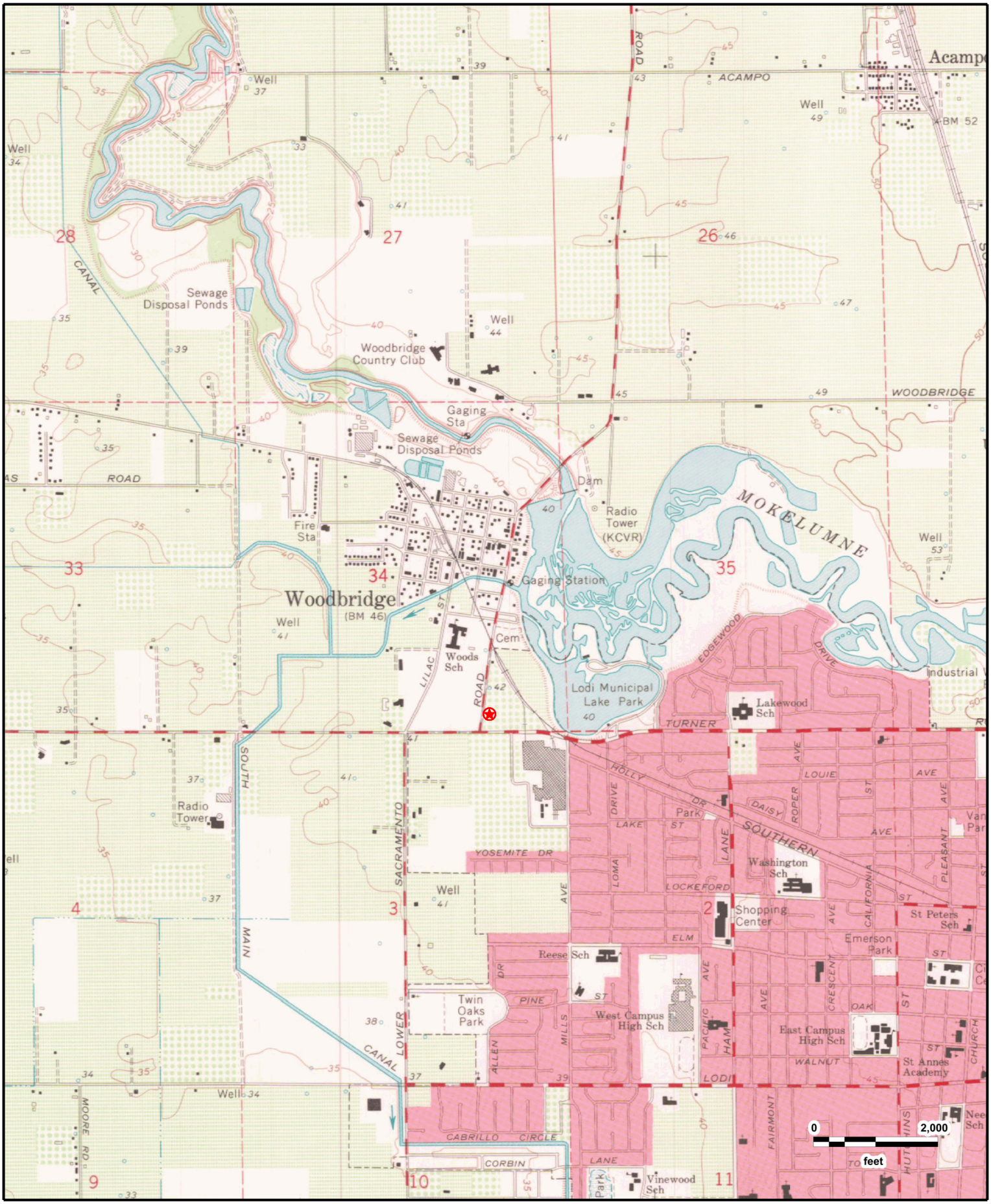


N
W E
S

Lodi California
Lodi North, CA (1976)

GeoSearch

JOB #: 237368 - 05/11/2018

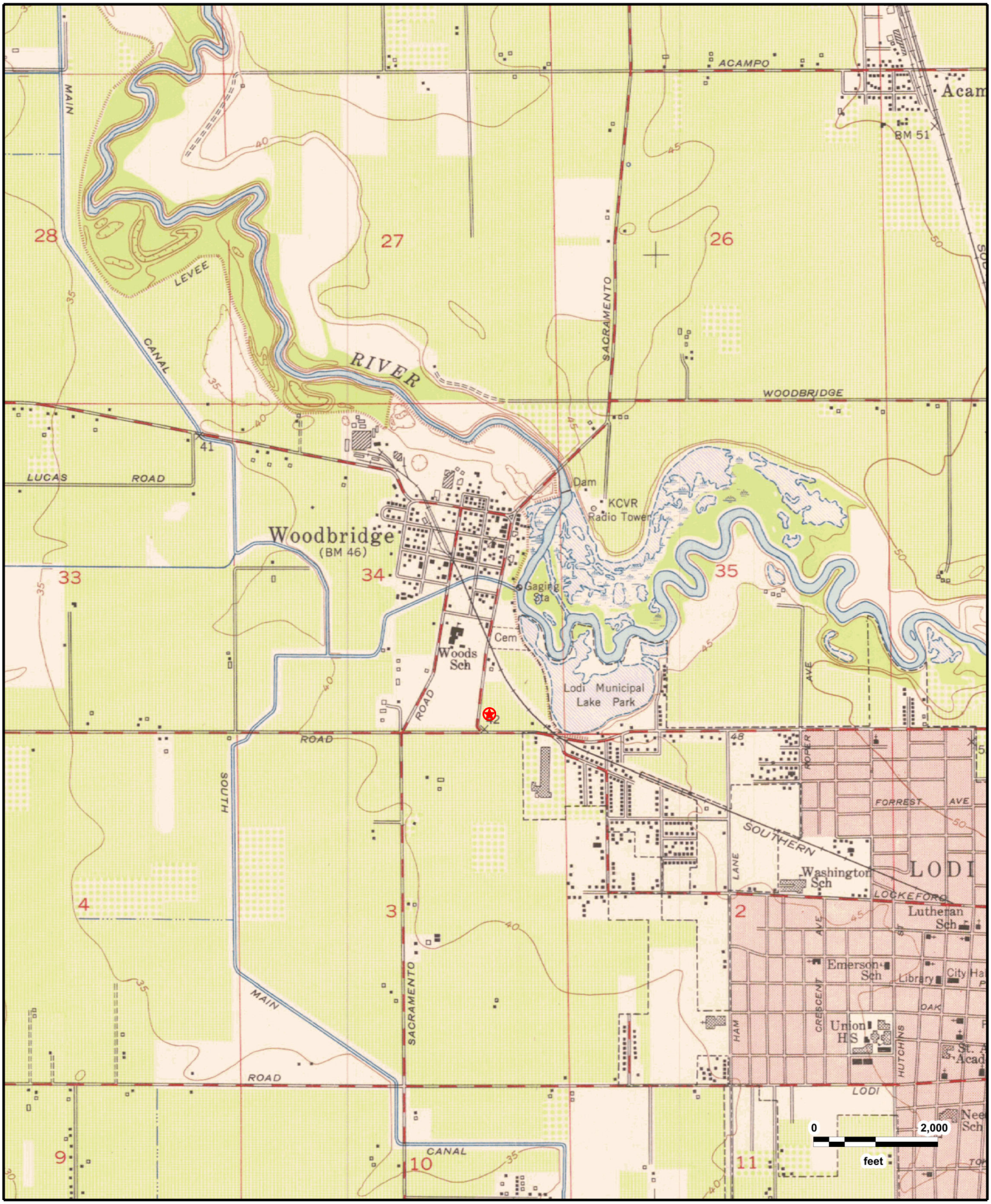


N
W E
S

Lodi California
Lodi North, CA (1968)

GeoSearch

JOB #: 237368 - 05/11/2018

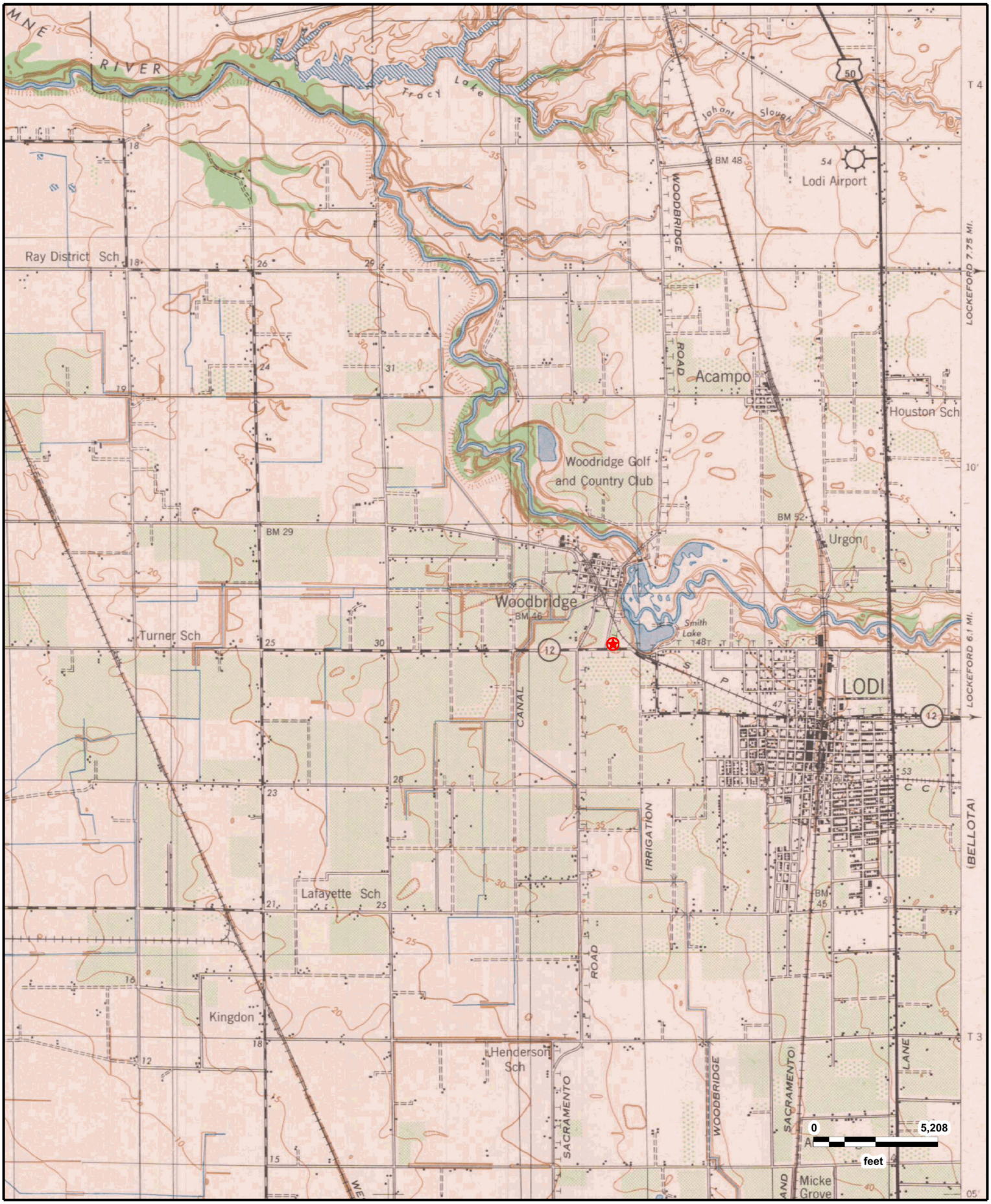


N
W E
S

Lodi California
Lodi North, CA (1953)

GeoSearch

JOB #: 237368 - 05/11/2018

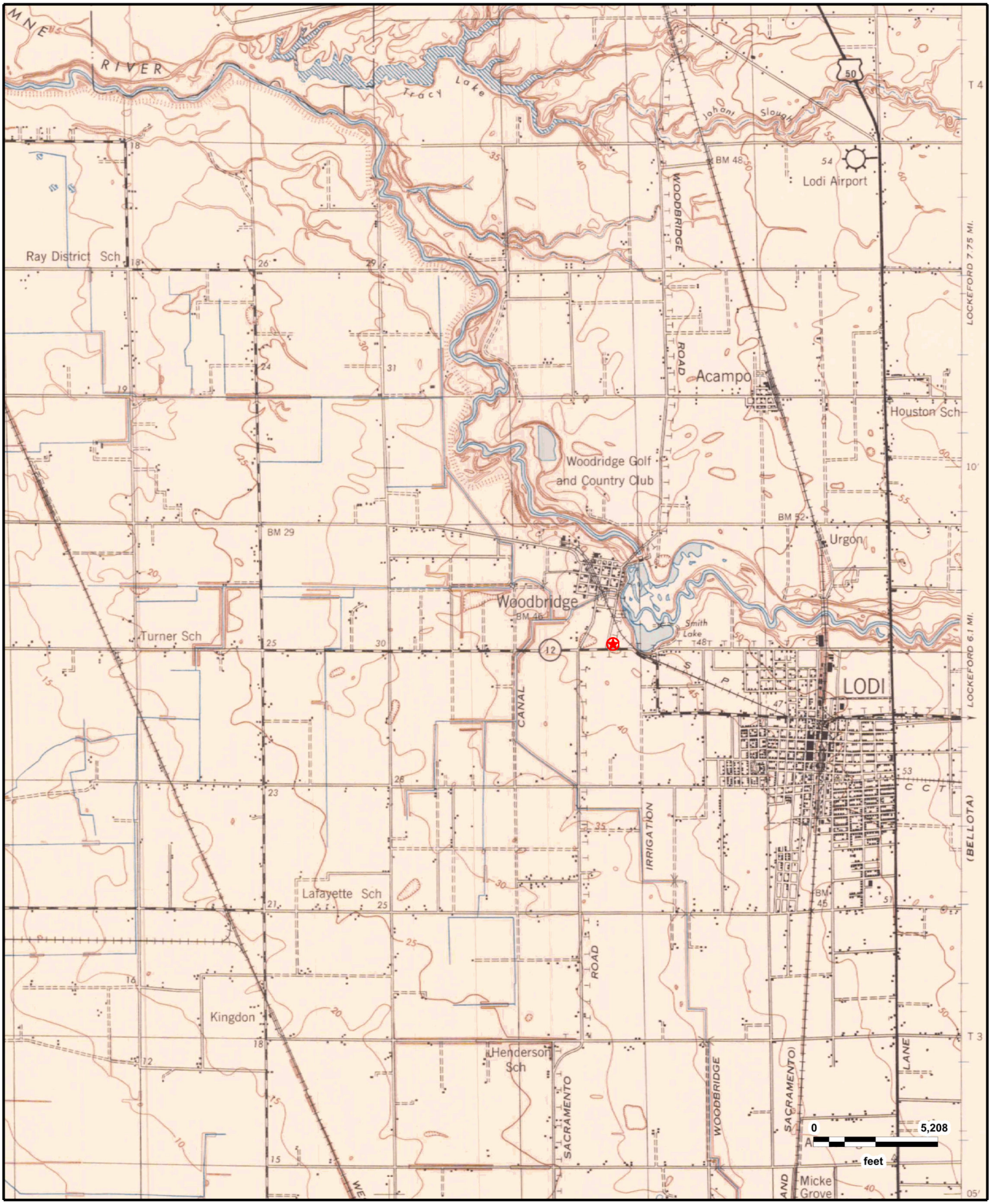


N
W E
S

Lodi California
Lodi, CA (1942)

GeoSearch

JOB #: 237368 - 05/11/2018



N
W E
S

Lodi California
Lodi, CA (1939)

GeoSearch

JOB #: 237368 - 05/11/2018

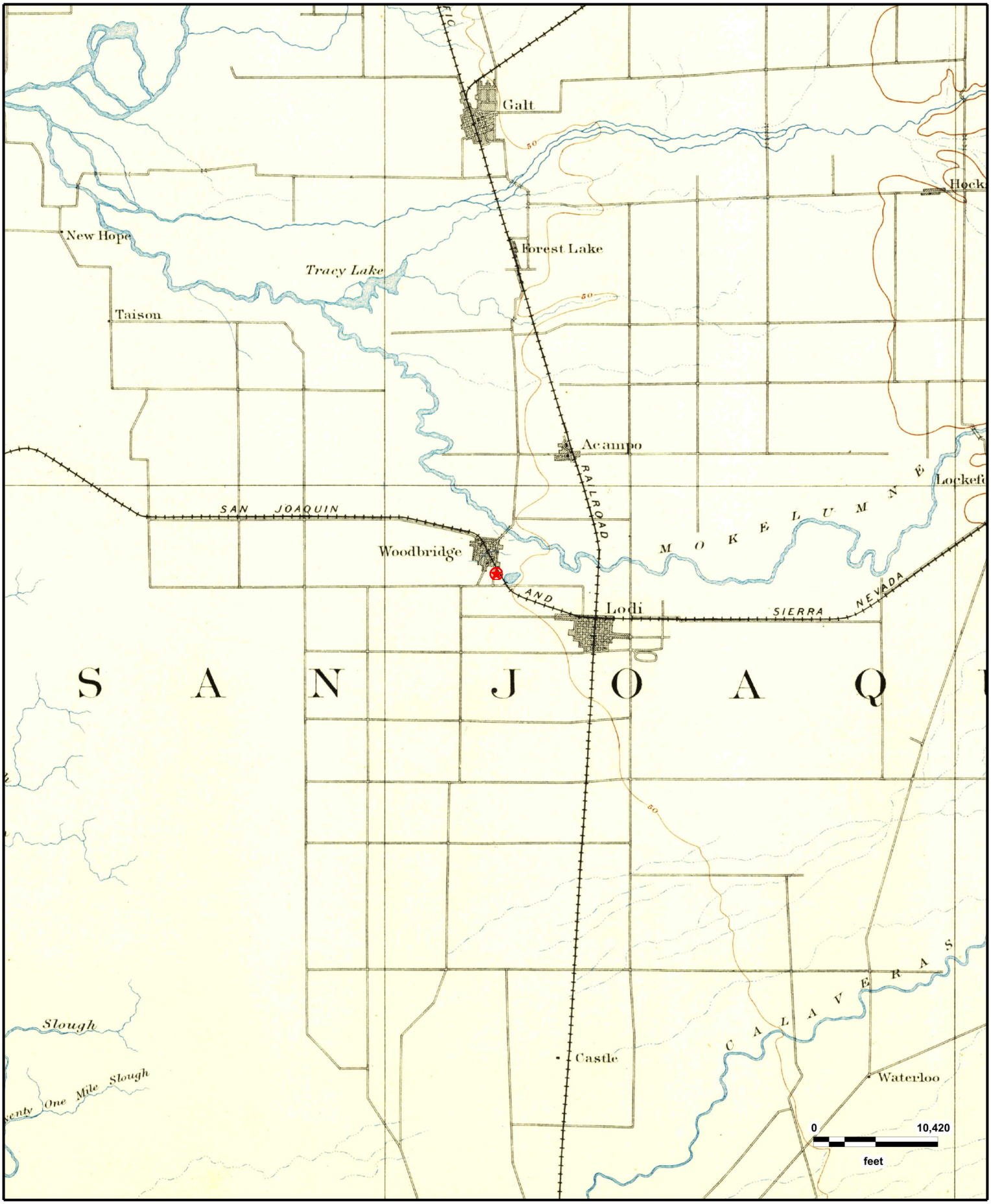


N
W E
S

Lodi California
Woodbridge, CA (1910)

GeoSearch

JOB #: 237368 - 05/11/2018



N
W E
S

Lodi California
Lodi, CA (1894)

GeoSearch

JOB #: 237368 - 05/11/2018

GeoSearch

On time. On target. In touch.™

Historical Aerials Package

Target Property:

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin, California 95242

Prepared For:

BaseCamp Environmental

Order #: 108219
Job #: 237373
Project #: 2941
Date: 5/14/2018

Target Property Summary

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin, California 95242

USGS Quadrangle: ***Lodi North***
Target Property Geometry: ***Point***

Target Property Longitude(s)/Latitude(s):
(-121.301861400, 38.146393500)

Aerial Research Summary

Date	Source	Scale	Frame
2016	USDA	1" = 500'	N/A
2014	USDA	1" = 500'	N/A
2012	USDA	1" = 500'	N/A
2010	USDA	1" = 500'	N/A
2009	USDA	1" = 500'	N/A
2006	USDA	1" = 500'	N/A
2005	USDA	1" = 500'	N/A
2004	USDA	1" = 500'	N/A
2003	USDA	1" = 500'	N/A
05/23/1993	USGS	1" = 500'	N/A
06/19/1987	USGS	1" = 500'	507-33
06/08/1984	USGS	1" = 500'	125-110
06/05/1977	USGS	1" = 500'	1-30
04/27/1974	USGS	1" = 500'	1-5
05/02/1967	USGS	1" = 500'	1-88
06/01/1963	ASCS	1" = 500'	2-86
07/12/1957	ASCS	1" = 500'	37-81
1949	FAIRCHILD	1" = 500'	24-105
08/14/1937	ASCS	1" = 500'	38-10

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N
W E
S

Lodi California
USDA
2016

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USDA
2014

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USDA
2012

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USDA
2010

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USDA
2009

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USDA
2006

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USDA
2005

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USDA
2004

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USDA
2003

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USGS
05/23/1993

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USGS
06/19/1987

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USGS
06/08/1984

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USGS
06/05/1977

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USGS
04/27/1974

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
USGS
05/02/1967

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
ASCS
06/01/1963

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
ASCS
07/12/1957

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
FAIRCHILD
1949

GeoSearch

JOB #: 237373 - 05/14/2018



N
W E
S

Lodi California
ASCS
08/14/1937

GeoSearch

JOB #: 237373 - 05/14/2018

Historical By Street Number

Target Property:

W Turner Rd,

Lodi, CA 95242

Prepared For:
BaseCamp Environmental

Order #: 108219

Project #: 2941

Date: 5/15/2018

1316 W Turner Rd	No Listing (1960-1965); Floyd Maurice H (1970); No Listing (1980-2016)
1326 W Turner Rd	Dause Rudolph (1960-1965); Taylor Terry (1960); Almer Delmer (1970); Norris James R (1980); Holland James (1985); No Listing (1989-2016)
1361 W Turner Rd	No Listing (1960-1985); Petree John L (1989); No Listing (1996-2016)
1604 W Turner Rd	No Listing (1960-1989); Barron Norma H (1996-2000); Y [E Turner Rd Ends] (1996-2000); No Listing (2005-2016)
1616 W Turner Rd	No Listing (1960-2000); No Current Listing (2005-2010); Barron Marcelino (2016)
1973 W Turner Rd	No Listing (1960-1989); Not Verified (1996); Spenker Ranch [Bf Cattle Exc Fdlo] (1996); Jessie's Grove Winery (2000-2016); Spenker Ranch (2000)
2000 W Turner Rd	Genl Mills Inc (Sperry Div) (1960-1989); Cooley Steve D (1996); General Mills [Cereal Brkfst Food] (1996); General Mills (2000); W [Woodhaven Ln Begins] (2000); General Mill Inc [Cereals] (2005-2016); X [Railroad Crosses] (2005-2016)
2020 W Turner Rd	Taylor Terry (1960); Tracy Mike (1965); No Listing (1970-2016)
2040 W Turner Rd	No Listing (1960-1989); Heyd Dennis M (1996); X [Woodhaven Ln Begins] (1996); No Listing (2000-2016)
2240 W Turner Rd	No Listing (1960-1989); Hatterle Roland A & Linda (1996); Not Verified (2000); No Listing (2005-2010); Hatterle Roland (2016)
2308 W Turner Rd	No Listing (1960-1965); Vacant (1970); Williams Gina (1980); Gregg Steven (1985-1989); No Listing (1996-2000); Dalporto Jennifer A (2005); Long Dale E (2010); No Listing (2016)
2310 W Turner Rd	No Listing (1960-1965); Gonzalez Manuel (1970); No Listing (1980-2016)
2312 W Turner Rd	No Listing (1960-1965); Benson Brad (1970); No Listing (1980-2016)
2316 W Turner Rd	No Listing (1960-1965); Brenning Elmer G (1970); No Listing (1980-2016)
2318 W Turner Rd	No Listing (1960-1965); Leis Ronald (1970); No Listing (1980-2016)
2320 W Turner Rd	No Listing (1960-1965); Litz Erwin (1970); No Listing (1980-2016)
2322 W Turner Rd	No Listing (1960-1965); Kranich Lyle (1970); No Listing (1980-2016)
2324 W Turner Rd	No Listing (1960-1965); Walther Ronald (1970); No Listing (1980-2016)
2326 W Turner Rd	No Listing (1960-1965); Wilkinson Wm L (1970); No Listing (1980-2016)
2330 W Turner Rd	No Listing (1960-1965); Bradford Larry L (1970); No Listing (1980-2016)
2332 W Turner Rd	No Listing (1960-1965); Hanson Harley (1970); No Listing (1980-2016)
2334 W Turner Rd	No Listing (1960-1965); Heist Roger (1970); No Listing (1980-2016)

2336 W Turner Rd	No Listing (1960-1965); Thompson Dale V (1970); No Listing (1980-2016)
2338 W Turner Rd	No Listing (1960-1965); Vacant (1970); No Listing (1980-2016)
2340 W Turner Rd	No Listing (1960-1965); Goedde Frances (1970); No Listing (1980-2016)
2342 W Turner Rd	No Listing (1960-1965); No Return (1970); No Listing (1980-2016)
2344 W Turner Rd	No Listing (1960-1965); Fairbanks Lester M (1970); No Listing (1980-2016)
2346 W Turner Rd	No Listing (1960-1965); No Return (1970); No Listing (1980-2016)
2348 W Turner Rd	No Listing (1960-1965); Antiveros John F (1970); No Listing (1980-2016)
2350 W Turner Rd	No Listing (1960-1965); Berg Ray (1970); No Listing (1980-2016)
2352 W Turner Rd	No Listing (1960-1965); Reyes Ofelia L (1970); No Listing (1980-2016)
2354 W Turner Rd	No Listing (1960-1965); Porter Irene (1970); No Listing (1980-2016)
2356 W Turner Rd	No Listing (1960-1965); Reed Velmar O (1970); No Listing (1980-2016)
2360 W Turner Rd	No Listing (1960-1965); Citrino F (1970); No Listing (1980-2016)
2362 W Turner Rd	No Listing (1960-1965); Kates James L (1970); No Listing (1980-2016)
2364 W Turner Rd	No Listing (1960-1965); Watson Thos L (1970); No Listing (1980-2016)
2366 W Turner Rd	No Listing (1960-1965); Dumoulin Kenneth (1970); No Listing (1980-2016)
2370 W Turner Rd	No Listing (1960-1965); O'neil Patrick (1970); No Listing (1980-2016)
2372 W Turner Rd	No Listing (1960-1965); Hausauer Dan (1970); No Listing (1980-2016)
2374 W Turner Rd	No Listing (1960-1965); Vacant (1970); No Listing (1980-2016)
2376 W Turner Rd	No Listing (1960-1965); Ganzer Ann (1970); No Listing (1980-2016)
2378 W Turner Rd	No Listing (1960-1965); Vacant (1970); No Listing (1980-2016)
2380 W Turner Rd	No Listing (1960-1965); Keddie Warren (1970); No Listing (1980-2016)

Comments: No coverage available for Lodi from 1970-1980, and prior to 1960 at the time of this report.

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GeoPlus Oil & Gas Report

Satellite view

Target Property:

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin County, California 95242

Prepared For:

BaseCamp Environmental

Order #: 108219
Job #: 237370
Project #: 2941
Date: 05/12/2018

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Target Property Summary

Target Property Information

Lodi California
1018 N Lower Sacramento Rd
Lodi, California 95242

Coordinates
Point (-121.30186, 38.146393)

USGS Quadrangle
Lodi North, CA

Geographic Coverage Information

County/Parish: San Joaquin (CA)
ZipCode(s):
Acampo CA: 95220
Lodi CA: 95242
Woodbridge CA: 95258

Radon
* Target property is located in Radon Zone 3.
Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L (picocuries per liter).

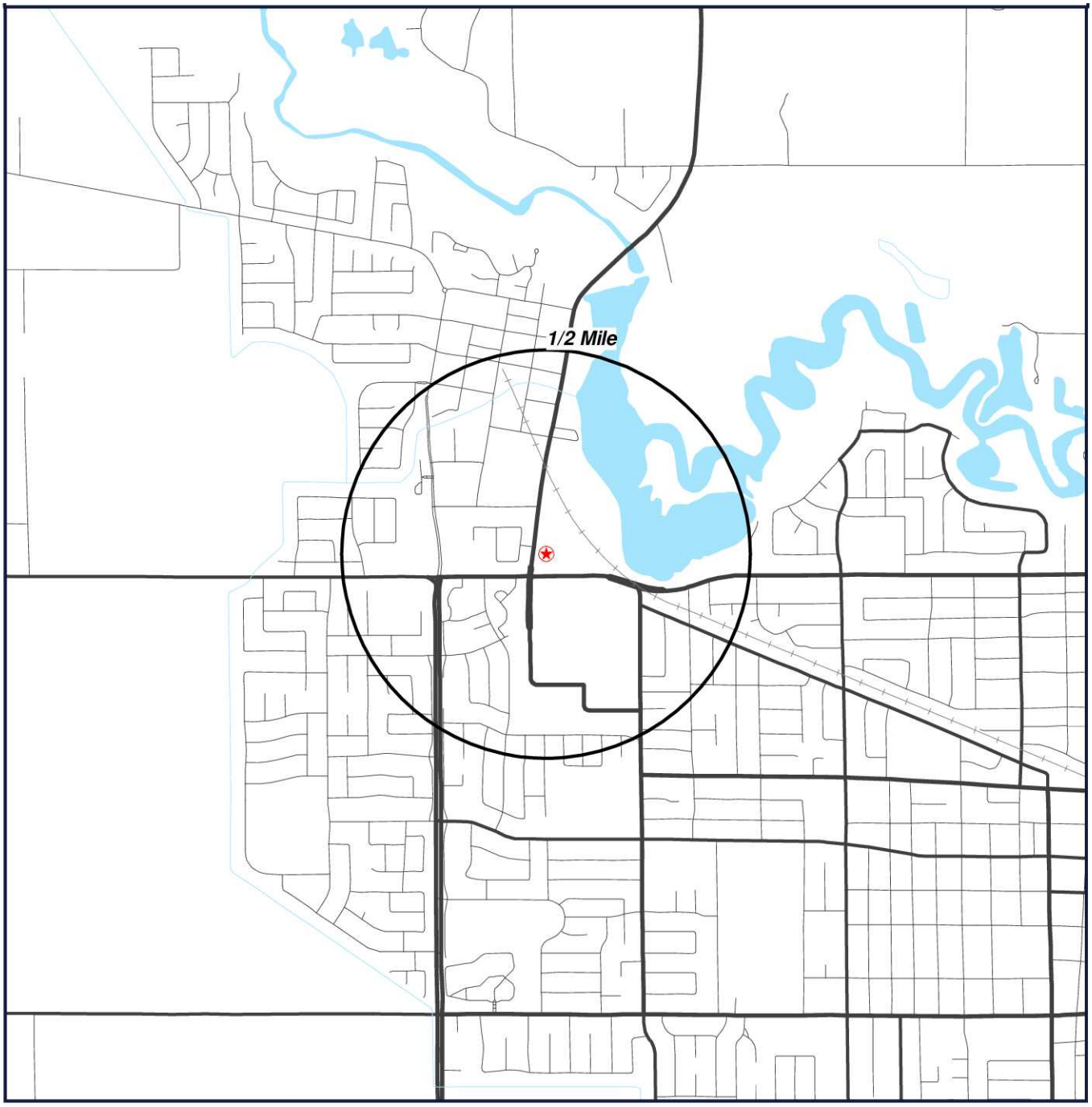
Database Radius Summary

STATE (CA) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OG	0.5000	0	0	0	0	NS	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS MAP



Target Property (TP)

Well Location

Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

[Click here to access Satellite view]

Located Sites Summary

No Records Found.

OG Oil and Gas

VERSION DATE: 11/26/17

This oil, gas, and geothermal well information database is maintained by the California Department of Conservation's Division of Oil, Gas, and Geothermal Resources. The database information may change without notice. The Department of Conservation makes no warranties, whether expressed or implied, as to the suitability of the product for any particular purpose. Any use of this information is at the user's own risk.

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GeoPlus Physical Setting Maps

Satellite view

Target Property:

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin County, California 95242

Prepared For:

BaseCamp Environmental

Order #: 108219
Job #: 237372
Project #: 2941
Date: 05/12/2018

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FEMA Report 3

NWI Map 4

NWI Report 5

SOIL Map 6

SOIL Report 7

GEOLOGY Map 8

GEOLOGY Report 9

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Target Property Summary

Target Property Information

Lodi California
1018 N Lower Sacramento Rd
Lodi, California 95242

Coordinates
Point (-121.30186, 38.146393)

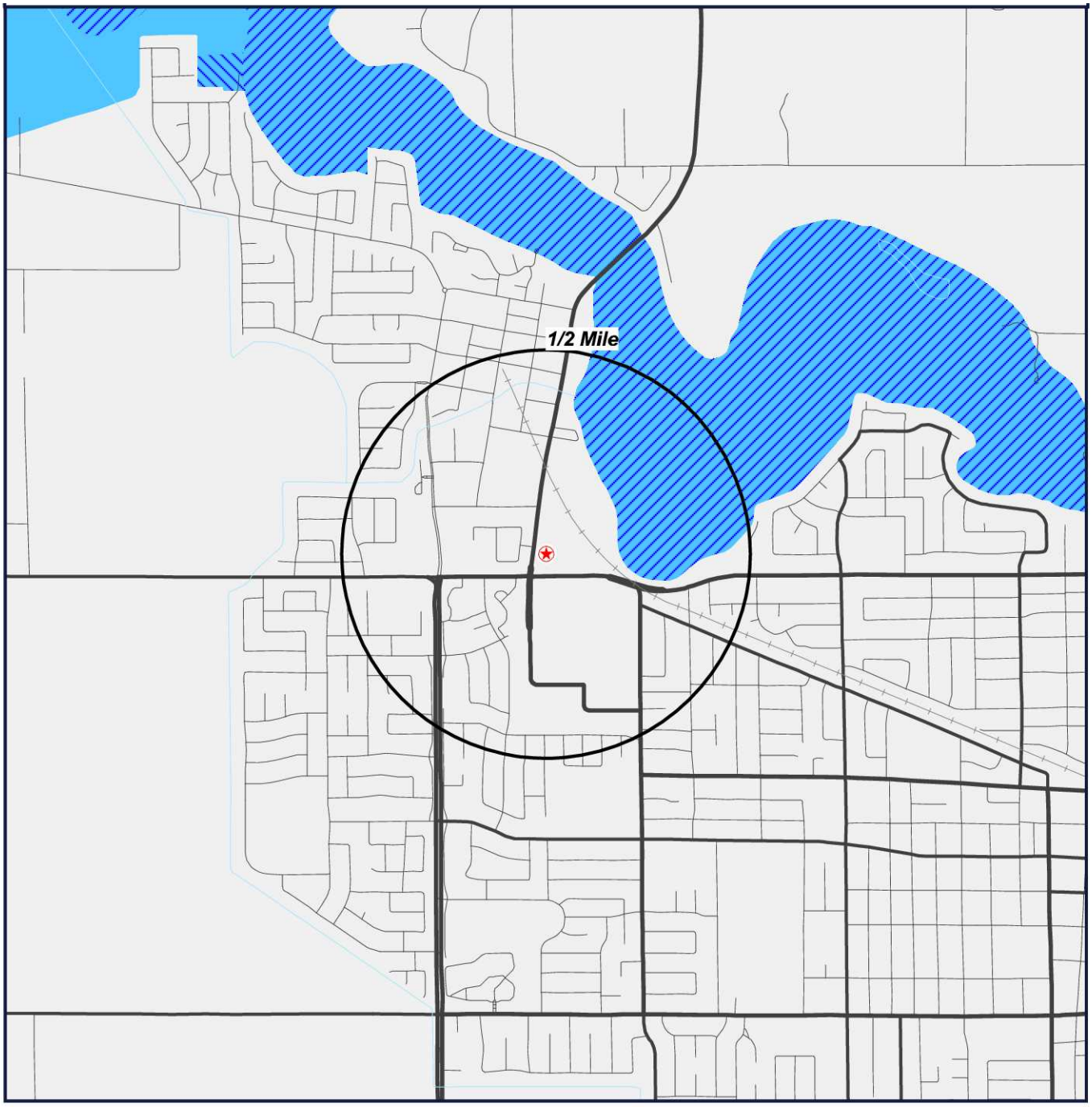
USGS Quadrangle
Lodi North, CA

Geographic Coverage Information

County/Parish: San Joaquin (CA)
ZipCode(s):
Acampo CA: 95220
Lodi CA: 95242
Woodbridge CA: 95258

Radon
* Target property is located in Radon Zone 3.
Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L (picocuries per liter).

FEMA Map



Target Property (TP)

ZONE A	ZONE D
ZONE AE	ZONE X
ZONE AH	AREA NOT INCLUDED
ZONE A0	OPEN WATER
ZONE AR	NDA - DIGITAL DATA NOT AVAILABLE
ZONE V	
ZONE VE	

Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Letter of map revision date: 12/27/2016
Latest study effective date: 11/04/2016
Panel #: 06077C0305E

[Click here to access Satellite view]

FEMA Report

FEMA - Federal Emergency Management Agency

The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information. This data was provided by the Federal Emergency Management Agency's Map Service Center in November of 2013.

FEMA Flood Zone Definitions within Search Radius

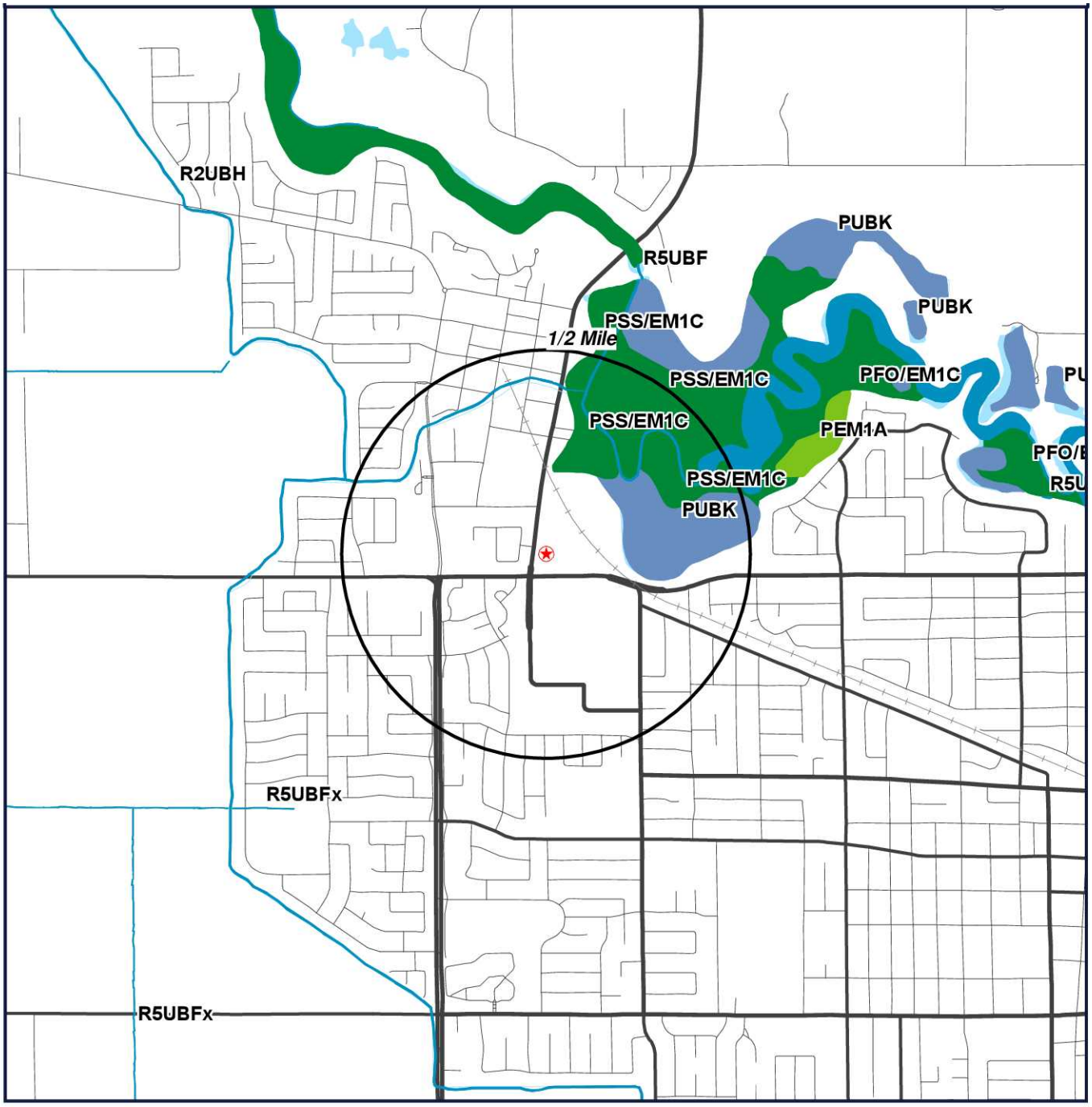
AE	Zone AE

Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones. (Zone AE is used on new and revised maps in place of Zones A1–A30.)

X	Zone X

An area that is determined to be outside the 100 and 500 year floodplains.

NWI Map



Target Property (TP)

Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

Map Date: 12/02/2016

- ESTUARINE AND MARINE DEEPWATER
- ESTUARINE AND MARINE WETLAND
- FRESHWATER EMERGENT WETLAND
- FRESHWATER FORESTED/ SHRUB WETLAND
- LAKE
- OTHER
- RIVERINE
- FRESHWATER POND
- NDA - DIGITAL DATA NOT AVAILABLE

N W E S

0' 1000' 2000' 3000'

SCALE: 1" = 2000'

Click here to access Satellite view

NWI Report

NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

NWI Definitions within Search Radius

PSS/EM1C

SYSTEM: **PALUSTRINE**

CLASS: **SCRUB-SHRUB**

WATER REGIME: **SEASONALLY FLOODED/SATURATED**

PUBK

SYSTEM: **PALUSTRINE**

CLASS: **UNCONSOLIDATED BOTTOM**

R2UBH

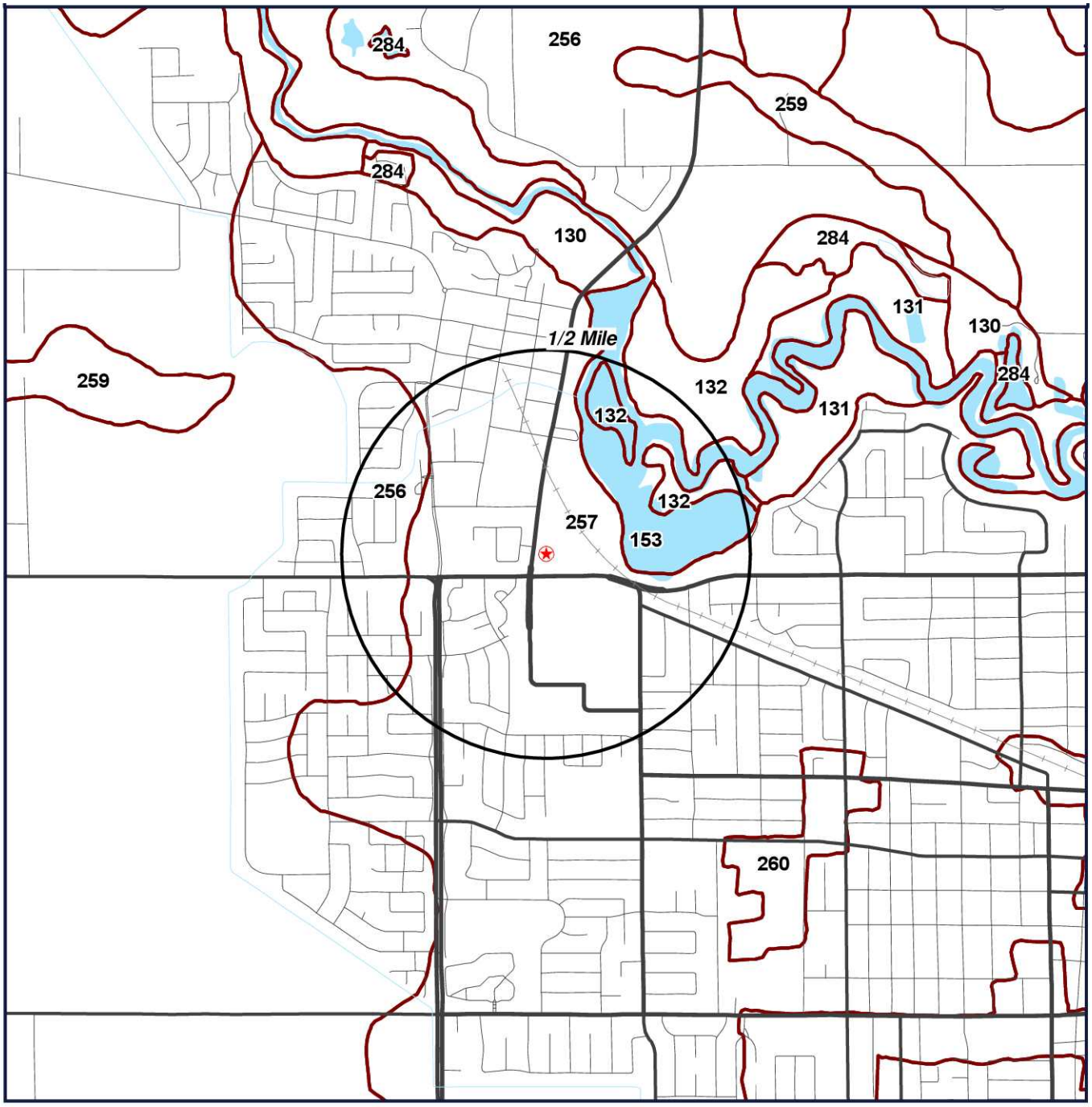
SYSTEM: **RIVERINE**

SUBSYSTEM: **LOWER PERENNIAL**

CLASS: **UNCONSOLIDATED BOTTOM**

WATER REGIME: **PERMANENTLY FLOODED**

Soil Map



Target Property (TP)

SOIL BOUNDARY

NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLETE

Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

[Click here to access Satellite view]

SOIL Report

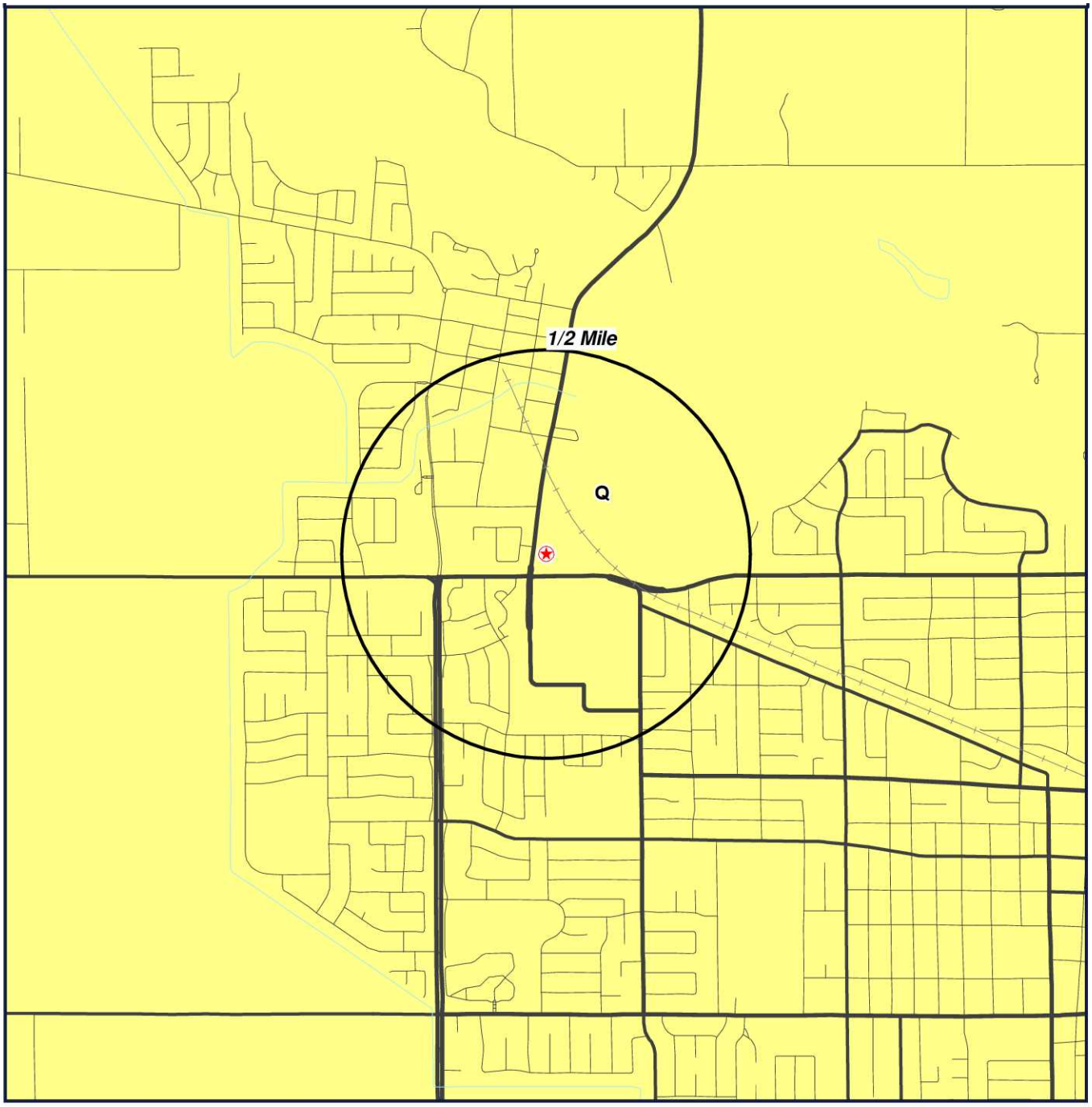
Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

SOIL Code Definitions within Search Radius

132	COLUMBIA FINE SANDY LOAM, CHANNELED, PARTIALLY DRAINED, 0 TO 2 PERCENT SLOPES, FREQUENTLY FLOODED
153	EGBERT SILTY CLAY LOAM, PARTIALLY DRAINED, 0 TO 2 PERCENT SLOPES
256	TOKAY FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES
257	TOKAY-URBAN LAND COMPLEX, 0 TO 2 PERCENT SLOPES

Geology Map



Target Property (TP)

Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

[Click here to access Satellite view]

GEOLOGY Report

US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **Q**
UNIT NAME: **Quaternary alluvium and marine deposits**
UNIT AGE: **Pliocene to Holocene**
UNIT DESCRIPTION:
Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated. Mostly nonmarine, but includes marine deposits near the coast.
ADDITIONAL UNIT INFORMATION:

ROCKTYPE/S: **alluvium; terrace; lake or marine deposit (non-glacial)**

GeoSearch
On time. On target. In touch.™

GeoPlus Water Well Report

Satellite view

Target Property:

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin County, California 95242

Prepared For:

BaseCamp Environmental

Order #: 108219
Job #: 237369
Project #: 2941
Date: 05/12/2018

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Target Property Summary

Target Property Information

Lodi California
1018 N Lower Sacramento Rd
Lodi, California 95242

Coordinates
Point (-121.30186, 38.146393)

USGS Quadrangle
Lodi North, CA

Geographic Coverage Information

County/Parish: San Joaquin (CA)
ZipCode(s):
Acampo CA: 95220
Lodi CA: 95242
Woodbridge CA: 95258

Radon
* Target property is located in Radon Zone 3.
Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L (picocuries per liter).

Database Radius Summary

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000	0	0	1	4	NS	NS	5
SUB-TOTAL		0	0	1	4	0	0	5

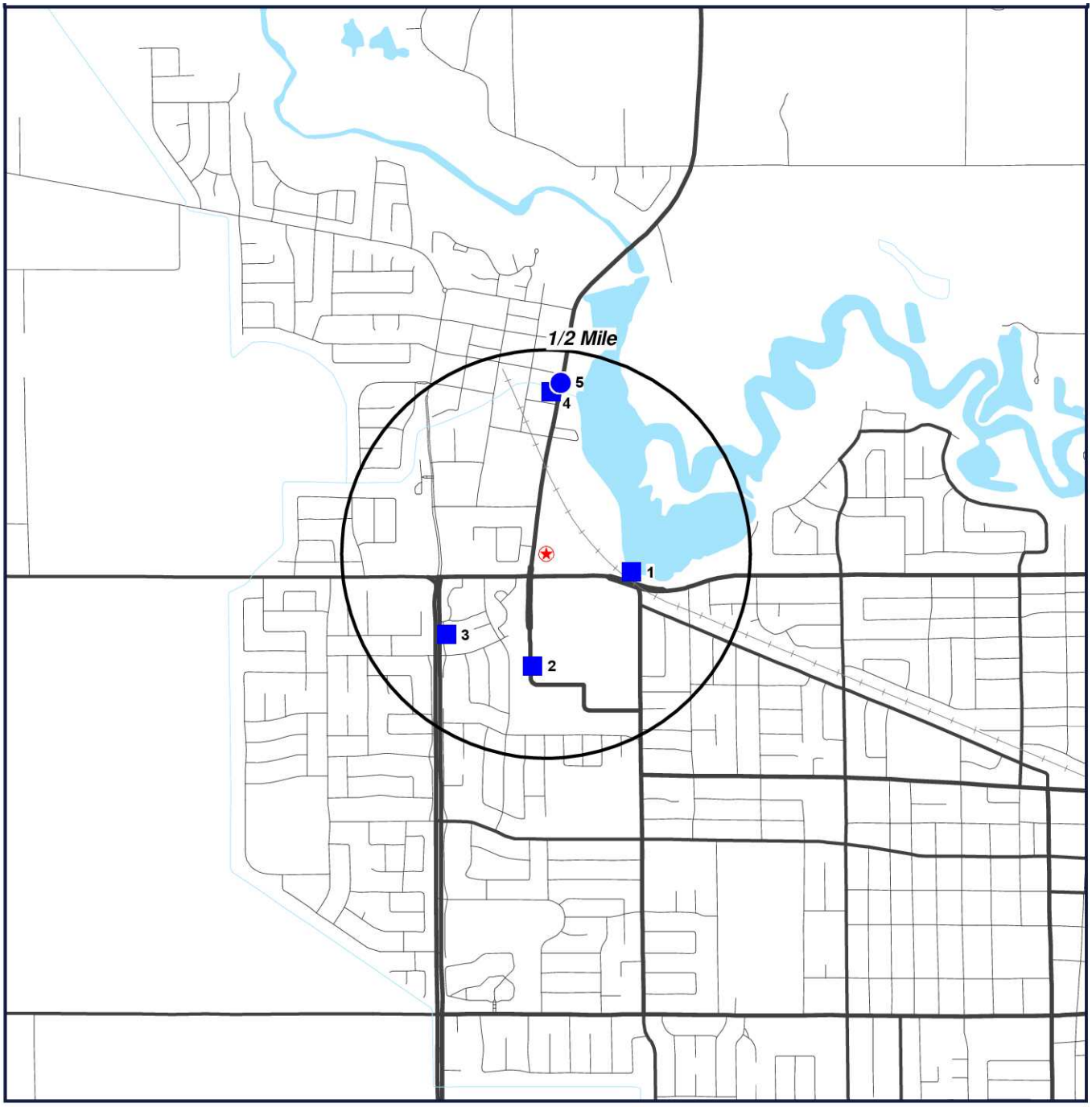
Database Radius Summary

STATE (CA) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
DWRWELLS	0.5000	0	0	0	7	NS	NS	7
SUB-TOTAL		0	0	0	7	0	0	7
TOTAL		0	0	1	11	0	0	12

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Waterwell Map



Target Property (TP)
NWIS
DWRWELLS

Lodi California
1018 N Lower Sacramento Rd
Lodi, California
95242

CONTOUR LINES REPRESENTED IN FEET

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

[Click here to access Satellite view]

Located Sites Summary

Map ID#	Database Name	Site ID#	Distance From Site	Site Name	Address	PAGE #
1	NWIS	00038321	0.214 mi. E (1130 ft.)	004N006E34R005M		6
2	NWIS	00038304	0.276 mi. S (1457 ft.)	003N006E03B003M		8
3	NWIS	00038310	0.314 mi. WSW (1658 ft.)	003N006E03B002M		10
4	NWIS	00038354	0.397 mi. N (2096 ft.)	004N006E34J003M		12
4	NWIS	00038356	0.417 mi. N (2202 ft.)	004N006E34J002M		14
5	DWRWELLS	0012989	0.423 mi. N (2233 ft.)		SAN JOAQUIN COUNTY, WOODBRIDGE, CA 95258	16
5	DWRWELLS	0012990	0.423 mi. N (2233 ft.)		SAN JOAQUIN COUNTY, WOODBRIDGE, CA 95258	17
5	DWRWELLS	0080279	0.423 mi. N (2233 ft.)		SAN JOAQUIN COUNTY, WOODBRIDGE, CA 95258	18
5	DWRWELLS	0080280	0.423 mi. N (2233 ft.)		SAN JOAQUIN COUNTY, WOODBRIDGE, CA 95258	19
5	DWRWELLS	0084051	0.423 mi. N (2233 ft.)		SAN JOAQUIN COUNTY, WOODBRIDGE, CA 95258	20
5	DWRWELLS	0084555	0.423 mi. N (2233 ft.)		SAN JOAQUIN COUNTY, WOODBRIDGE, CA 95258	21
5	DWRWELLS	0084556	0.423 mi. N (2233 ft.)		SAN JOAQUIN COUNTY, WOODBRIDGE, CA 95258	22

MAP ID# 1 **Distance from Property: 0.214 mi. (1,130 ft.) E**

GEOSEARCH ID: **00038321**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **380845121174901**
STATION NAME: **004N006E34R005M**
SITE TYPE: **WELL**
LATITUDE: **38.145751760**
LONGITUDE: **-121.298003500**
DISTRICT CODE: **06**
STATE CODE: **06**
COUNTY CODE: **077**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **SESESES34T0**
NAME OF LOCATION MAP: **LODI NORTH**
SCALE OF LOCATION MAP: **24000**
ALTITUDE OF GAGE/LAND SURFACE: **44.00**
METHOD OF ALTITUDE DETERMINED: **INTERPOLATED FROM TOPOGRAPHIC MAP**
ALTITUDE ACCURACY: **2.5**
ALTITUDE DATUM: **NGVD29**
HYDROLOGIC UNIT CODE: **18040005**
DRAINAGE BASIN CODE: **NOT REPORTED**
TOPOGRAPHIC SETTING CODE: **V**
DATE OF FIRST CONSTRUCTION: **01/01/1949**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
DRAINAGE AREA: **NOT REPORTED**
CONTRIBUTING DRAINAGE AREA: **NOT REPORTED**
MEAN GREENWICH TIME OFFSET: **PST**
LOCAL STANDARD TIME FLAG: **Y**
DATA RELIABILITY: **DATA HAVE BEEN CHECKED BY THE REPORTING AGENCY**
LOCAL AQUIFER: **NOT REPORTED**
LOCAL AQUIFER TYPE CODE: **NOT REPORTED**
NATIONAL AQUIFER CODE: **S100CNRLVL**
WELL DEPTH: **217 FEET**
HOLE DEPTH: **220 FEET**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **8479423710**
REAL-TIME DATA FLAG: **0**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1978-05-18**
WATER-QUALITY DATA END DATE: **--**
WATER-QUALITY DATA COUNT: **1**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **--**

FIELD WATER-LEVEL MEASUREMENTS COUNT: **0**

SITE-VISIT DATA BEGIN DATE: **--**

SITE-VISIT DATA END DATE: **--**

SITE-VISIT DATA COUNT: **0**

Back to Report Summary

MAP ID# 2 **Distance from Property: 0.276 mi. (1,457 ft.) S**

GEOSEARCH ID: **00038304**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **380833121180501**
STATION NAME: **003N006E03B003M**
SITE TYPE: **WELL**
LATITUDE: **38.142418500**
LONGITUDE: **-121.302448000**
DISTRICT CODE: **06**
STATE CODE: **06**
COUNTY CODE: **077**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **SENWNES03T0**
NAME OF LOCATION MAP: **LODI NORTH**
SCALE OF LOCATION MAP: **24000**
ALTITUDE OF GAGE/LAND SURFACE: **42.00**
METHOD OF ALTITUDE DETERMINED: **INTERPOLATED FROM TOPOGRAPHIC MAP**
ALTITUDE ACCURACY: **2.5**
ALTITUDE DATUM: **NGVD29**
HYDROLOGIC UNIT CODE: **18040005**
DRAINAGE BASIN CODE: **NOT REPORTED**
TOPOGRAPHIC SETTING CODE: **V**
DATE OF FIRST CONSTRUCTION: **02/26/1968**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
DRAINAGE AREA: **NOT REPORTED**
CONTRIBUTING DRAINAGE AREA: **NOT REPORTED**
MEAN GREENWICH TIME OFFSET: **PST**
LOCAL STANDARD TIME FLAG: **Y**
DATA RELIABILITY: **DATA HAVE BEEN CHECKED BY THE REPORTING AGENCY**
LOCAL AQUIFER: **NOT REPORTED**
LOCAL AQUIFER TYPE CODE: **NOT REPORTED**
NATIONAL AQUIFER CODE: **S100CNRLVL**
WELL DEPTH: **184 FEET**
HOLE DEPTH: **324 FEET**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **8479423710**
REAL-TIME DATA FLAG: **0**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **--**
WATER-QUALITY DATA END DATE: **1968-02-26**
WATER-QUALITY DATA COUNT: **0**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1968-02-26**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1968-02-26**

FIELD WATER-LEVEL MEASUREMENTS COUNT: **1**

SITE-VISIT DATA BEGIN DATE: **--**

SITE-VISIT DATA END DATE: **--**

SITE-VISIT DATA COUNT: **0**

Back to Report Summary

MAP ID# 3 **Distance from Property: 0.314 mi. (1,658 ft.) WSW**

GEOSEARCH ID: **00038310**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **380837121181901**
STATION NAME: **003N006E03B002M**
SITE TYPE: **WELL**
LATITUDE: **38.143529590**
LONGITUDE: **-121.306337000**
DISTRICT CODE: **06**
STATE CODE: **06**
COUNTY CODE: **077**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NWNWNES03T0**
NAME OF LOCATION MAP: **LODI NORTH**
SCALE OF LOCATION MAP: **24000**
ALTITUDE OF GAGE/LAND SURFACE: **42.00**
METHOD OF ALTITUDE DETERMINED: **INTERPOLATED FROM TOPOGRAPHIC MAP**
ALTITUDE ACCURACY: **2.5**
ALTITUDE DATUM: **NGVD29**
HYDROLOGIC UNIT CODE: **18040005**
DRAINAGE BASIN CODE: **NOT REPORTED**
TOPOGRAPHIC SETTING CODE: **V**
DATE OF FIRST CONSTRUCTION: **1969**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
DRAINAGE AREA: **NOT REPORTED**
CONTRIBUTING DRAINAGE AREA: **NOT REPORTED**
MEAN GREENWICH TIME OFFSET: **PST**
LOCAL STANDARD TIME FLAG: **Y**
DATA RELIABILITY: **DATA HAVE BEEN CHECKED BY THE REPORTING AGENCY**
LOCAL AQUIFER: **ALLUVIAL FAN DEPOSITS**
LOCAL AQUIFER TYPE CODE: **NOT REPORTED**
NATIONAL AQUIFER CODE: **S100CNRLVL**
WELL DEPTH: **466 FEET**
HOLE DEPTH: **475 FEET**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **479435800**
REAL-TIME DATA FLAG: **NOT REPORTED**
PEAK-STREAMFLOW DATA BEGIN DATE: **NOT REPORTED**
PEAK-STREAMFLOW DATA END DATE: **NOT REPORTED**
PEAK-STREAMFLOW DATA COUNT: **NOT REPORTED**
WATER-QUALITY DATA BEGIN DATE: **NOT REPORTED**
WATER-QUALITY DATA END DATE: **NOT REPORTED**
WATER-QUALITY DATA COUNT: **NOT REPORTED**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **NOT REPORTED**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **NOT REPORTED**

FIELD WATER-LEVEL MEASUREMENTS COUNT: **NOT REPORTED**
SITE-VISIT DATA BEGIN DATE: **NOT REPORTED**
SITE-VISIT DATA END DATE: **NOT REPORTED**
SITE-VISIT DATA COUNT: **NOT REPORTED**

Back to Report Summary

MAP ID# 4 **Distance from Property: 0.397 mi. (2,096 ft.) N**

GEOSEARCH ID: **00038354**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **380908121180201**
STATION NAME: **004N006E34J003M**
SITE TYPE: **WELL**
LATITUDE: **38.152140450**
LONGITUDE: **-121.301614700**
DISTRICT CODE: **06**
STATE CODE: **06**
COUNTY CODE: **077**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NWNESES34T0**
NAME OF LOCATION MAP: **LODI NORTH**
SCALE OF LOCATION MAP: **24000**
ALTITUDE OF GAGE/LAND SURFACE: **42.00**
METHOD OF ALTITUDE DETERMINED: **INTERPOLATED FROM TOPOGRAPHIC MAP**
ALTITUDE ACCURACY: **2.5**
ALTITUDE DATUM: **NGVD29**
HYDROLOGIC UNIT CODE: **18040005**
DRAINAGE BASIN CODE: **NOT REPORTED**
TOPOGRAPHIC SETTING CODE: **V**
DATE OF FIRST CONSTRUCTION: **03/15/1964**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
DRAINAGE AREA: **NOT REPORTED**
CONTRIBUTING DRAINAGE AREA: **NOT REPORTED**
MEAN GREENWICH TIME OFFSET: **PST**
LOCAL STANDARD TIME FLAG: **Y**
DATA RELIABILITY: **DATA HAVE BEEN CHECKED BY THE REPORTING AGENCY**
LOCAL AQUIFER: **NOT REPORTED**
LOCAL AQUIFER TYPE CODE: **NOT REPORTED**
NATIONAL AQUIFER CODE: **S100CNRLVL**
WELL DEPTH: **172 FEET**
HOLE DEPTH: **450 FEET**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **8479423710**
REAL-TIME DATA FLAG: **0**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **--**
WATER-QUALITY DATA END DATE: **1964-03-15**
WATER-QUALITY DATA COUNT: **0**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1964-03-15**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1964-03-15**

FIELD WATER-LEVEL MEASUREMENTS COUNT: **1**

SITE-VISIT DATA BEGIN DATE: **--**

SITE-VISIT DATA END DATE: **--**

SITE-VISIT DATA COUNT: **0**

Back to Report Summary

MAP ID# 4 **Distance from Property: 0.417 mi. (2,202 ft.) N**

GEOSEARCH ID: **00038356**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **380909121180101**
STATION NAME: **004N006E34J002M**
SITE TYPE: **WELL**
LATITUDE: **38.152418200**
LONGITUDE: **-121.301336900**
DISTRICT CODE: **06**
STATE CODE: **06**
COUNTY CODE: **077**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NWNESES34T0**
NAME OF LOCATION MAP: **LODI NORTH**
SCALE OF LOCATION MAP: **24000**
ALTITUDE OF GAGE/LAND SURFACE: **42.00**
METHOD OF ALTITUDE DETERMINED: **INTERPOLATED FROM TOPOGRAPHIC MAP**
ALTITUDE ACCURACY: **2.5**
ALTITUDE DATUM: **NGVD29**
HYDROLOGIC UNIT CODE: **18040005**
DRAINAGE BASIN CODE: **NOT REPORTED**
TOPOGRAPHIC SETTING CODE: **V**
DATE OF FIRST CONSTRUCTION: **02/26/1964**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
DRAINAGE AREA: **NOT REPORTED**
CONTRIBUTING DRAINAGE AREA: **NOT REPORTED**
MEAN GREENWICH TIME OFFSET: **PST**
LOCAL STANDARD TIME FLAG: **Y**
DATA RELIABILITY: **DATA HAVE BEEN CHECKED BY THE REPORTING AGENCY**
LOCAL AQUIFER: **NOT REPORTED**
LOCAL AQUIFER TYPE CODE: **NOT REPORTED**
NATIONAL AQUIFER CODE: **S100CNRLVL**
WELL DEPTH: **172 FEET**
HOLE DEPTH: **466 FEET**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **8479423710**
REAL-TIME DATA FLAG: **0**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **--**
WATER-QUALITY DATA END DATE: **1964-02-26**
WATER-QUALITY DATA COUNT: **0**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1964-02-26**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1964-02-26**

FIELD WATER-LEVEL MEASUREMENTS COUNT: **1**

SITE-VISIT DATA BEGIN DATE: **--**

SITE-VISIT DATA END DATE: **--**

SITE-VISIT DATA COUNT: **0**

Back to Report Summary

MAP ID# 5 **Distance from Property: 0.423 mi. (2,233 ft.) N**

GEOSEARCH ID: **0012989**
WATERWELL NUMBER: **04N06E34J002M**
WELL TYPE: **VOLUNTARY**
WELL DEPTH: **466**
WELL USAGE: **IRRIGATION**
BASIN: **EASTERN SAN JOAQUIN**
LONGITUDE: **-121.301200000**
LATITUDE: **38.152500000**

Back to Report Summary

MAP ID# 5 **Distance from Property: 0.423 mi. (2,233 ft.) N**

GEOSEARCH ID: **0012990**
WATERWELL NUMBER: **04N06E34J002M**
WELL TYPE: **VOLUNTARY**
WELL DEPTH: **466**
WELL USAGE: **IRRIGATION**
BASIN: **EASTERN SAN JOAQUIN**
LONGITUDE: **-121.301200000**
LATITUDE: **38.152500000**

Back to Report Summary

MAP ID# 5 **Distance from Property: 0.423 mi. (2,233 ft.) N**

GEOSEARCH ID: **0080279**
WATERWELL NUMBER: **04N06E34J002M**
WELL TYPE: **VOLUNTARY**
WELL DEPTH: **466**
WELL USAGE: **IRRIGATION**
BASIN: **COSUMNES**
LONGITUDE: **-121.301200000**
LATITUDE: **38.152500000**

Back to Report Summary

California Department of Water Resources Water Wells (DWRWELLS)

MAP ID# 5 **Distance from Property: 0.423 mi. (2,233 ft.) N**

GEOSEARCH ID: **0080280**
WATERWELL NUMBER: **04N06E34J002M**
WELL TYPE: **VOLUNTARY**
WELL DEPTH: **466**
WELL USAGE: **IRRIGATION**
BASIN: **COSUMNES**
LONGITUDE: **-121.301200000**
LATITUDE: **38.152500000**

Back to Report Summary

MAP ID# 5 **Distance from Property: 0.423 mi. (2,233 ft.) N**

GEOSEARCH ID: **0084051**
WATERWELL NUMBER: **04N06E34J002M**
WELL TYPE: **VOLUNTARY**
WELL DEPTH: **466**
WELL USAGE: **IRRIGATION**
BASIN: **COSUMNES**
LONGITUDE: **-121.301200000**
LATITUDE: **38.152500000**

Back to Report Summary

MAP ID# 5 **Distance from Property: 0.423 mi. (2,233 ft.) N**

GEOSEARCH ID: **0084555**
WATERWELL NUMBER: **04N06E34J002M**
WELL TYPE: **VOLUNTARY**
WELL DEPTH: **CONFIDENTIAL**
WELL USAGE: **IRRIGATION**
BASIN: **COSUMNES**
LONGITUDE: **-121.301200000**
LATITUDE: **38.152500000**

Back to Report Summary

MAP ID# 5 **Distance from Property: 0.423 mi. (2,233 ft.) N**

GEOSEARCH ID: **0084556**
WATERWELL NUMBER: **04N06E34J002M**
WELL TYPE: **VOLUNTARY**
WELL DEPTH: **CONFIDENTIAL**
WELL USAGE: **IRRIGATION**
BASIN: **COSUMNES**
LONGITUDE: **-121.301200000**
LATITUDE: **38.152500000**

Back to Report Summary

NWIS United States Geological Survey National Water Information System

VERSION DATE: 12/14/16

This USGS National Water Information System database only includes groundwater wells. The USGS defines this well type as: A hole or shaft constructed in the earth intended to be used to locate, sample, or develop groundwater, oil, gas, or some other subsurface material. The diameter of a well is typically much smaller than the depth. Wells are also used to artificially recharge groundwater or to pressurize oil and gas production zones. Additional information about specific kinds of wells should be recorded under the secondary site types or the Use of Site field. Underground waste-disposal wells should be classified as waste-injection wells.

DWRWELLS California Department of Water Resources Water Wells

VERSION DATE: 09/20/17

The California Department of Water Resources (DWR) maintains this database of water wells, including California Statewide Groundwater Elevation Monitoring (CASGEM) program wells and Voluntary wells. In Late 2009 the State Legislature amended the Water Code with SBx7-6, which mandates a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in California's groundwater basins. To achieve that goal, the amendment requires collaboration between local monitoring entities and DWR to collect groundwater elevation data. In accordance with this amendment to the Water Code, DWR developed the CASGEM program.

FIM Abstract

Target Property:

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin County, California 95242

Prepared For:

BaseCamp Environmental

Order #: 108219
Job #: 237371
Project #: 2941
Date: 05/10/2018

phone: 888-396-0042 · fax: 512-472-9967 · www.geo-search.com

TARGET PROPERTY SUMMARY

Lodi California
1018 N Lower Sacramento Rd
Lodi, San Joaquin County, California 95242

USGS Quadrangle: ***Lodi North, CA***
Target Property Geometry: ***Point***

Target Property Longitude(s)/Latitude(s):
(-121.301861, 38.146394)

County/Parish Covered:
San Joaquin (CA)

Zipcode(s) Covered:
Acampo CA: 95220
Lodi CA: 95242
Woodbridge CA: 95258

State(s) Covered:
CA

****Target property is located in Radon Zone 3.***
Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L (picocuries per liter).

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GeoSearch FIM

Date: 05/10/18

GS Job Number: 108219

Company Name: BaseCamp Environmental

Project Number: 2941

Site Information: Lodi California
1018 N Lower Sacramento Rd,
Lodi, CA 95242

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress
University Publications of America
Other Libraries (universities, state, local, etc.).

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APPENDIX G
NOISE ANALYSIS



Lakehouse Development
Environmental Noise Assessment

City of Lodi, California
July 9, 2021

jcb Project # 2021-112

Prepared for:

BaseCamp Environmental, Inc.

Attn:
Mr. Charlie Simpson
802 West Lodi Avenue
Lodi, CA 95240

Prepared by:

j.c. brennan & associates, Inc.

Jim Brennan, INCE
President
Member, Institute of Noise Control Engineering (INCE)

INTRODUCTION

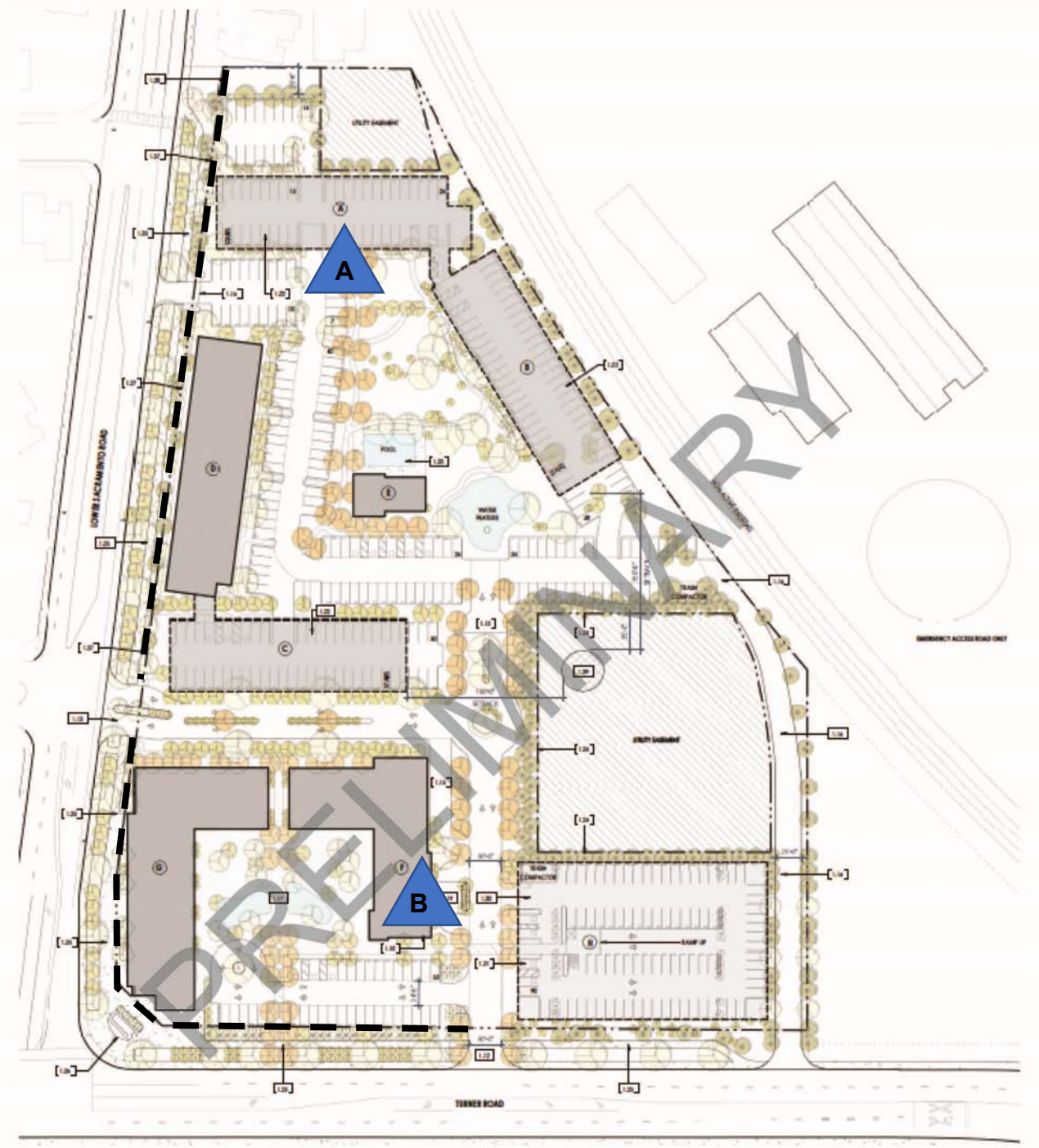
This noise analysis presents the potential noise impacts due to the proposed Lakehouse Residential Development Plan. This report will also provide an analysis of traffic noise upon the project site, and the ability of the project to comply with the exterior and interior noise level standards contained in the City of Lodi General Plan Noise Element.

The project is located at the northeast corner of Turner Road and Lower Sacramento Road, in the City of Lodi, California. Adjacent land uses include the NCPA Peaker Plant which is located near the southeast portion of the project site, the wastewater treatment plant to the east, residential development to the west across Lower Sacramento Road, and industrial uses to the south across Turner Road.

The proposed project involves the construction and operation of a 92-suite boutique hotel and 150 1-, 2- and 3-bedroom apartment units on 8.82-acre site at the northeast corner of Turner Road and Lower Sacramento Road in Lodi, CA.

This analysis will not evaluate the other impacts which may affect the project site, such as the Peaker Plant and the wastewater treatment plant.

Figure 1 shows the project site plan.



SOURCE: NJA Architecture

BaseCamp Environmental

Figure 5A OVERALL SITE PLAN

Noise Measurement Locations

Potential Barrier Location

Figure1
Project Site Plan
Barrier Locations and Noise Measurement Sites

j.c. brennan & associates
consultants in acoustics

Date:
6/15/2020

ENVIRONMENTAL SETTING

Background Information on Noise

Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. Appendix A provides a summary of acoustical terms used in this report.

Table 1: Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. November, 2009.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

Acoustic Addition

Because of the logarithmic nature of the decibel scale, provided two sources of noise differ in intensity by at least 10 dB, their noise will not be additive.

To demonstrate this point, consider two noise sources generating noise levels exactly 10 dB apart. It does not matter if the levels in this example are 60 and 70 dB, 20 and 30, or 45 and 55, as the result is the same. Because the decibel scale is logarithmic, decibels must be converted into energy before undergoing mathematical conversion, so the formula for adding two sources of noise is as follows:

$$L_{sum} = 10 * Log_{10} (10 \text{ ^ } (L1 / 10) + 10 \text{ ^ } (L2 / 10))$$

Which for theoretical values of 60 and 70 for L_1 and L_2, respectively, computes as follows

$$L_{sum} = 10 * Log_{10} (10 \text{ ^ } (70 / 10) + 10 \text{ ^ } (60 / 10))$$

Which reduces to:

L_{sum} = 70.41 dB or 70 dB after rounding.

This example illustrates that two noise levels differing by 10 dB which are added together essentially equal the higher of the two noise levels.

EXISTING CONDITIONS

The existing noise environment in the project area is defined primarily by local traffic on Lower Sacramento Road and Turner Road. The NCPA Peaker Plant operates at small intervals when power demand is high. Based upon discussions with the NCPA staff and observations, the peaker plant generally operates for no more than 1 to 2 hours at a time. There is a railroad line which traverses the east side of the project site. However, based upon observations and the Railroad Atlas of North America, this is a narrow-gauge line that has been abandoned.

Existing Noise Receptors

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors include residences, schools, libraries, hospitals, and passive recreational areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Existing Ambient Noise Levels

To quantify the existing ambient noise environment in the project vicinity, j.c. brennan & associates Inc. conducted continuous hourly noise level measurements for a period of 24-hours at two locations within the project site. The noise level measurements were conducted on June 25th and 26th, 2018. Figure 1 shows the locations of the 24-hour noise measurements. A summary of the noise level measurement survey results are provided in Table 2. Appendix B contains the complete results of the continuous (24-hr) noise monitoring.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period.

The primary noise sources in the project vicinity during the noise measurement survey included roadway traffic on Lower Sacramento Road and Turner Road. Table 2 does not show the noise levels associated with the Peaker Plant. The noise levels associated with that noise source are contained a separate report.

Table 2: Summary of Existing Background Noise Measurement Data

Site	Date	CNEL	Average Measured Hourly Noise Levels, dB					
			Daytime (7 am-10 pm) Low-High (Average)			Nighttime (10 pm-7 am) Low-High (Average)		
			L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
Continuous (24-hr) noise level measurements								
A	June 25-26, 2018	52.8 dB	47.8	45.8	61.9	46.1	43.9	59.9
B	June 25-26, 2018	59.8 dB	55.8	52.1	69.3	52.8	48.2	68.2

Source: j.c. brennan & associates, Inc., 2018.

REGULATORY SETTING

City of Lodi General Plan

The City of Lodi General Plan Noise Element provides land use compatibility guidelines relative to noise. Table 3 shows the noise level standards. It should be noted that the Noise Element provides a "Conditionally Acceptable" noise level standard of 70 dB Ldn for residential and Hotel uses, provided that mitigation is included to ensure that interior noise levels do not exceed 45 dB Ldn/CNEL,

Table 3 (Table 9-3 of the Lodi General Plan)
Allowable Noise Exposure, Outdoor and Interior

Land Use	Outdoor Activity Areas[1] (CNEL)	Interior Areas (CNEL)
Residential	60	45
Motels, Hotels	60	45
Public/Semi-Public	65	45
Recreational	65	50
Commercial	65	50
Industrial	70	65
1. For non-residential uses, where an outdoor activity area is not proposed, the standard does not apply.		

The following Guiding Policies and Implementing Policies contained in the City of Lodi General Plan Noise Element are considered pertinent to this analysis:

> *9.5 Policies*
> *N-G1 Protect humans, the natural environment and property from manmade hazards due to excessive noise exposure.*
>
> *N-G2 Protect sensitive uses, including schools, hospitals, and senior care facilities from excessive noise.*
>
> *N-P1 Control and mitigate noise at the source where feasible, as opposed to at the receptor end.*

N-P2 Encourage the control of noise through site design, building design, landscaping, hours of operation, and other techniques for new development deemed to be noise generators.

N-P3 Use the noise and land use compatibility matrix (Table 9-2) and allowable noise exposure levels (Table 9-3) as review criteria for all new land uses. Incorporate noise attenuation measures for all projects that have noise exposure levels of "conditionally acceptable" and higher. These may include:

- *Facades constructed with substantial weight and insulation;*
- *Sound-rated windows in habitable rooms;*
- *Sound-rated doors in all exterior entries;*
- *Active cancellation;*
- *Acoustic baffling of vents for chimneys, fans and gable ends;*
- *Ventilation system affording comfort under closed-window conditions; and*
- *Double doors and heavy roofs with ceilings of two layers of gypsum board on resilient channels to meet the highest noise level reduction requirements.*

N-P4 Discourage noise-sensitive uses such as residences, hospitals, schools, libraries, and rest homes from locating in areas with noise levels above 65 dB. Conversely, do not permit new uses likely to produce high levels of noise (above 65 dB) from locating in or adjacent to areas with existing or planned noise-sensitive uses.

N-P8 Update Noise Ordinance regulations to address allowed days and hours of construction, types of work, construction equipment (including noise and distance thresholds), notification of neighbors, and sound attenuation devices.

City of Lodi Municipal Code, Noise Control

The noise standards contained in the City of Lodi Municipal Code are provided below:

Chapter 9.24 of the City of Lodi Code of Ordinances establishes criteria and exemptions from the ordinance specific to noise. The following are the pertinent portions of the ordinance:

9.24.030 Excessive, Offensive or Disturbing Noise. The following activities are declared to cause excessive, offensive or disturbing noise in violation of this section:

C. It is unlawful for any person, firm or corporation to cause, permit or generate any noise or sound as described herein between the hours of ten p.m. and seven a.m. which exceeds the ambient noise level at the property line of any residential property as determined at the time of such reading by more than five decibels. This section shall be applicable whether such noise or sound is of a commercial or noncommercial nature.

9.24.050 Exemptions. This chapter shall not apply to the following:

> *A. Sirens or other similar emergency warning devices located upon any emergency vehicle as defined by the Vehicle Code, or upon the premises of any public safety agency;*
>
> *B. Any bell, siren or similar device on any vehicle, which is required by law, and which is automatically activated by placing the vehicle transmission in reverse, or by any backing movement;*
>
> *C. Any sound equipment operating under a city license or permit, or being utilized for an activity subject to the First Amendment protection;*
>
> *D. Emergency repair work as defined herein;*
>
> *E. Events in public parks or other public places, sponsored by the city.*

Substantial Increase Criteria

Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to measurably severe noise levels. In practice, a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud. [1]

The City of Lodi, like many jurisdictions, does not have an adopted policy regarding significant increases in ambient noise. A common practice in many jurisdictions is to use a 3-5 dB increase as a threshold of significance. However, a limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project-noise conditions.
Table 4 is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been widely accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn} or CNEL.

Table 4: Significance of Changes in Noise Exposure

Ambient Noise Level Without Project, L_{dn}	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON)

Based on the 4 data, an increase in the traffic noise level of 5 dB or more would be significant where the pre-project noise level is less than 60 dB L_{dn}/CNEL. Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 65 dB L_{dn}/CNEL. The rationale for the criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

Vibration Standards

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

The City of Lodi does not have specific policies pertaining to vibration levels. However, vibration levels associated with construction activities and project operations are addressed as potential noise impacts associated with project implementation.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 5 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

Table 5: Effects of Vibration on People and Buildings

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/sec.	in./sec.		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.
Source: Caltrans. Transportation Related Earthborne Vibrations. TAV-02-01-R9601 February 20, 2002.			

NOISE AND VIBRATION IMPACTS

Traffic Noise Impacts

To describe future noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. Direct inputs to the model included traffic volumes provided by KD Anderson & Associates. The FHWA model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict L_{dn}/CNEL values, it is necessary to determine the day/night distribution of traffic and adjust the traffic volume input data to yield an equivalent hourly traffic volume. Appendix C provides the complete inputs and results for the FHWA traffic noise prediction modeling.

Impact 1 – Increases in *Exterior Traffic Noise Levels and Compliance with Traffic Noise Level Standards at the Project Site*

Traffic noise levels are predicted at the reference distance of 75-feet from the roadway centerlines along each project-area roadway segment. Table **Error! Reference source not found.**6 shows the noise levels associated with traffic on the local roadway network under the Existing, Existing + Project, Cumulative No Project, and Cumulative + Project traffic conditions. As indicated by Table **Error! Reference source not found.**6, the related noise level increases under development of the proposed project will not result in an increase in traffic noise levels along Lower Sacramento Road and Turner Road. The project does not result in a significant increase in traffic noise levels.

Based upon the site plan, and Table 6, the nearest proposed residences to Lower Sacramento Road are approximately 70 feet from the roadway centerline and will be exposed to traffic noise levels of approximately 67 dB CNEL under future conditions. Units G & F are located approximately 75-feet and 125-feet from Turner Road, respectively. They are exposed to Turner Road traffic noise levels of approximately 66 dB and 62 dB CNEL, respectively.

The hotel is located approximately 200-feet from the Turner Road centerline and approximately 450-feet from Lower Sacramento Road. The hotel will be exposed to traffic noise levels of approximately 60 dB CNEL from each roadway.

Therefore, exterior noise levels may exceed the exterior noise level standard of 60 dB CNEL at the proposed residential units.

The project site also includes a Community Center and Pool area for the residential portion of the project site. It is located approximately 250-feet from the Lower Sacramento Road centerline, and approximately 500-feet from Turner Road. There is also shielding of traffic noise from the on-site buildings at the Community Center/Pool area. The predicted noise levels at the Community Center/Pool area are predicted to be less than 55 dB Ldn/CNEL, based upon distances from the roadways and on-site shielding. The City of Lodi can apply the exterior noise level standard of 60 dB CNEL at the common area. If City applies the exterior noise level standard at the Community Center/Pool area, the exterior noise levels will comply with the 60 dB CNEL standard.

If the City applies the exterior noise level standard at the residential facades, the project will not comply with the exterior noise level standard of 60 dB CNEL at the nearest residential uses.

Mitigation 1

If the City applies the exterior noise level standard at the Community Center/Pool area, the exterior noise levels will comply with the 60 dB CNEL standard, and no mitigation is required,

If the City applies the exterior noise level standard at the residential facades and any upper floor patios facing Lower Sacramento Road, and any upper floor patios of Units G & F facing Turner Road, a barrier 6-feet in height would be required for Lower Sacramento Road and Turner Road, as shown on Figure 1, to reduce exterior traffic noise levels to 60 dB Ldn at the project residential uses

This is a less than significant impact with mitigation.

Table 6: Traffic Noise Levels and Increases in Traffic Noise Levels

Roadway	Segment	Existing and Existing + Project Traffic Noise Levels (LDN/CNEL) @75-feet from the Roadway C.L.			Cumulative and Cumulative + Project Traffic Noise Levels (LDN/CNEL) @ 75-feet from the Roadway C.L.		
		Existing	Existing + Project	Δ	Cumulative	Cumulative + Project	Δ
Turner Road	Lower Sacramento Rd. to Mills Ave.	66 dB	66 dB	0	67 dB	67 dB	0
Lower Sacramento Rd.	Turner Rd. to North City Limits	66 dB	66 dB	0	67 dB	67 dB	0

[1] Distances to traffic noise contours are measured in feet from the centerlines of the roadways. Actual distances may vary due to shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

SOURCE: J.C. BRENNAN & ASSOCIATES, INC. 2021 (FHWA-RD-77-108 WITH INPUTS FROM KD ANDERSON & ASSOCIATES TRANSPORTATION ENGINEERS).

Impact 2 - Interior Traffic Noise Levels

Typical construction will provide an exterior to interior noise level reduction of 25 dB, provided windows and doors are in the closed position. First floor facades of the proposed residential units facing Lower Sacramento Road and Turner Road will be exposed to traffic noise levels ranging up to 67 dB CNEL, depending upon if the project includes a 6-foot tall sound wall along Lower Sacramento Road and Turner Road. The upper floors of the residential units facing Lower Sacramento Road and Units G & F facing Turner Road will be exposed to traffic noise levels up to 70 dB CNEL. The use of standard construction practices are expected to result in compliance with the 45 dB CNEL standard. Therefore, all residential units will comply with the interior noise level standard of 45 dB CNEL

First floor facades of the hotel facing Lower Sacramento Road and Turner Road will be exposed to traffic noise levels of 60 dB CNEL. The upper floors of the hotel units facing Turner Road and Lower Sacramento Road will be exposed to traffic noise levels up to 63 dB CNEL. It is expected that the units of the hotel will comply with the interior noise level standard of 45 dB CNEL.

This is a less than significant impact.

Impact 3 - Construction Noise

Noise impacts resulting from construction depends on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise-sensitive areas. Noise levels from typical construction equipment are shown in Table 7.

Activities involved in construction would generate maximum noise levels, as indicated in Table 7, ranging from 76 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A primary project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would occur during daytime hours. Based upon noise measurement data collected in the adjacent neighborhoods, it is not expected that construction will result in a significant temporary increase in background ambient noise levels.

Table 7: Construction Equipment Noise

Type of Equipment	Predicted Noise Levels, L_{max} dB				Distances to Noise Contours (feet)	
	Noise Level at 50'	Noise Level at 100'	Noise Level at 200'	Noise Level at 4,00'	70 dB L_{max} contour	65 dB L_{max} contour
Auger Drill Rig	84	78	72	66	250	446
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete Saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic Tools	85	79	73	67	281	500

Source: *Roadway Construction Noise Model User's Guide*. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

The existing single-family residential receptors located west of the proposed project are located approximately 200-feet, from the center of the project site and approximately 100-feet from the project western property line. At an average distance of 200 feet construction related noise levels are expected to less than 64-78 dB Lmax.

Impact 4 - Construction Vibration

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural damage. Table 8 shows the typical vibration levels produced by construction equipment.

The nearest receptors are expected to be approximately 100 feet, or further, from the closest construction activities which would occur. The 8 data indicate that construction vibration levels anticipated for the project are less than the 0.1 in/sec criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors as described in Table 5. Implementation of the proposed project would have a less than significant vibration impact.

Table 8: Vibration Levels for Various Construction Equipment

Type of Equipment	Peak Particle Velocity @ 25 feet (inches/second)	Peak Particle Velocity @ 50 feet (inches/second)	Peak Particle Velocity @ 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210	0.074	0.026
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006			

Appendix A
Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
$L_{(n)}$	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50% of the time during the one hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the AMaximum@ level, which is the highest RMS level.
RT_{60}	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is s rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

Appendix B
2021-112 Lakehouse
24hr Continuous Noise Monitoring - Site A
06/25/2018-06/26/2018

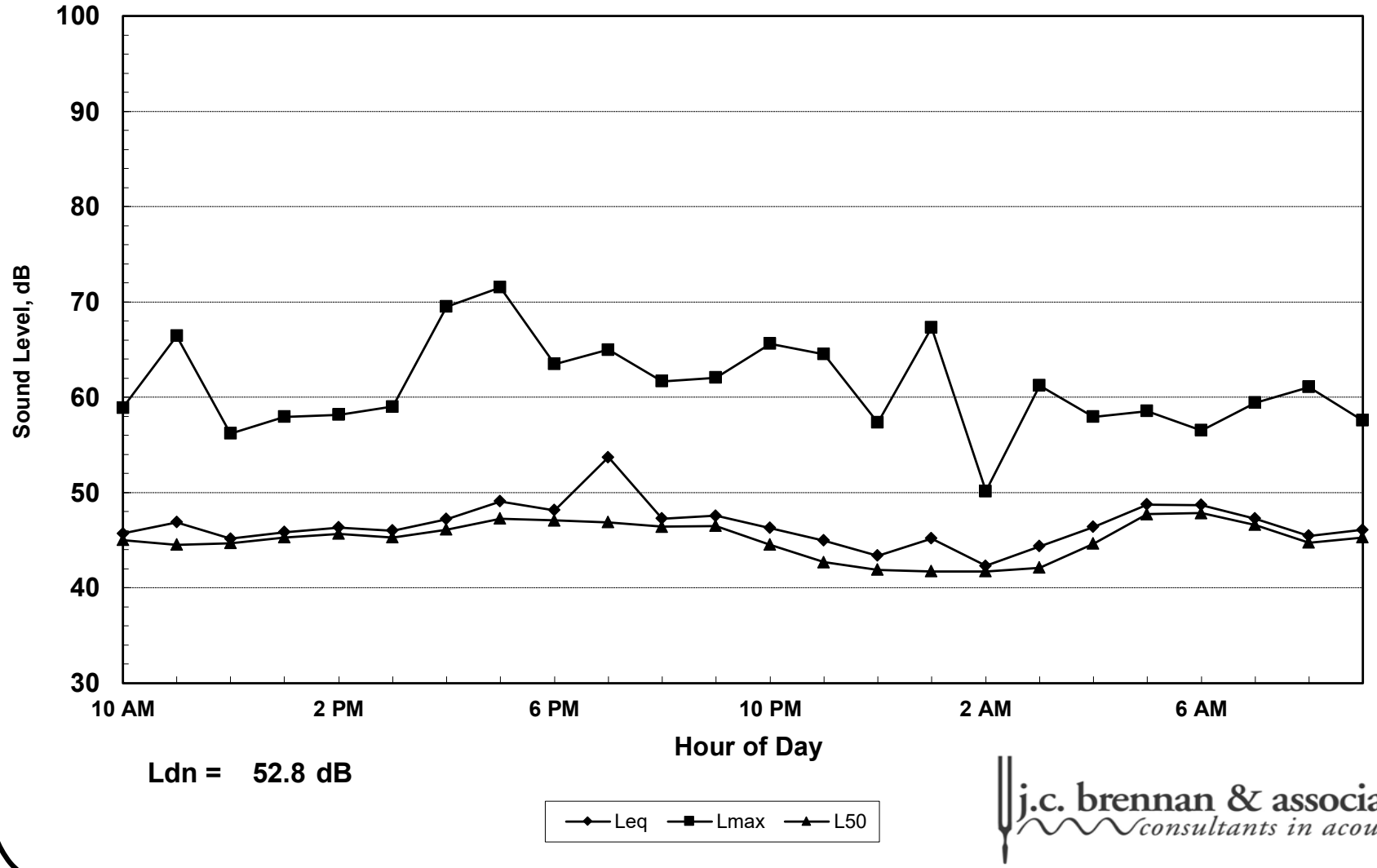
Hour	Leq	Lmax	L50	L90
10:00	46	59	45	43
11:00	47	66	45	42
12:00	45	56	45	43
13:00	46	58	45	43
14:00	46	58	46	44
15:00	46	59	45	43
16:00	47	70	46	44
17:00	49	72	47	45
18:00	48	63	47	45
19:00	54	65	47	44
20:00	47	62	46	44
21:00	48	62	47	44
22:00	46	66	45	41
23:00	45	64	43	41
0:00	43	57	42	40
1:00	45	67	42	40
2:00	42	50	42	40
3:00	44	61	42	40
4:00	46	58	45	42
5:00	49	59	48	45
6:00	49	57	48	45
7:00	47	59	47	44
8:00	45	61	45	42
9:00	46	58	45	43

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	53.7	45.2	47.8	48.7	42.3	46.1
Lmax (Maximum)	71.5	56.2	61.9	67.3	50.1	59.9
L50 (Median)	47.3	44.5	45.8	47.8	41.7	43.9
L90 (Background)	45.1	42.3	43.6	45.0	39.8	41.5

Computed Ldn, dB	52.8
% Daytime Energy	71%
% Nighttime Energy	29%

j.c. brennan & associates
consultants in acoustics

Appendix B
2021-112 Lakehouse
24hr Continuous Noise Monitoring - Site A
06/25/2018-06/26/2018



Ldn = 52.8 dB

j.c. brennan & associates
consultants in acoustics

Appendix B
2021-112 Lakehouse
24hr Continuous Noise Monitoring - Site B
06/25/2018-06/26/2018

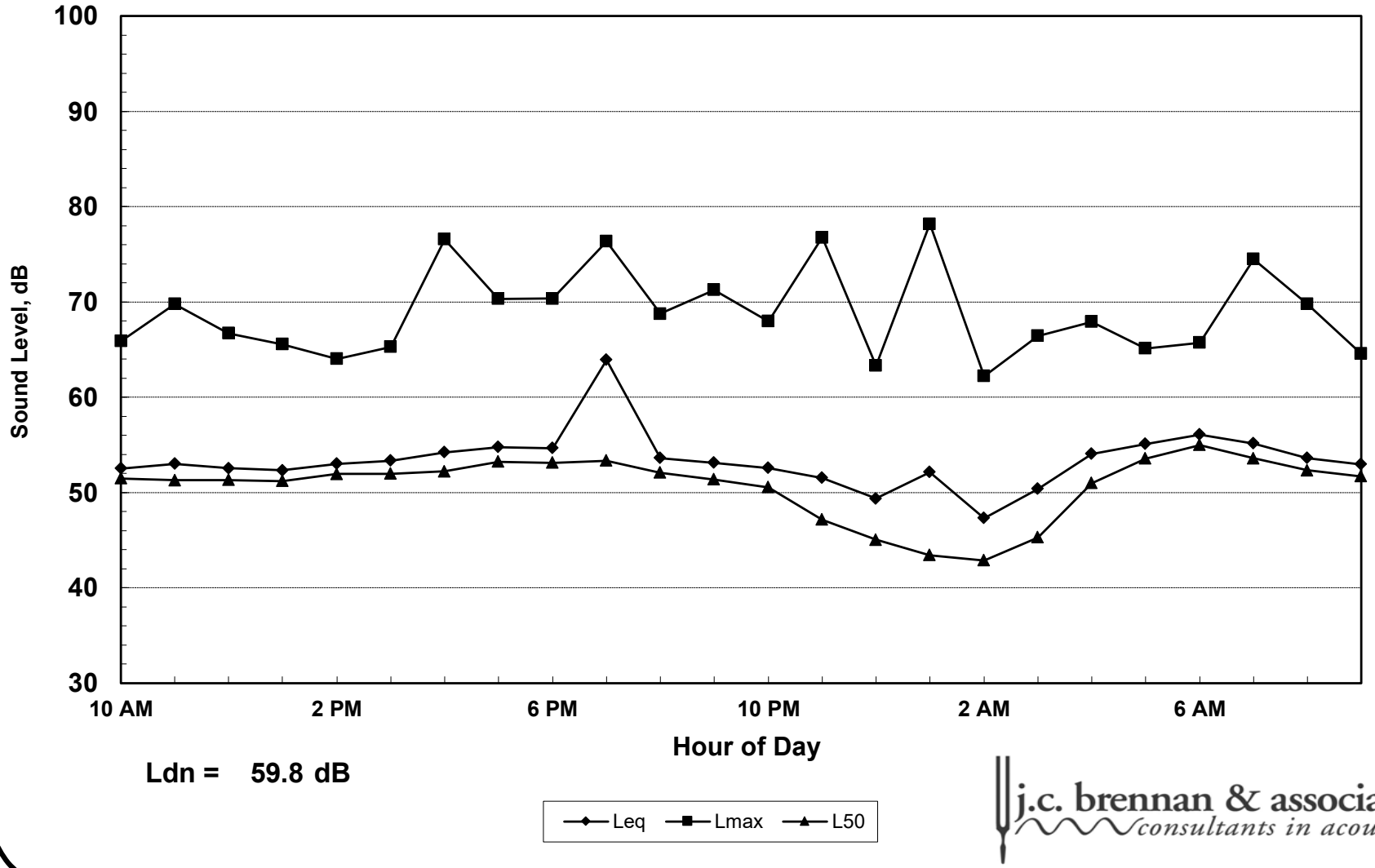
Hour	Leq	Lmax	L50	L90
10:00	53	66	51	48
11:00	53	70	51	48
12:00	53	67	51	48
13:00	52	66	51	48
14:00	53	64	52	48
15:00	53	65	52	49
16:00	54	77	52	49
17:00	55	70	53	50
18:00	55	70	53	50
19:00	64	76	53	49
20:00	54	69	52	48
21:00	53	71	51	46
22:00	53	68	51	44
23:00	52	77	47	41
0:00	49	63	45	41
1:00	52	78	43	41
2:00	47	62	43	41
3:00	50	66	45	42
4:00	54	68	51	44
5:00	55	65	54	48
6:00	56	66	55	50
7:00	55	74	54	50
8:00	54	70	52	49
9:00	53	65	52	48

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	63.9	52.3	55.8	56.1	47.3	52.8
Lmax (Maximum)	76.6	64.0	69.3	78.2	62.2	68.2
L50 (Median)	53.6	51.2	52.1	55.0	42.9	48.2
L90 (Background)	49.8	46.0	48.3	50.2	41.0	43.6

Computed Ldn, dB	59.8
% Daytime Energy	77%
% Nighttime Energy	23%

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Appendix B
2021-112 Lakehouse
24hr Continuous Noise Monitoring - Site B
06/25/2018-06/26/2018



Ldn = 59.8 dB

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Appendix C

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Data Input Sheet

Project #: 2021-112
Description: Existing, Existing + Project, Cumulative, Cumulative + Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Turner Road	Lower Sacramento Rd to Mills Ave	18,379	77		23	2	1	35	75	
2	Lower Sacramento Road	Turner Road to North City Limits	10,674	77		23	2	1	45	75	
3											
4	Turner Road	Lower Sacramento Rd to Mills Ave	19,341	77		23	2	1	35	75	
5	Lower Sacramento Road	Turner Road to North City Limits	11,214	77		23	2	1	45	75	
6											
7	Turner Road	Lower Sacramento Rd to Mills Ave	22,055	77		23	2	1	35	75	
8	Lower Sacramento Road	Turner Road to North City Limits	13,343	77		23	2	1	45	75	
9											
10	Turner Road	Lower Sacramento Rd to Mills Ave	23,017	77		23	2	1	35	75	
11	Lower Sacramento Road	Turner Road to North City Limits	13,883	77		23	2	1	45	75	
12											
13											
14											
15											
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18											
19											
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21											
22											
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25											

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Appendix C

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Predicted Levels

Project #: 2021-112
Description: Existing, Existing + Project, Cumulative, Cumulative + Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway Name	Segment Description	Autos	Medium Trucks	Heavy Trucks	Total
1	Turner Road	Lower Sacramento Rd to Mills Ave	64.0	56.8	59.0	66
2	Lower Sacramento Road	Turner Road to North City Limits	64.8	56.2	57.7	66
4	Turner Road	Lower Sacramento Rd to Mills Ave	64.2	57.1	59.3	66
5	Lower Sacramento Road	Turner Road to North City Limits	65.0	56.4	57.9	66
7	Turner Road	Lower Sacramento Rd to Mills Ave	64.8	57.6	59.8	67
8	Lower Sacramento Road	Turner Road to North City Limits	65.8	57.2	58.6	67
10	Turner Road	Lower Sacramento Rd to Mills Ave	65.0	57.8	60.0	67
11	Lower Sacramento Road	Turner Road to North City Limits	65.9	57.3	58.8	67

Appendix C

FHWA-RD-77-108 Highway Traffic Noise Prediction Model
Noise Contour Output

Project #: 2021-112
Description: Existing, Existing + Project, Cumulative, Cumulative + Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

			-------- Distances to Traffic Noise Contours --------				
Segment	Roadway Name	Segment Description	75	70	65	60	55
1	Turner Road	Lower Sacramento Rd to Mills Ave	18	39	85	183	394
2	Lower Sacramento Road	Turner Road to North City Limits	19	41	88	190	409
4	Turner Road	Lower Sacramento Rd to Mills Ave	19	41	88	189	407
5	Lower Sacramento Road	Turner Road to North City Limits	20	42	91	196	422
7	Turner Road	Lower Sacramento Rd to Mills Ave	21	44	96	206	445
8	Lower Sacramento Road	Turner Road to North City Limits	22	47	102	220	474
10	Turner Road	Lower Sacramento Rd to Mills Ave	21	46	99	212	458
11	Lower Sacramento Road	Turner Road to North City Limits	23	49	105	226	487

NJA ARCHITECTURE

Lodi Lakes Housing Plan

Noise Assessment Report



Document No Rev 0: 418010-00011-00-GE-REP-0001
26 May 2020

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PROJECT 418010-00011-00-GE-REP-0001 – Lodi Lakes Housing Plan – Noise Assessment Report

Rev	Description	Originator	Reviewer	Worley Approver	Revision Date	Customer Approver	Approval Date
Rev 0	Issue for Review	M. Hale	R. Antoline	R. Antoline	26 May 20	J. Vierra	

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1. Purpose

NJA Architecture (NJA) is in the process of developing the Lodi Lakes housing plan located in Lodi, CA at the corner of Turner Road and Lower Sacramento Road. Adjacent to the proposed housing development is the existing Northern California Power Authority (NCPA) Peaker Plant (see Figure 1 and Figure 2 for the original and updated general layouts). Lodi Lake and the Lodi Surface Water Treatment Facility is located to the east, Bond Manufacturing to the south and existing residential housing to the west and the Lodi Lake Mobile Homes Park to the north.

This report focuses on data measured at the project site as part of the study on November 13 and 14, 2019 and a second study to ascertain additional information on April 7, 2020. This report covers fundamentals of sound (Section 2), noise standards (Section 3), measured project noise and vibration from ambient and NCPA Peaker Plant (Section 4), noise modelling conclusions (Section 5), potential noise mitigation techniques (Section 5.3) and recommended mitigation(s) (Section 7). Additional information used in development of this report is provided in the Appendices.



Figure 1: Lodi Lakes Housing Plan Original Layout (Option A)



Figure 2: Lodi Lakes Housing Plan Updated Layout (Option B)

2. Fundamentals of Sound

Sound magnitude is measured and quantified in terms of the decibel (dB), which is associated with a logarithmic scale based on the ratio of a measured sound pressure to the reference sound pressure of 20 micropascal (20 μPa = 20 x 10-6 N/m^2). In addition, the human hearing system is not equally sensitive to sound at all frequencies. Because of this variability, a frequency-dependent adjustment called "A-weighting" (dBA) has been devised so that sound may be measured in a manner similar how human hearing responds. Figure 3 gives typical A-weighted sound levels for various noise sources and the typical responses of people to these levels. The sound or noise levels in this report are dBA referenced to 0 dBA (20 μPa).

Many studies on the subjective human perception of sound differences have shown that changes in environmental sound levels that are less than about 3 dB are usually not perceptible by the vast majority of people. Table 1 summarizes the findings of these studies. This means that it takes doubling the acoustic power output of a sound source (assuming similar distances to sensitive receptors) to cause an increase of 3 dB in the source sound power level and in the sound pressure level at the receptor location, a "just barely perceptible" loudness increase, according to the research findings. Likewise, applying noise control measures that reduce acoustic power by 50% would result in a lowering of the sound level by 3 dB, which would be a "just barely perceptible" reduction in the perceived loudness.

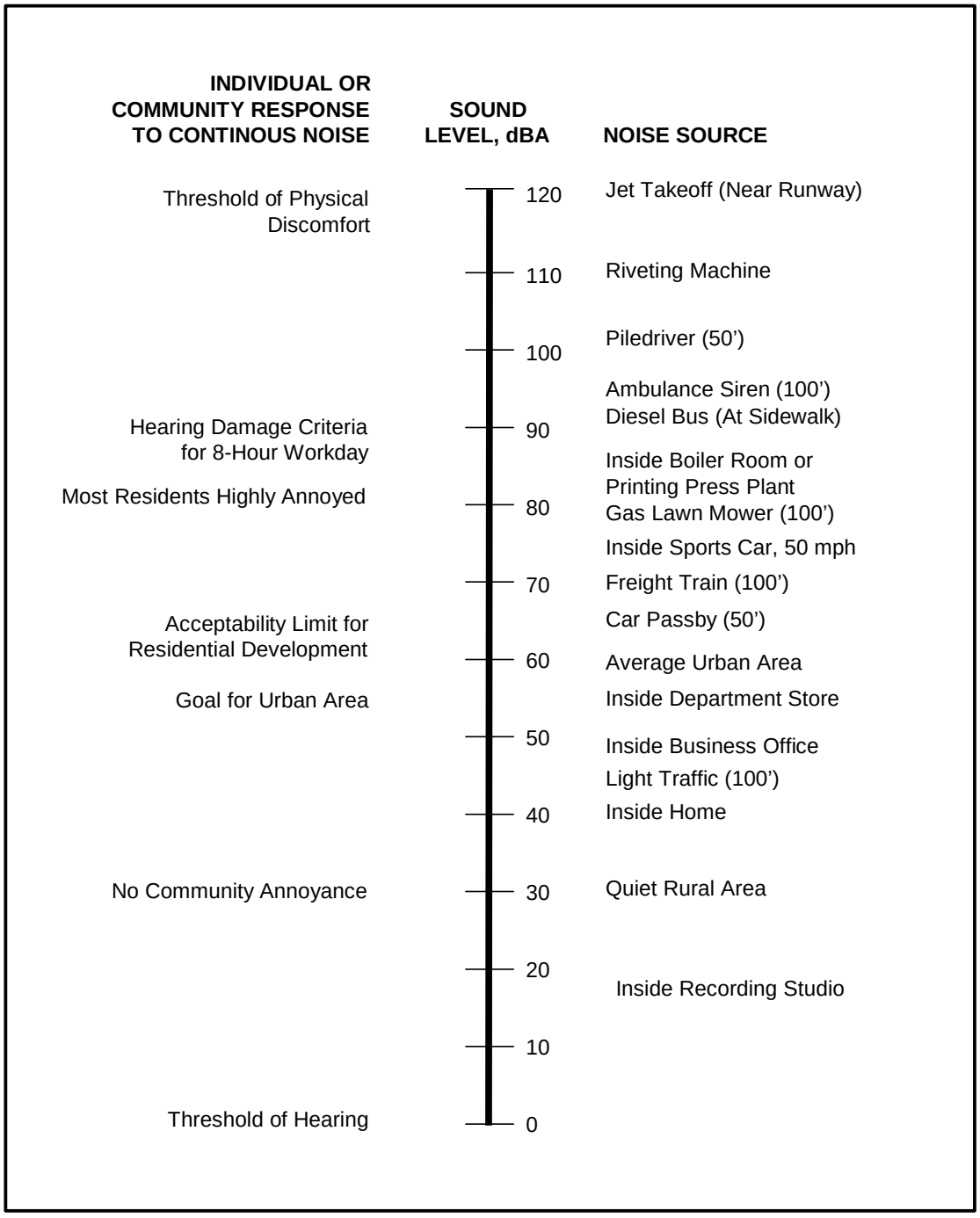


Figure 3: Typical Sound Levels from Common Noise Sources and Their Effect on People

Measured Change in Sound Pressure Level, dB	Relative Change in Acoustic Power		Perceived Change in Sound Loudness
	Decreasing Sound	Increasing Sound	
3	1/2 (halving)	2 (doubling)	Just barely perceptible
5	1/3	3 (tripling)	Clearly noticeable
10	1/10	10 fold	Half or twice as loud
20	1/100	100 fold	Much quieter or louder

Table 1: Human Perception of Changes in Sound Pressure Level (Source: Bias and Hansen, 1996)

3. Noise Standards and Guidelines

Maximum allowable overall noise levels (ambient + Peaker Plant) are limited to those summarized in Table 2 and Table 3 for all operations or plants as per Table 9-2 “Community Noise Exposure Matrix” and Table 9-3 “Allowable Noise Exposure, Outdoor and Interior” as provided in Chapter 9 “Noise” of the City of Lodi Final General Plan – April 2010. Of particular importance for the proposed project is the notation at the bottom of Table 3.

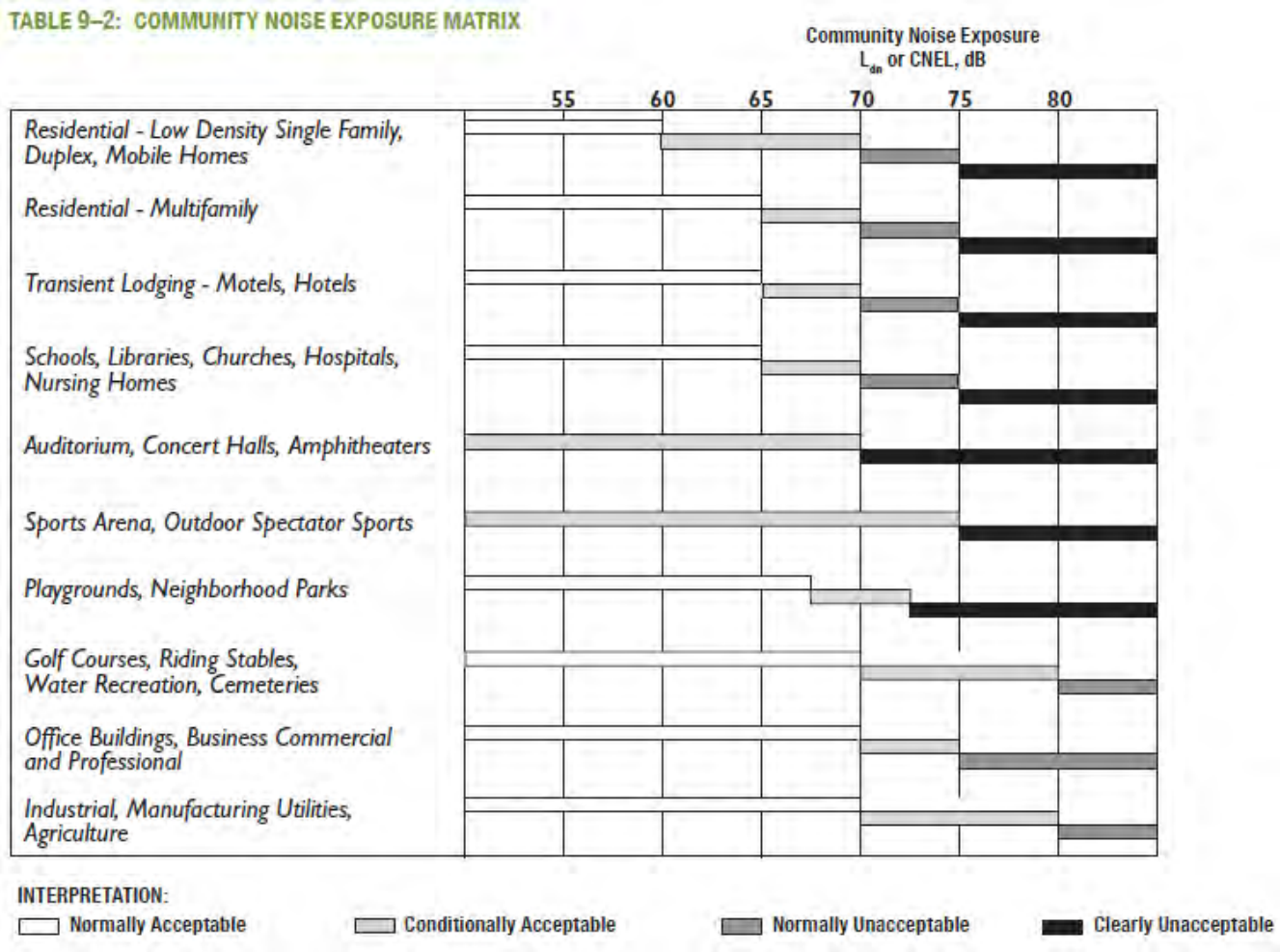


Table 2: Acceptable and Conditionally Acceptable Noise Exposure per City of Lodi Final General Plan - April 2010

TABLE 9–3: ALLOWABLE NOISE EXPOSURE, OUTDOOR AND INTERIOR

LAND USE	OUTDOOR ACTIVITY AREAS[1] (CNEL)	INTERIOR AREAS (CNEL)
Residential	60	45
Motels, Hotels	60	45
Public/Semi-Public	65	45
Recreational	65	50
Commercial	65	50
Industrial	70	65

1. For non-residential uses, where an outdoor activity area is not proposed, the standard does not apply.

Table 3: Allowable Noise Exposure per City of Lodi Final General Plan - April 2010

The proposed development property classifies as “Residential – Multifamily” and thus the maximum normally acceptable noise limit for this project will be 65 dBA as stated in Table 2.

4. Site Measurements

Worley conducted ambient noise measurements for this project over a 29-hour period, including 4-hour operating power plant sound measurements taken on November 13-14, 2019 and additional noise measurements during plant operation on April 7, 2020 for approximately one (1) hour.

4.1 Ambient Noise Survey Results

4.1.1 Initial Noise Survey (13-14 November 2019)

Five (5) ambient noise measurement locations near planned noise sensitive receptor sites were identified by the project and are shown in Figure 4 below. The ambient noise measurement sites are referenced in Table 4 and shown with the Option A layout of the proposed project site in Figure 8. The location of Site C1 was selected for the alternate "Option B" layout where buildings will be maintained a minimum of 100 feet from the power plant.

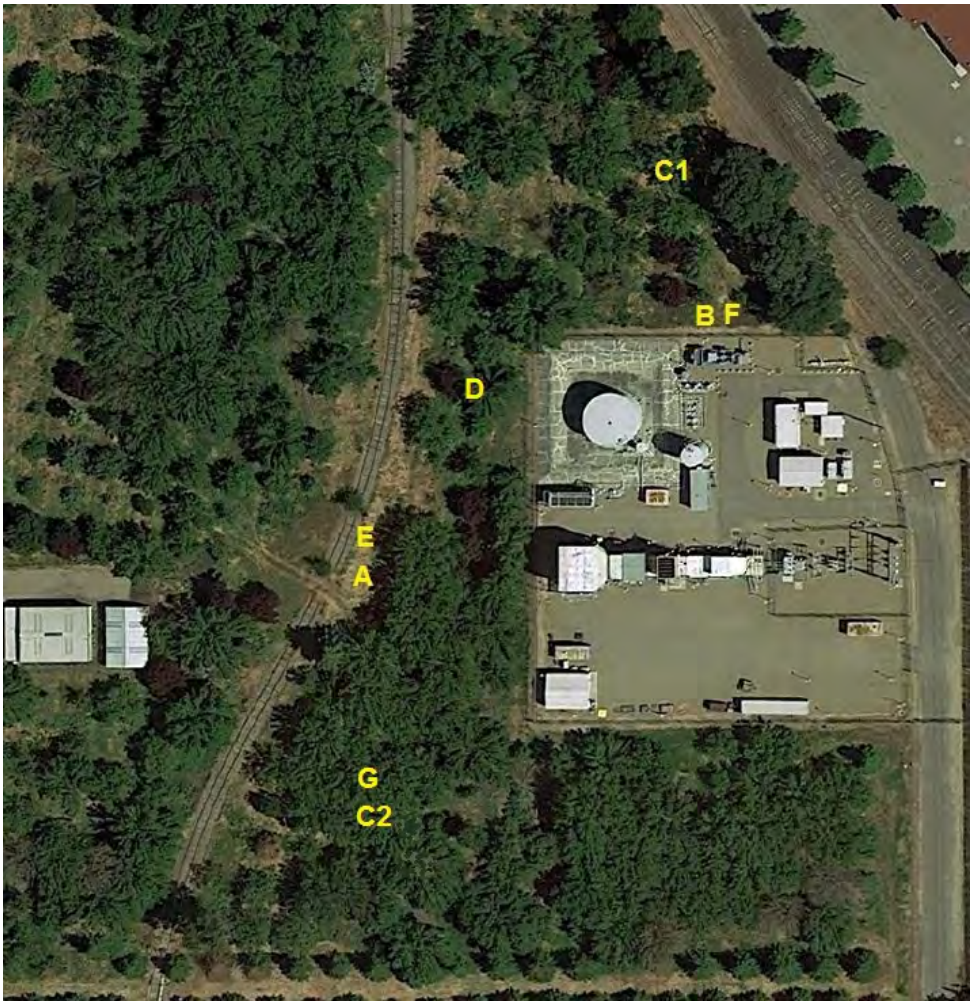


Figure 4: Ambient Noise Measurement Locations (Initial Noise Survey)

Table 4 contains the hourly A-weighted Leq ambient sound levels at each of the five (5) 5-foot high (Sites A, B, C1, C2 & D) and the three (3) 26-foot high (Sites E, F & G) above ground level (AGL) sites which were used to measure and log the ambient noise at the proposed project site during the initial noise survey. All values listed in ***bold blue italics*** were calculated based on other readings as measurements were not available due to a power failure for Site G and the movement of the same meter from Site C1 to Site C2 during the study.

Date	Time	Site A (5') LAeq(1hr)	Site E (25') LAeq(1hr)	Site B (5') LAeq(1hr)	Site F (25') LAeq(1hr)	Site C1 (5') LAeq(1hr)	Site C2 (5') LAeq(1hr)	Site G (25') LAeq(1hr)	Site D (5') LAeq(1hr)
11/13/2019	15:00	51.3	52.6	47.4	49.0	50.8	***53.5***	***55.7***	49.7
11/13/2019	16:00	53.3	54.6	49.8	51.4	52.5	***55.5***	***57.7***	51.2
11/13/2019	17:00	55.3	56.6	52.1	53.7	56.2	***57.5***	***59.7***	53.5
11/13/2019	18:00	55.9	57.2	51.5	53.1	54.4	***58.1***	***50.3***	53.2
11/13/2019	19:00	54.2	55.5	50.7	52.3	53.0	***56.4***	***58.6***	52.2
11/13/2019	20:00	51.2	52.5	48.5	50.1	50.5	***53.4***	***55.6***	49.7
11/13/2019*	21:00	51.5	52.8	46.5	48.1	48.5	***53.7***	***55.9***	48.7
11/13/2019*	22:00	47.3	48.6	46.2	47.8	47.4	***49.5***	***51.7***	46.3
11/13/2019*	23:00	44.7	46.0	44.4	46.0	46.1	***46.9***	***49.1***	44.0
11/14/2019*	0:00	43.4	44.7	43.7	45.3	45.2	***45.6***	***47.8***	42.8
11/14/2019*	1:00	42.3	43.6	43.6	45.2	45.1	***44.5***	***46.7***	42.2
11/14/2019*	2:00	41.2	42.5	42.8	44.4	44.5	***43.4***	***45.6***	40.8
11/14/2019*	3:00	42.4	43.7	43.4	45.0	44.9	***44.6***	***46.8***	42.1
11/14/2019*	4:00	44.5	45.8	44.3	45.9	46.0	***46.7***	***48.9***	43.7
11/14/2019*	5:00	48.5	49.8	46.6	48.2	48.1	***50.7***	***52.9***	47.1
11/14/2019*	6:00	52.0	53.3	48.9	50.5	50.4	***54.2***	***56.4***	50.3
11/14/2019*	7:00	54.2	55.5	50.6	52.2	52.5	***56.4***	***58.6***	52.2
11/14/2019*	8:00	52.1	53.4	49.6	51.2	51.8	***54.3***	***56.5***	50.8
11/14/2019*	9:00	51.2	52.5	49.1	50.7	51.7	***52.2***	***55.6***	50.2
11/14/2019*	10:00	50.0	51.3	46.4	48.0	49.4	***53.8***	***54.4***	47.9
11/14/2019*	11:00	51.6	52.9	47.0	48.6	50.1	51.6	***56.0***	49.5
11/14/2019*	12:00	50.6	51.9	48.7	50.3	***50.9***	55.2	***56.5***	***50.6***
11/14/2019*	13:00	51.5	52.8	49.5	51.1	***51.7***	55.5	***56.8***	***51.5***
11/14/2019*	14:00	55.0	56.3	52.8	54.4	***55.0***	57.0	***58.3***	***55.0***
11/14/2019*	15:00	66.2	67.5	75.1	76.7	***67.8***	66.7	***68.0***	***66.7***
11/14/2019*	16:00	66.5	67.2	79.8	81.4	***68.2***	68.0	***69.3***	***70.0***
11/14/2019*	17:00	66.3	68.0	80.1	82.2	***68.9***	68.4	69.8	***66.8***
11/14/2019*	18:00	66.2	67.6	80.1	81.9	***68.3***	68.2	69.0	***66.7***
11/14/2019*	19:00	66.0	67.3	80.1	81.7	***68.0***	68.0	68.7	69.5
11/14/2019*	20:00	54.8	56.1	65.1	66.6	***57.1***	55.7	58.0	56.0
Ambient CNEL >		**55.4**	**56.6**	**53.2**	**54.8**	**55.1**	**57.6**	**59.8**	**54.0**
***CNEL w/4 hr Plant>**		**61.8**	**63.1**	**74.5**	**76.2**	**63.6**	**63.7**	**64.9**	**64.8**

Table 4: Ambient Noise Measurement Results and City Noise Limits (Initial Noise Survey)

The 24-hour ambient CNEL was calculated using the measured hourly LAeq at each site from 3:00 p.m. (15:00) on Wednesday, November 13th through 2:00 p.m. (14:00) on Thursday, November 14th. The 24-hour CNEL, including the 4-hour power plant operating noise from 4:00 p.m. (16:00) to 8:00 p.m. (20:00), was calculated by using the measured hourly LAeq at each site from 9:00 p.m. (21:00) on Wednesday, November 13th through 8:00 p.m. (20:00) on Thursday, November 14th. According to standard calculations of the CNEL, a penalty of 5 dB is added to the measured noise data for the three (3) evening hours of 7:00 p.m. (19:00) through 9:00 p.m. (21:00) and a 10 dB penalty is added to the nine (9) night-time hours of 10:00 p.m. (22:00) through 6:00 a.m. (6:00) the next morning. The twenty-four (24) hourly energy average sound levels are then averaged logarithmically using the following formula:

CNEL = 10 x Log((1/24) x (10^(dB1/10) + 10^(dB2/10)+... +10^(dB24/10))), where evening is dB + 5 and night is dB + 10

4.1.2 Second Noise Survey (7 April 2020)

Noise measurements were obtained from six (6) noise measurement locations to better assess the updated layout. The ambient noise measurement sites are referenced in Table 5 and shown with the updated Option B-2 layout of the proposed project site in Figure 19.

Table 5 contains the hourly A-weighted Leq ambient sound levels at each of the sites which were used to measure and log the ambient noise at the proposed project site during the second noise survey.

Date	Time	Site 1 (5') LAeq(1hr)	Site 1 (30') LAeq(1hr)	Site 2 (5') LAeq(1hr)	Site 3 (5') LAeq(1hr)	Site 4 (5') LAeq(1hr)	Site 4 (30') LAeq(1hr)	Site 5 (5') LAeq(1hr)	Site 6 (5') LAeq(1hr)
4/7/2020	17:00	55.3	56.6	52.0	50.5	50.0	51.3	52.1	56.4
4/7/2020	18:00	55.9	57.2	52.4	51.2	54.4	55.5	51.5	57.2
4/7/2020	19:00	54.2	55.5	50.9	49.4	53.0	54.3	50.7	55.4
4/7/2020	20:00	51.2	52.5	47.7	46.5	50.5	51.6	48.5	52.1
4/7/2020	21:00	51.5	52.8	48.2	46.7	48.5	49.8	46.5	52.7
4/7/2020	22:00	47.3	48.6	43.8	42.6	47.4	48.6	46.2	48.4
4/7/2020	23:00	44.7	46.0	41.4	39.9	46.1	47.4	44.4	45.8
4/7/2020	0:00	43.4	44.7	35.9	38.7	45.2	46.4	43.7	44.5
4/7/2020	1:00	42.3	43.6	39.0	37.5	45.1	46.3	43.6	43.5
4/7/2020	2:00	41.2	42.5	37.7	36.5	44.5	45.7	42.8	42.0
4/7/2020	3:00	42.4	43.7	39.1	37.6	44.9	46.2	43.4	43.4
4/7/2020	4:00	44.5	45.8	41.0	39.8	46.0	47.1	44.3	45.6
4/7/2020*	5:00	48.5	49.8	45.2	43.7	48.1	49.4	46.6	49.8
4/7/2020*	6:00	52.0	53.3	48.5	47.8	50.4	51.5	48.9	53.2
4/7/2020*	7:00	54.2	55.5	50.9	49.4	52.5	53.8	50.6	55.3
4/7/2020*	8:00	52.1	53.4	48.6	47.4	51.8	53.0	49.6	53.1
4/7/2020*	9:00	51.2	52.5	47.9	46.4	51.7	52.7	49.1	52.4
4/7/2020*	10:00	50.0	51.3	46.5	45.8	49.4	50.4	46.4	50.8
4/7/2020*	11:00	51.6	52.9	48.8	46.8	50.1	51.4	48.0	52.6
4/7/2020*	12:00	50.6	51.9	47.1	45.9	48.7	49.9	48.7	51.6
4/7/2020*	13:00	51.5	52.8	48.2	46.7	49.5	50.6	49.5	52.4
4/7/2020*	14:00	55.0	56.3	51.5	50.3	52.8	54.1	52.3	56.2
4/7/2020*	15:00	51.3	52.6	48.0	46.5	49.8	51.1	49.8	52.3
4/7/2020*	16:00	53.3	54.6	49.8	48.6	51.4	52.6	50.3	54.6
4/7/2020*	17:00	55.3	56.6	52.0	50.5	53.3	54.4	53.8	56.5
4/7/2020*	18:00	55.0	56.3	51.5	50.3	52.8	54.1	52.0	56.4
4/7/2020*	19:00	66.8	68.1	69.7	65.6	70.1	66.8	93.8	75.9
4/7/2020*	20:00	66.6	57.8	67.7	65.5	70.0	66.6	93.7	75.8
4/7/2020*	21:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
4/7/2020*	22:00	63.9	65.5	67.6	64.8	69.1	65.5	93.2	75.7
4/7/2020*	23:00	44.7	46.0	41.4	39.9	46.1	47.4	44.4	45.6
4/7/2020*	0:00	43.4	44.7	39.9	38.7	45.2	46.4	43.7	44.5
4/7/2020*	1:00	42.3	53.6	39.0	37.5	45.1	46.3	43.6	43.5
4/7/2020*	2:00	41.2	42.5	37.7	36.5	44.5	45.7	42.8	42.0
4/7/2020*	3:00	42.4	43.7	39.1	37.6	44.9	46.2	43.4	43.4
4/7/2020*	4:00	44.5	45.8	41.0	39.8	46.0	47.1	44.3	45.6
4/7/2020*	5:00	48.5	49.8	45.2	43.7	48.1	49.4	46.6	49.8

Date Time	Site 1 (5') LAeq(1hr)	Site 1 (30') LAeq(1hr)	Site 2 (5') LAeq(1hr)	Site 3 (5') LAeq(1hr)	Site 4 (5') LAeq(1hr)	Site 4 (30') LAeq(1hr)	Site 5 (5') LAeq(1hr)	Site 6 (5') LAeq(1hr)
Ambient CNEL >	**55.4**	**52.4**	**47.8**	**46.4**	**49.9**	**51.1**	**48.6**	**52.3**
***CNEL w/4 hr Plant>**	**61.7**	**62.9**	**61.7**	**59.2**	**63.3**	**61.6**	**85.8**	**68.7**

Table 5: Ambient Noise Measurement Results and City Noise Limits (Second Noise Survey)

The 24-hour ambient CNEL from the initial noise survey as shown in Table 4 was used without modification. The 24-hour CNEL, including plant operating noise, was calculated by using the measured hourly LAeq at each site from approximately 7:15 p.m. (19:15) through approximately 8:15 p.m. (20:15) on Tuesday, April 7th, extrapolating this single hour datapoint to the 4-hr and 10-hr operating spans required and combining with the ambient data measured during the initial noise survey to provide a complete dataset. Ambient data points for sites that were not previously included in the initial noise survey were estimated as only one (1) hour of data was measured during the second noise survey. According to standard calculations of the CNEL, a penalty of 5 dB is added to the measured noise data for the three (3) evening hours of 7:00 p.m. (19:00) through 9:00 p.m. (21:00) and a 10 dB penalty is added to the nine (9) night-time hours of 10:00 p.m. (22:00) through 6:00 a.m. (6:00) the next morning. The twenty-four (24) hourly energy average sound levels are then averaged logarithmically using the following formula:

CNEL = 10 x Log((1/24) x (10^(dB1/10) + 10^(dB2/10)+... +10^(dB24/10))), where evening is dB + 5 and night is dB + 10

4.2 Vibration Survey Results

Vibration caused by plant operation was measured at the project site. Due to an issue with calibration unknown at the time of testing, the vibration measurements from the initial noise survey were deemed unusable and vibration was remeasured during the second noise survey. These noise measurements can be seen in Figure 5 and Figure 6 below for Site 1 and Site 4 where the two (2) vibration sensors were placed.

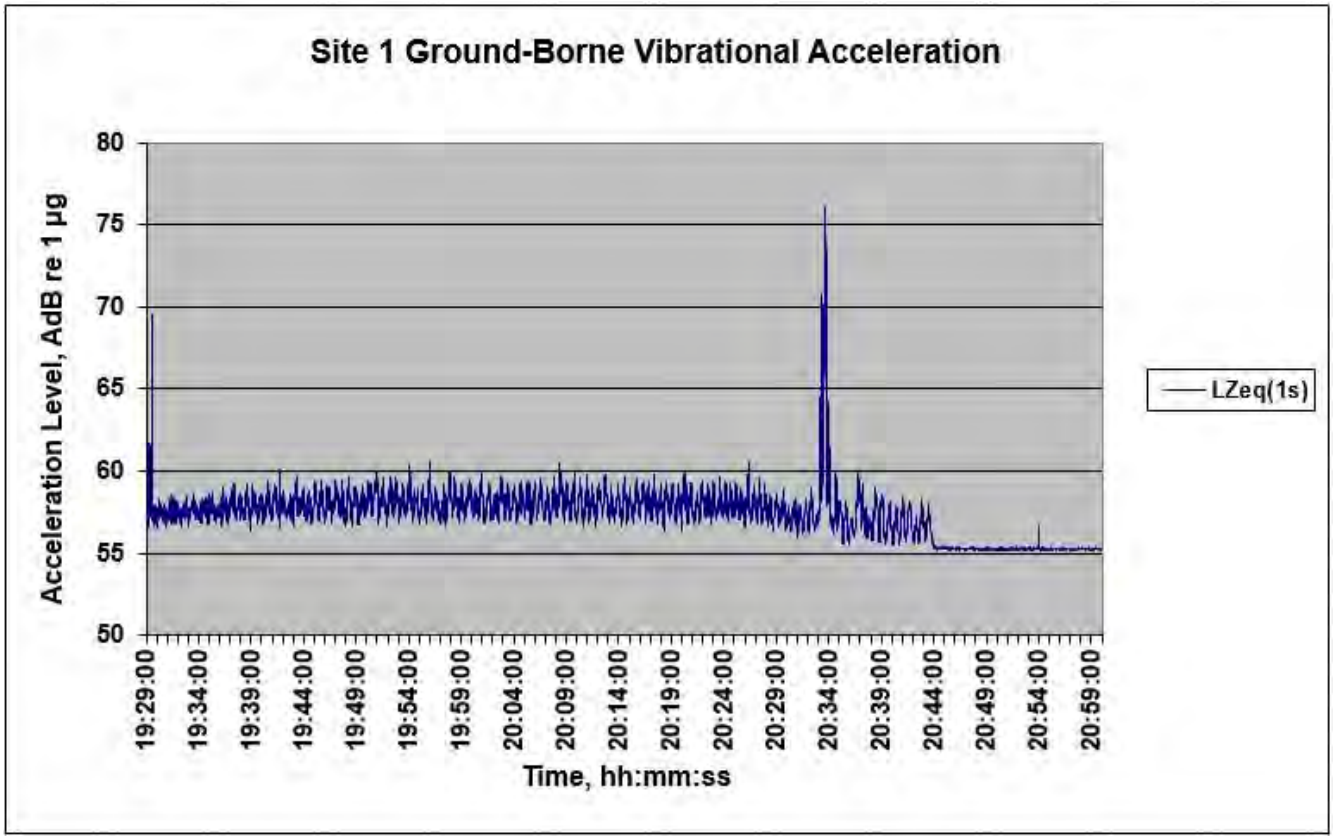


Figure 5: Site 1 Vibration Readings

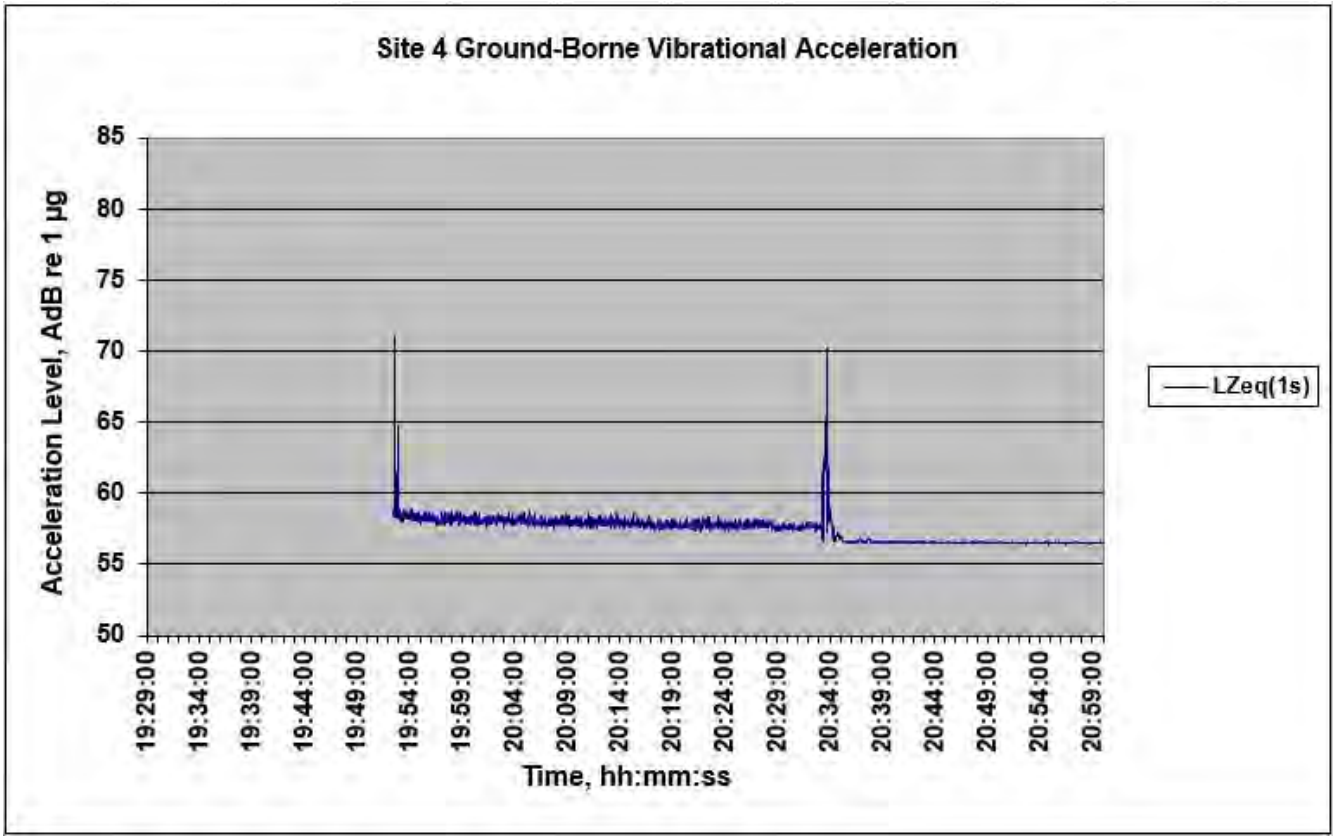


Figure 6: Site 4 Vibration Readings

As can be seen in the above figures, vibration during plant operations at both sites is between 55 AdB(Z) and 60 AdB(Z). The spikes in vibration seen at the beginning of the plots are due to personnel activating the sensors and are not the start up of the plant. The maximum recorded vibration for both sites was at shutdown being 76.0 AdB(Z) for Site 1 and 70.3 AdB(Z) for Site 2.

Figure 7 below provides guidelines for ground-borne vibration sensitivity based on land use. Project measurements were made using a reference of 1 micro-g while Figure 7 uses a reference of 1 micro-inch/sec for acceleration. Converting the units for Category 2, which includes residences, results in an equivalent rating of 80.27 AdB(Z) for the listed rating of 72 VdB. As stated above, at no time does the recorded data show vibration that reaches or exceeds 80 AdB(Z) thus making the vibration levels acceptable. This acceptance also considers a stricter criterion as the peak vibration during shutdown would be considered an “Infrequent Event” thus permitting a significantly higher vibration than what is seen at the site where the “Frequent Event” vibrations are less than 60 AdB(Z).

Table 4. Ground-Borne Vibration and Noise Impact Criteria by Land Use Category

Land Use Category	Ground-Borne Vibration Impact Levels (VdB re 1 micro-inch/sec)		Ground-Borne Noise Impact Levels (dB re 20 micro Pascals)	
	Frequent Events[1]	Infrequent Events[2]	Frequent Events[1]	Infrequent Events[2]
Category 1: Buildings where low ambient vibration is essential for interior operations.	65 VdB[3]	65 VdB[3]	-[4]	-[4]
Category 2: Residences and buildings where people normally sleep.	72 VdB	80 VdB	35 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	83 VdB	40 dBA	48 dBA

Notes:
1. "Frequent Events" is defined as more than 70 vibration events per day. Most transit projects fall into this category.
2. "Infrequent Events" is defined as fewer than 70 vibration events per day. This category includes most commuter rail systems.
3. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.
4. Vibration-sensitive equipment is not sensitive to ground-borne noise.

Table 5. Ground-Borne Vibration and Noise Impact Criteria for Special Buildings

Type of Building or Room	Ground-Borne Vibration Impact Levels (VdB re 1 micro-inch/sec)		Ground-Borne Noise Impact Levels (dB re 20 micro Pascals)	
	Frequent Events[1]	Infrequent Events[2]	Frequent Events[1]	Infrequent Events[2]
Concert Halls	65 VdB	65 VdB	25 dBA	25 dBA
TV Studios	65 VdB	65 VdB	25 dBA	25 dBA
Recording Studios	65 VdB	65 VdB	25 dBA	25 dBA
Auditoriums	72 VdB	80 VdB	30 dBA	38 dBA
Theaters	72 VdB	80 VdB	35 dBA	43 dBA

Notes:
1. "Frequent Events" is defined as more than 70 vibration events per day. Most transit projects fall into this category.
2. "Infrequent Events" is defined as fewer than 70 vibration events per day. This category includes most commuter rail systems.
3. If the building will rarely be occupied when the trains are operating, there is no need to consider impact. As an example consider locating a commuter rail line next to a concert hall. If no commuter trains will operate after 7 pm, it should be rare that the trains interfere with the use of the hall.

Figure 7: Vibration Level Guidelines

5. Project Sound Level Model

Equipment sound power levels (Lw) were not available for this study. Worley developed noise models based on field measurements and modelling back to the key noise sources including turbine, generator, inlet filters and gas compressors. Two (2) types of sound power levels have been modelled: Lw, which is the total sound power level produced by the operating equipment and Lw', which is the partial sound power level per unit length or per unit area of noise radiating equipment and is normally used for pipelines and large surfaces.

5.1 SoundPLAN® Proposed Project Model and Receptor Noise Modelling Results

The project was modelled in SoundPLAN® (Version 8.1) by using point noise sources, line noise sources and area noise sources, representing the various major power plant noise sources for the plant equipment. This powerful and sophisticated computer noise propagation program has several standardized sound propagation methods (e.g., ISO 9613, Part 2). Modelling accuracy is considered to be in the +/- 3 dBA to 5 dBA range. The plant noise modelling reported herein used this conservative industrial plant sound propagation model and assumes hemispherical noise propagation over the area topography for the various ground conditions. Sound level attenuation due to noise barrier effects by topography, earthen berms, larger plant equipment, tanks and buildings, as well as any needed sound walls, are specifically considered by SoundPLAN, whereas these more complex attenuation measures and various meteorological conditions are typically not considered by less sophisticated noise prediction methods, such as spreadsheet noise models.

5.2 Project Noise Verification Survey – Initial Noise Survey

5.2.1 Sensor Locations

Worley utilized a total of eight (8) Type 1 sound level meters with data logging and integrating functions with four (4) of the sound meters having wave file audio recording capabilities. Four (4) sound meters microphones were mounted on camera tripods approximately five (5) feet above grade. These sensors measured the sound level at the approximate pedestrian elevation in the proposed housing development area. Locations of the ground level acoustic sensors are shown in Figure 8 below designated by ◆ .

An additional three (3) stationary microphones were mounted at the top of masts approximately 26 feet above grade (30-foot high masts were attempted but a light breeze that began during equipment set-up caused this elevation to be unstable). Each microphone had a cable attached to its mast and connected to ground level sound meters. These sensors measured the sound level at the approximate elevation of the third story of the proposed buildings located near the plant. Locations of the elevated sensors are shown in Figure 8 below designated by ⬟ .

An eighth "roving" sound sensor was carried by Worley throughout the course of the study taking instantaneous measurements where deemed necessary to ensure all required information was gathered.

Worley utilized three (3) vibration sensors. Two (2) were attached to 25-pound weights at ground level and located near the proposed building locations as shown in Figure 8 below designated by ■. The third vibration sensor was “roving” and used to check vertical surface vibration on the planned project site.



Figure 8: Measurement and SoundPLAN Modelled Receiver Sites (Option A Layout)

5.2.2 Results

The model used the project coordinate grid system (converted to metric units for SoundPLAN use) and calculated the cumulative sound pressure levels at sensitive receptor points, using the receptor single point calculation routine and the meshed grid noise contour calculation routine. Figure 9 shows the noise model plan view and sensitive receptor locations. Figure 10 shows an isometric 3-D view of the noise model.

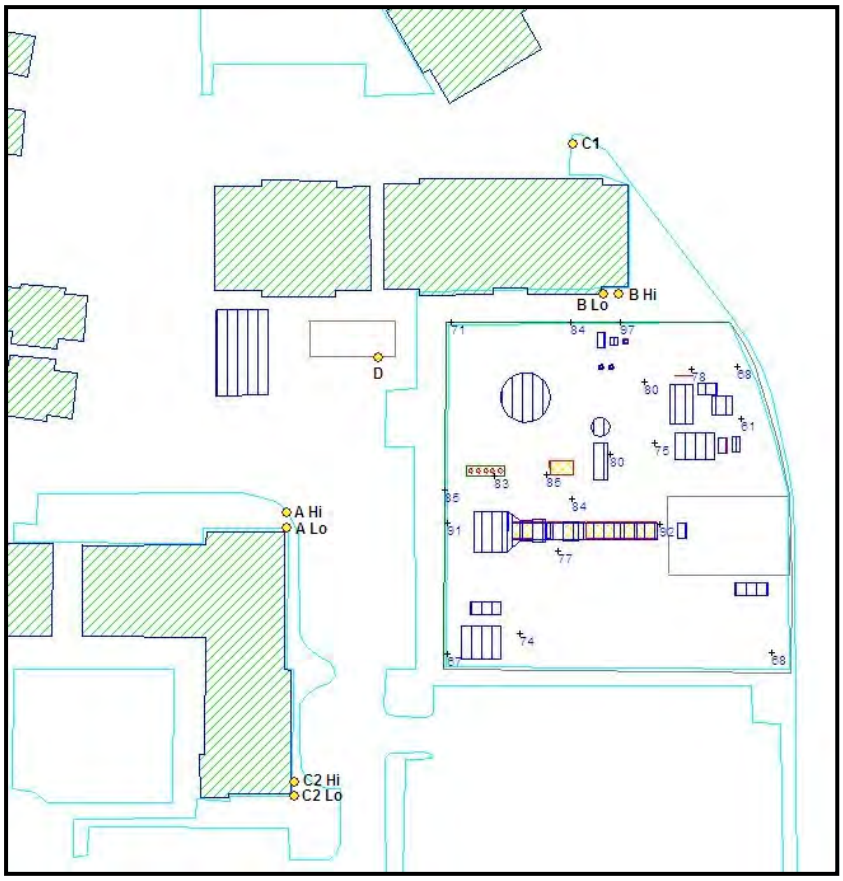


Figure 9: Option A Noise Model Plan View

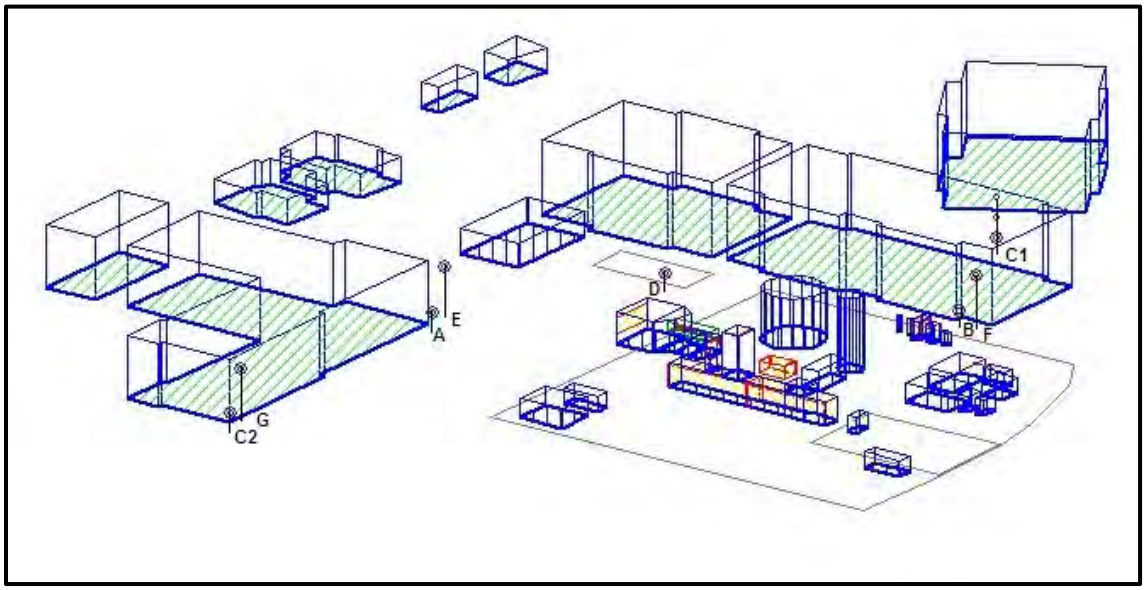


Figure 10: 3-Dimensional Option A Noise Model Plan Isometric View

Unabated power plant noise contours for Option A and Option B layouts at five (5) feet and 26 feet AGL are shown in Figure 11, Figure 12, Figure 13 and Figure 14. Unabated power plant perimeter CNEL noise modelling results can also be found in Table 7 for Option A and Table 8 for Option B. The contours include an additional data point "H", which was not included during site measurements but has been modelled to show any potential noise level changes in the direction of Lodi Lake.

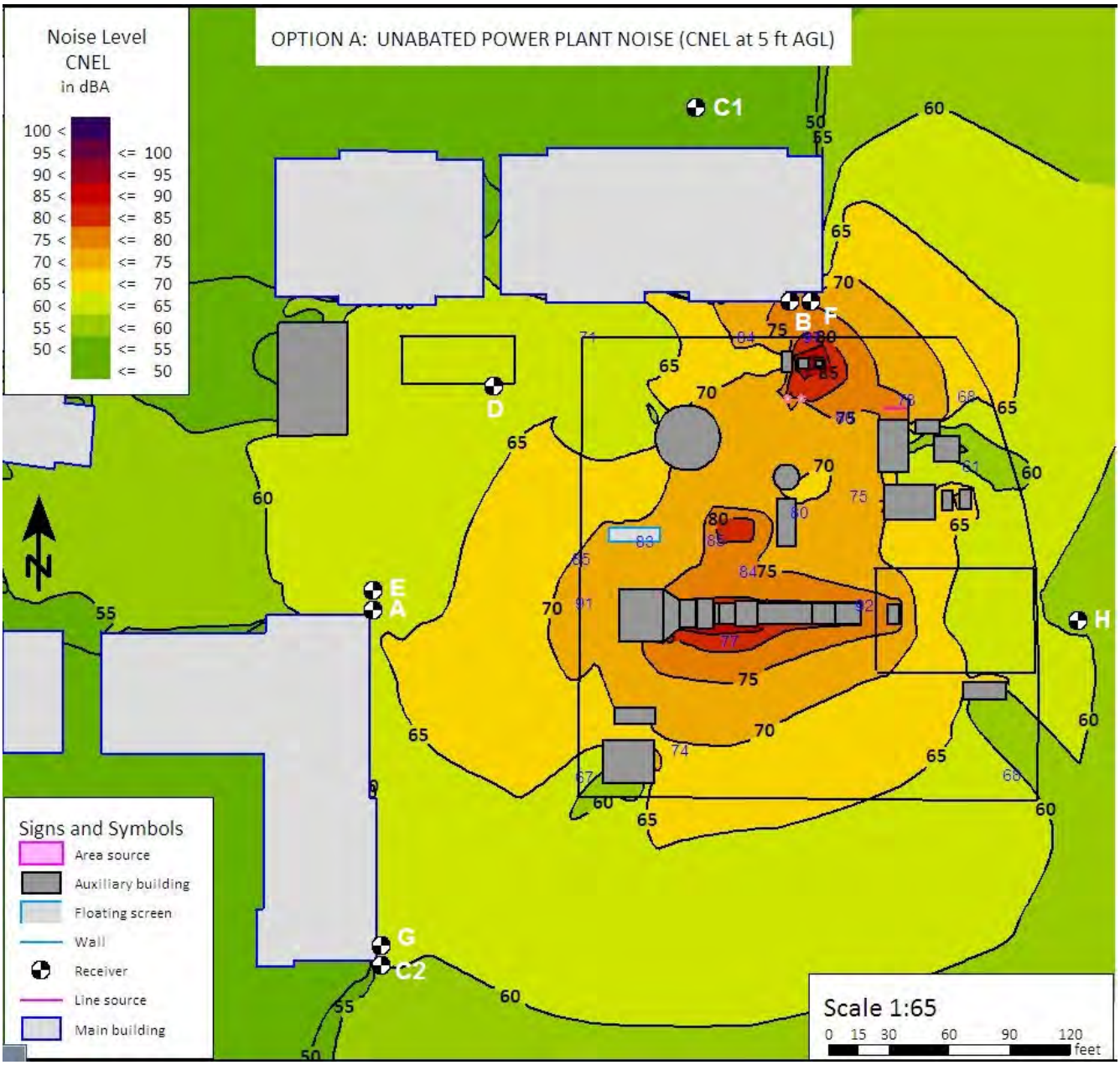


Figure 11: Option A Unabated Project Noise Contours During NCPA Peaker Plant Operation – 5 ft AGL

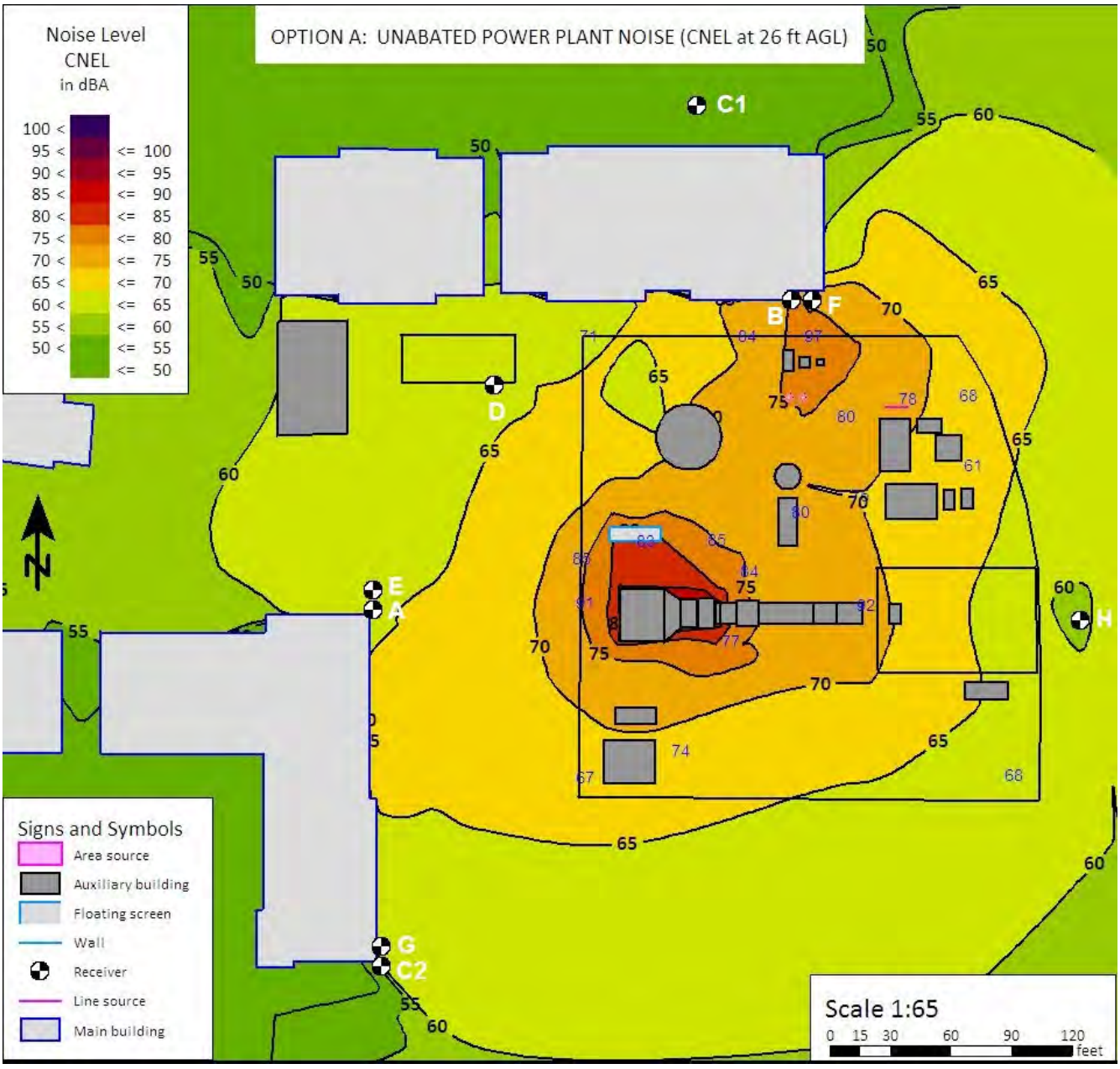


Figure 12: Option A Unabated Project Noise Contours During NCPA Peaker Plant Operation – 26 ft AGL

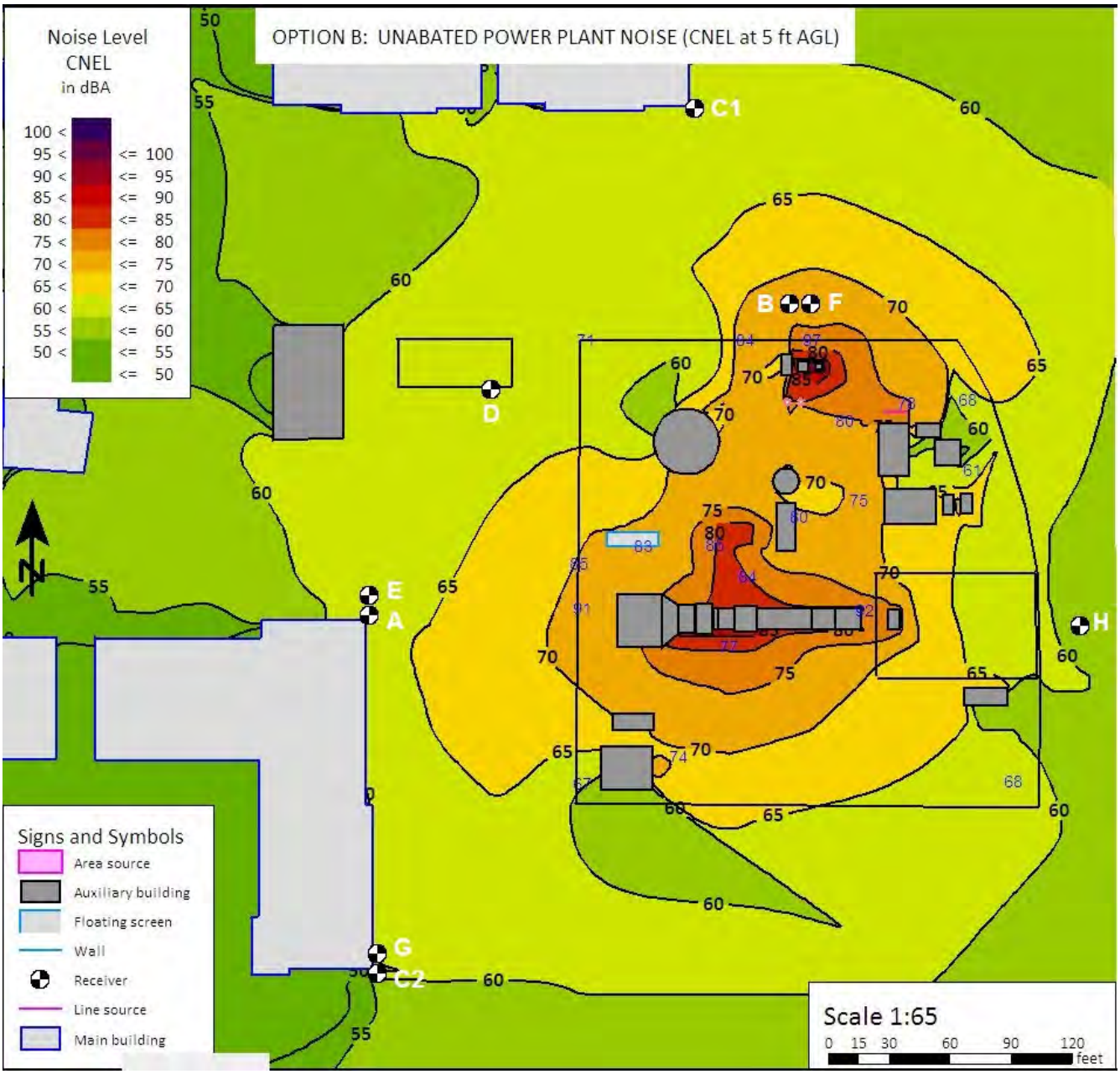


Figure 13: Option B Unabated Project Noise Contours During NCPA Peaker Plant Operation – 5 ft AGL

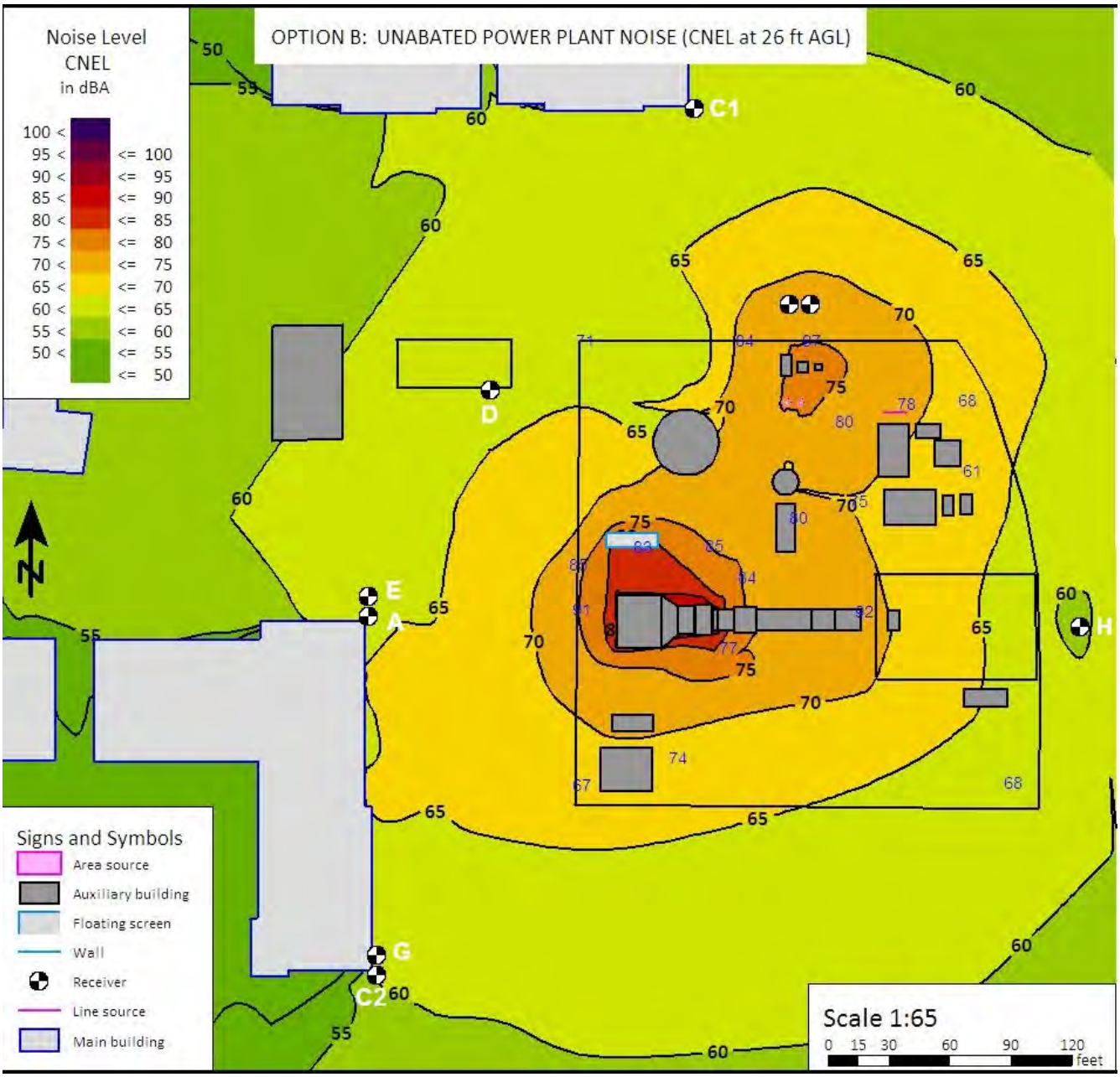


Figure 14: Option B Unabated Project Noise Contours During NCPA Peaker Plant Operation – 26 ft AGL

These contours depict the 24-hour CNEL noise levels. However, the power plant produces louder sound levels during start up that should also be considered. Figure 15 shows the ambient noise recorded at Site A on November 13, 2019 during the same span of hours the plant was operating on November 14, 2019 as shown in Figure 16. An additional hour (15:00 – 16:00) in included in Figure 16 in order to capture power plant startup. The same data is shown in for the sensor at Site B in Figure 17 and Figure 18 respectively.

Due to winds experienced at site during the measurements, readings were restricted to twenty-six (26) feet AGL. Noise levels at thirty-six (36) feet AGL were thus modelled based on the measured data to estimate sound at the height of third story windows. As can be seen in the comparison of the modelled elevated CNELs in Table 6, the unabated values remain the same or decrease for all key measurement sites which are located at the proposed building locations at the exterior wall facing the power plant.

Site	CNEL @ 26 ft AGL[1]	CNEL @ 36 ft AGL
C1	61.2 dBA	61.3 dBA
E	62.6 dBA	62.6 dBA
F	72.8 dBA	71.5 dBA
G	62.5 dBA	60.6 dBA

Table 6: Comparison of Unabated CNEL for Elevated Building Faces

When considering Site H, the modelled unabated noise levels are the same for Option A and Option B layouts being 58.9 dBA at five (5) feet AGL and 60.5 dBA at 26 feet AGL.

[1] The values in Table 6 are for the time period of plant operation and are for comparison only. These values do not include all ambient noise and thus do not match the values in Table 4.

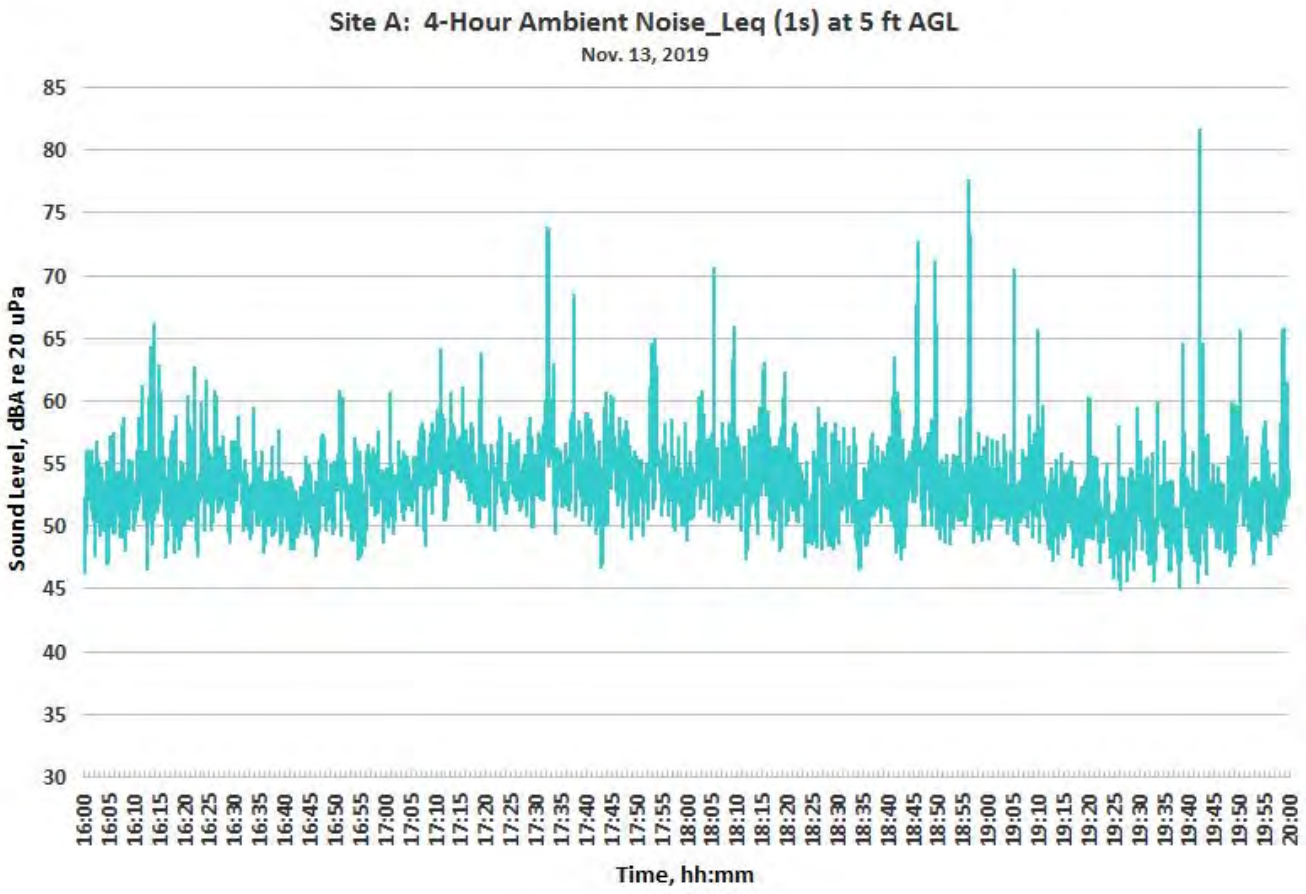


Figure 15: Site A Ambient Noise – 5 ft AGL

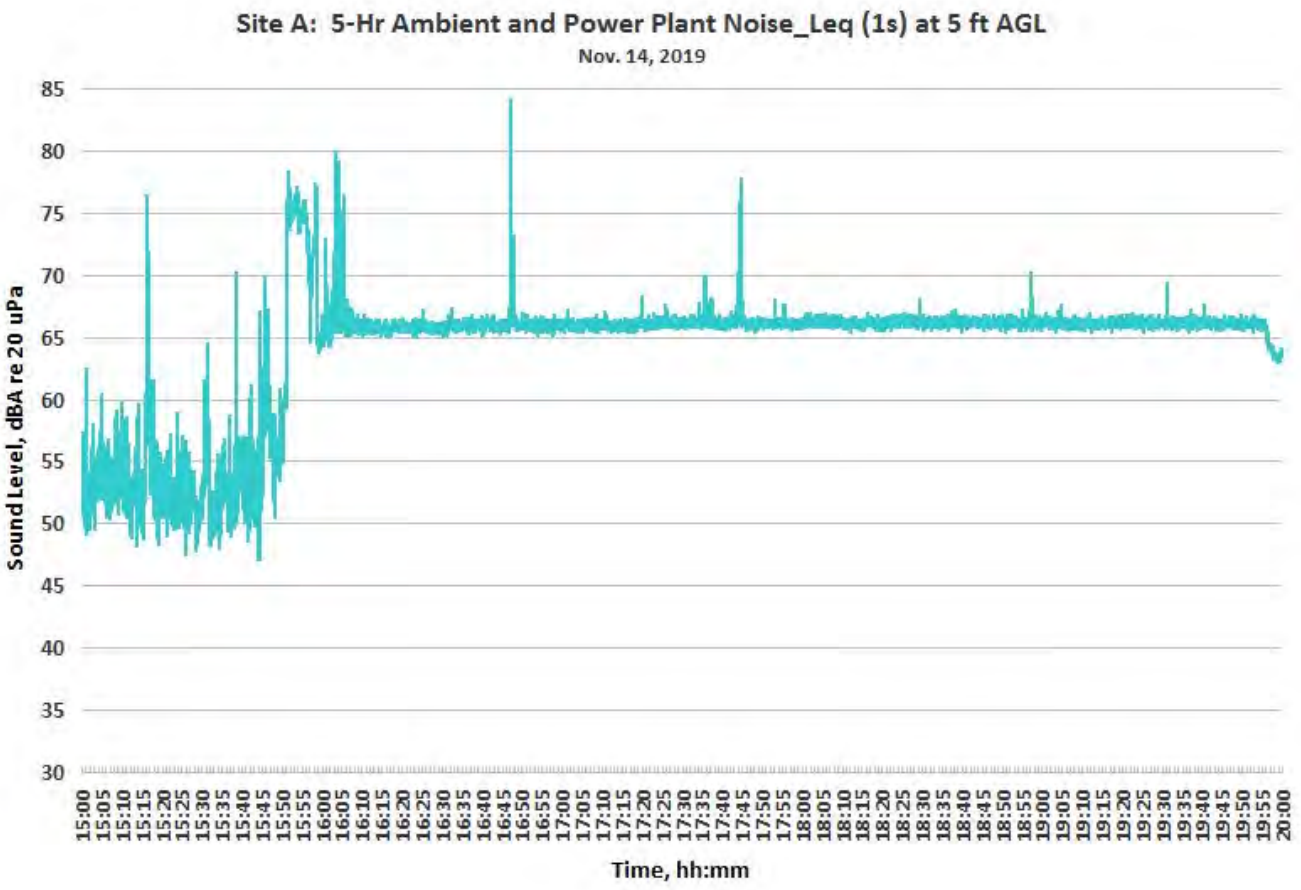


Figure 16: Site A Ambient + Plant Noise – 5 ft AGL

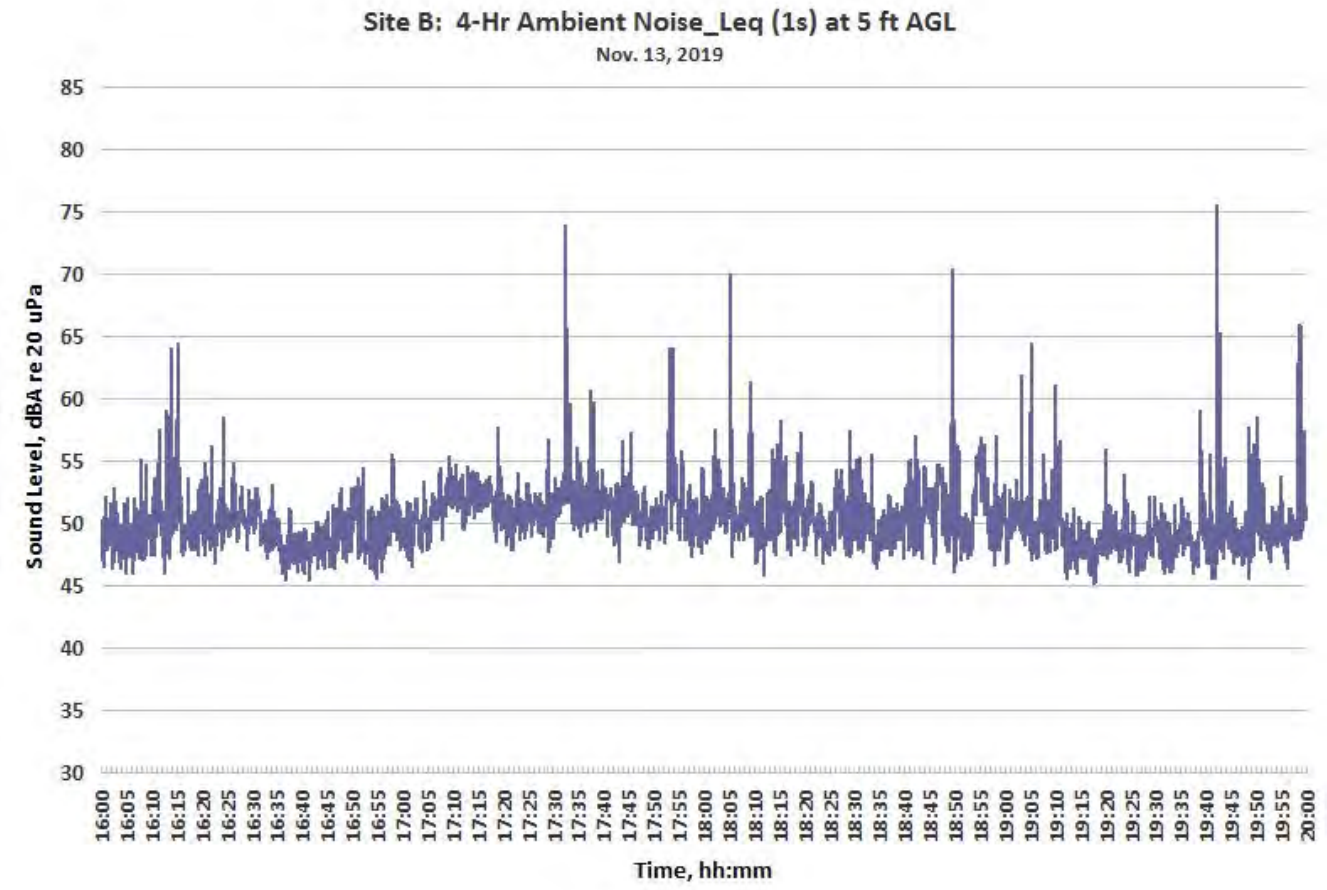


Figure 17: Site B Ambient Noise – 5 ft AGL

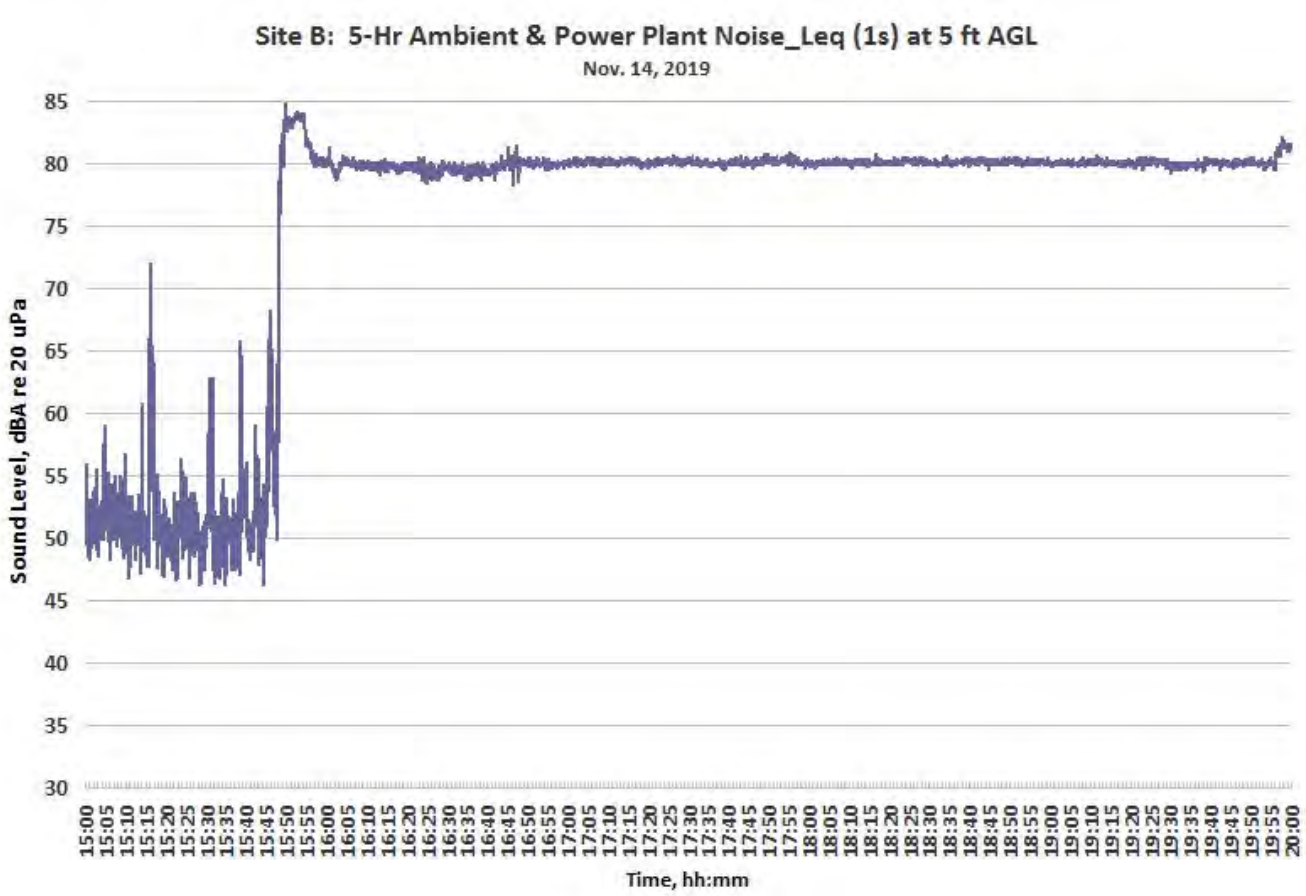


Figure 18: Site B Ambient + Plant Noise – 5 ft AGL

Several spikes in noise greater than 70 dBA, with one exceeding 80 dBA, are seen in Figure 15 during ambient conditions. It can therefore be reasonably implied that the spikes seen during the power plant operating period seen in Figure 16 are due to external ambient effects and were not caused by plant operation. This is further confirmed by the lack of spikes seen at Site B during plant operation in Figure 18.

From these data plots it is understood that at Site A (building face west of the power plant) a high noise level of approximately 80 dBA is experienced that then reduces to approximately 66 dBA. Similarly, at Site B (building face north of the power plant in Option A layout) a high noise level of approximately 85 dBA is experienced that then reducing to approximately 80 dBA.

These findings are provided here as examples and show that mitigations are required to reduce noise levels to acceptable levels in accordance with City of Lodi Final General Plan. All site measured data plots can be found in Appendix A.

5.3 Project Noise Verification Survey – Second Noise Survey

5.3.1 Sensor Locations

It was determined upon review of the initial noise survey that the Option B layout would be utilized and thus a modified version, Option B-2, was evaluated for the second noise survey. Worley utilized a total of eight (8) Type 1 sound level meters with data logging and integrating functions. Location of the acoustic sensors at approximately five (5) feet above grade are shown in Figure 19 with additional measurements taken at approximately 30 feet above grade at Site 1 and Site 4. These measurements were used in conjunction with the initial noise survey measurements to determine the final results.

Due to the maximum height of the masts available for the study, readings were restricted to thirty (30) feet AGL.

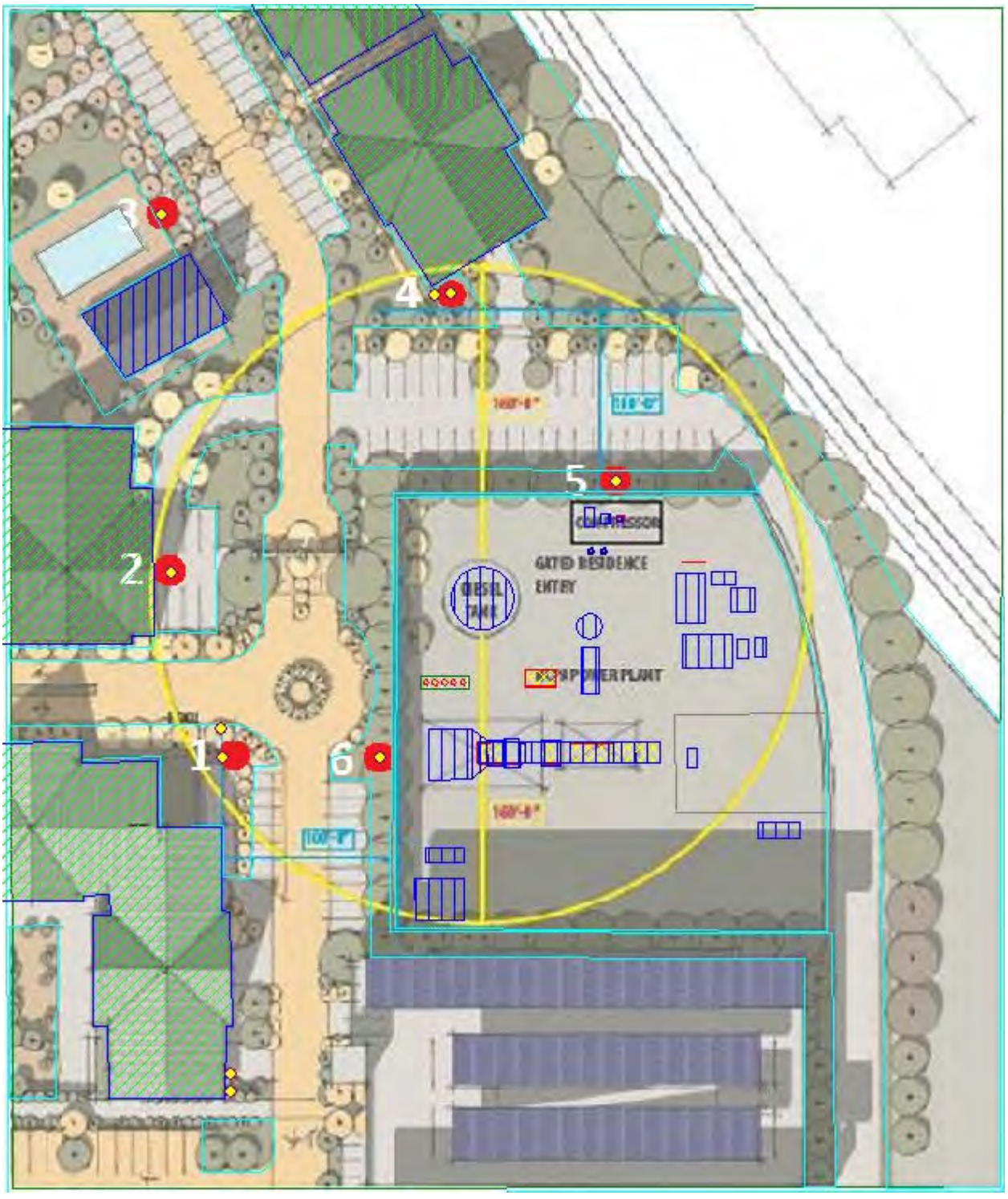


Figure 19: Measurement and SoundPLAN Modelled Receiver Sites (Second Noise Survey)

5.3.2 Results

Unabated power plant noise contours for Option B-2 layouts for the 4-hr and 10-hr CNEL at five (5) feet and 30 feet AGL are shown in Figure 20, Figure 21, Figure 22 and Figure 23. Unabated power plant perimeter CNEL noise modelling results for Option B-2 can also be found in Table 9 and Table 10.

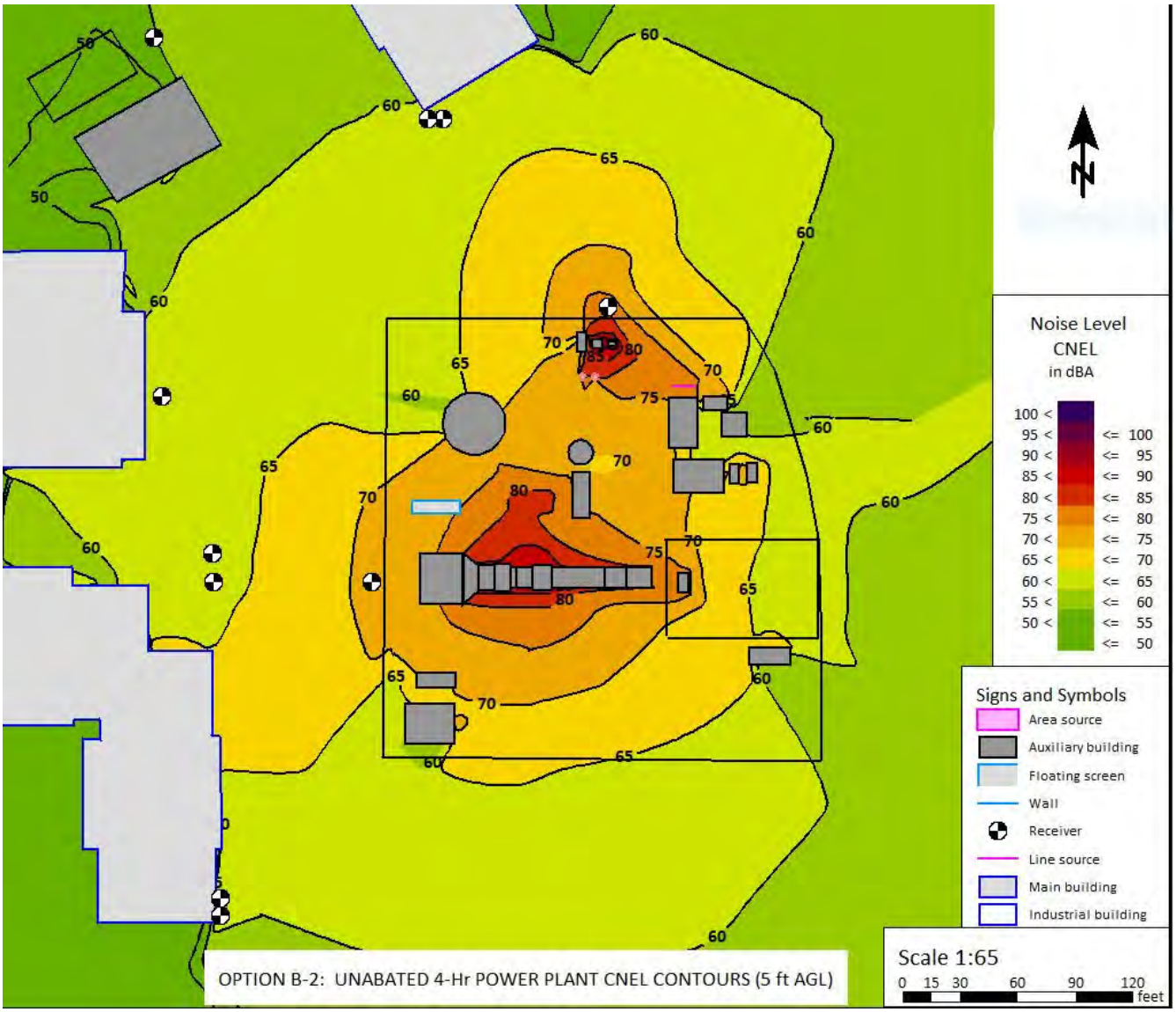


Figure 20: Option B Unabated Project Noise Contours During NCPA Peaker Plant Operation – 4 hr CNEL, 5 ft AGL

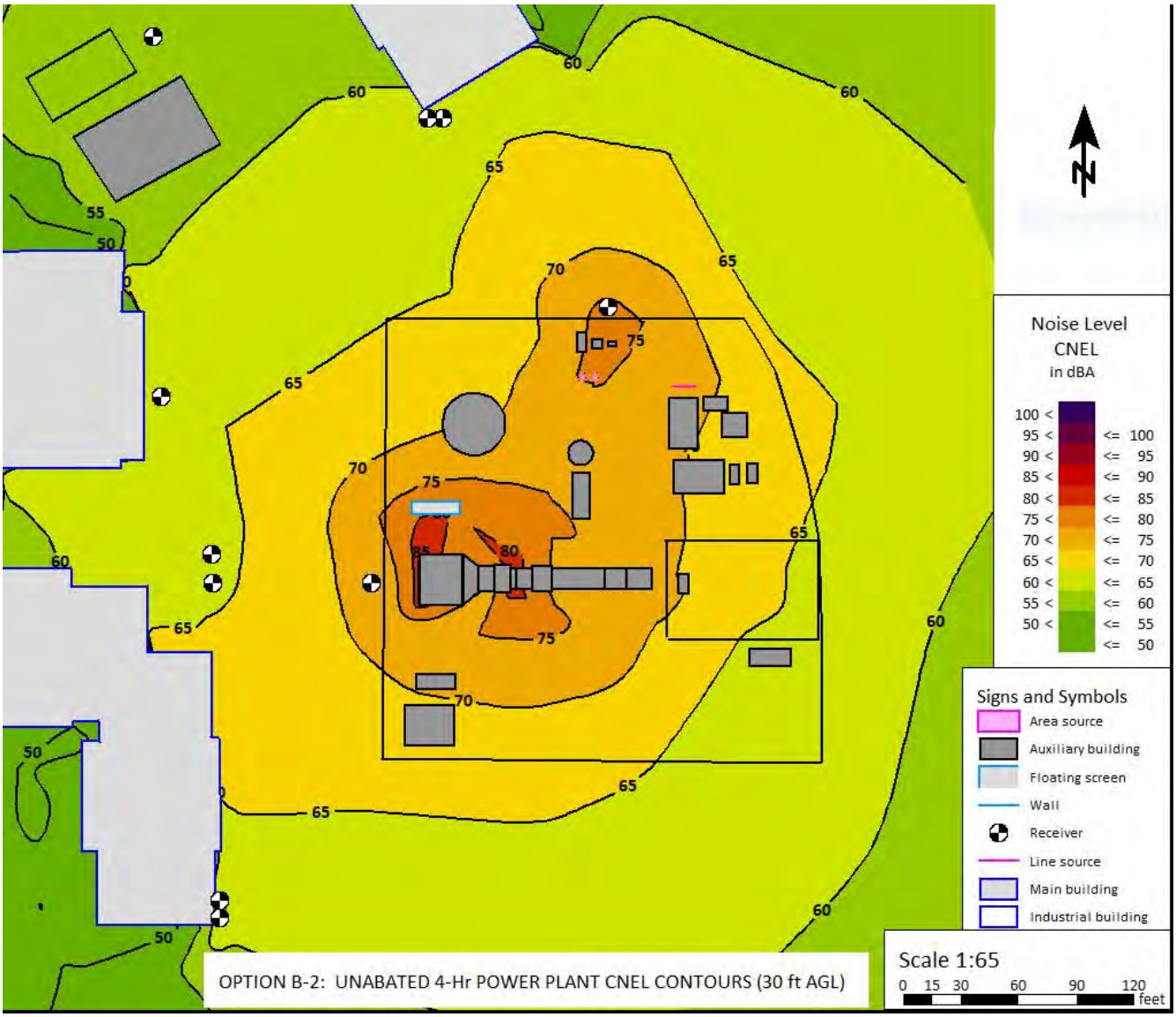


Figure 21: Option B Unabated Project Noise Contours During NCPA Peaker Plant Operation – 4 hr CNEL, 30 ft AGL

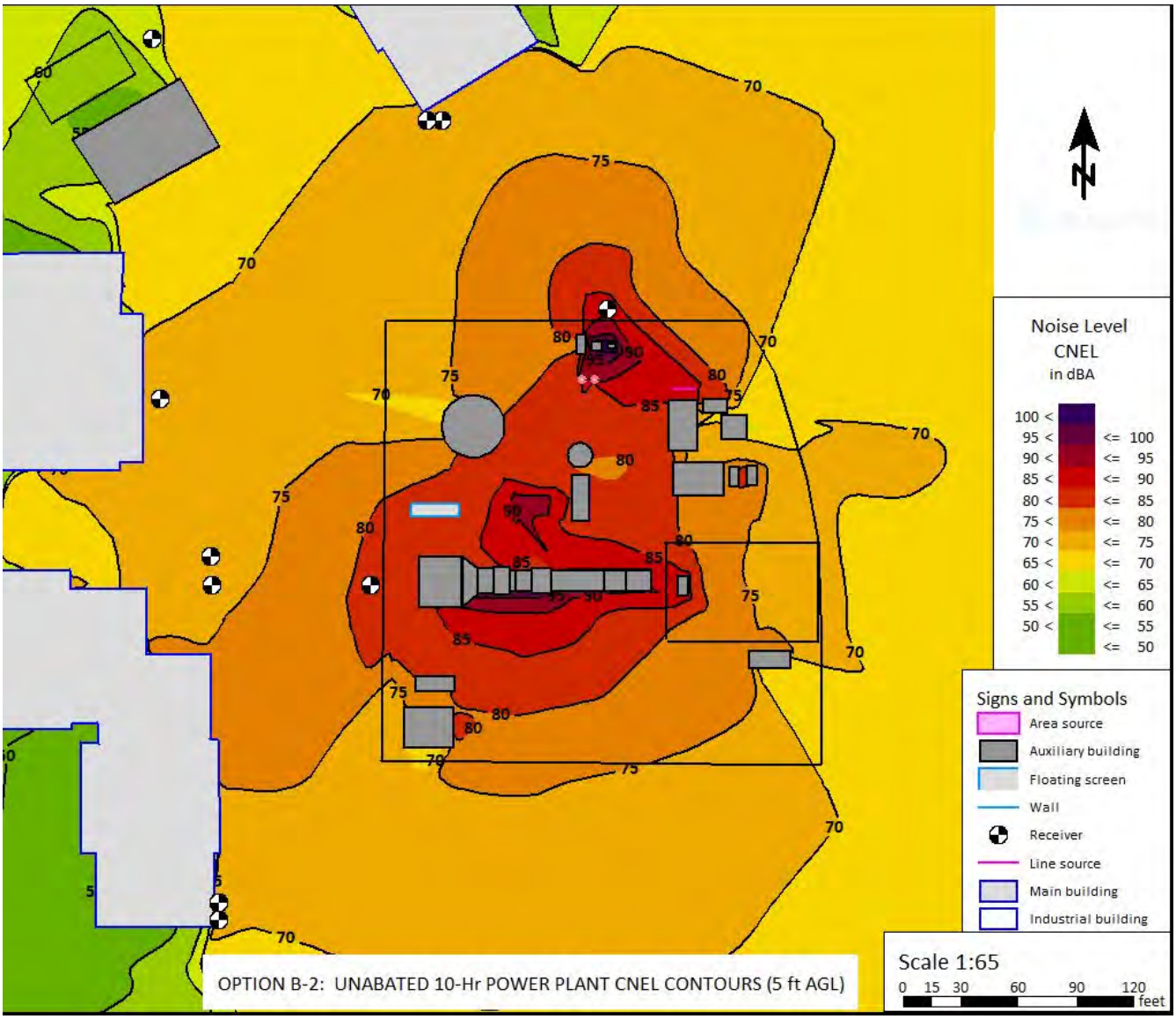


Figure 22: Option B-2 Unabated Project Noise Contours During NCPA Peaker Plant Operation – 10 hr CNEL, 5 ft AGL

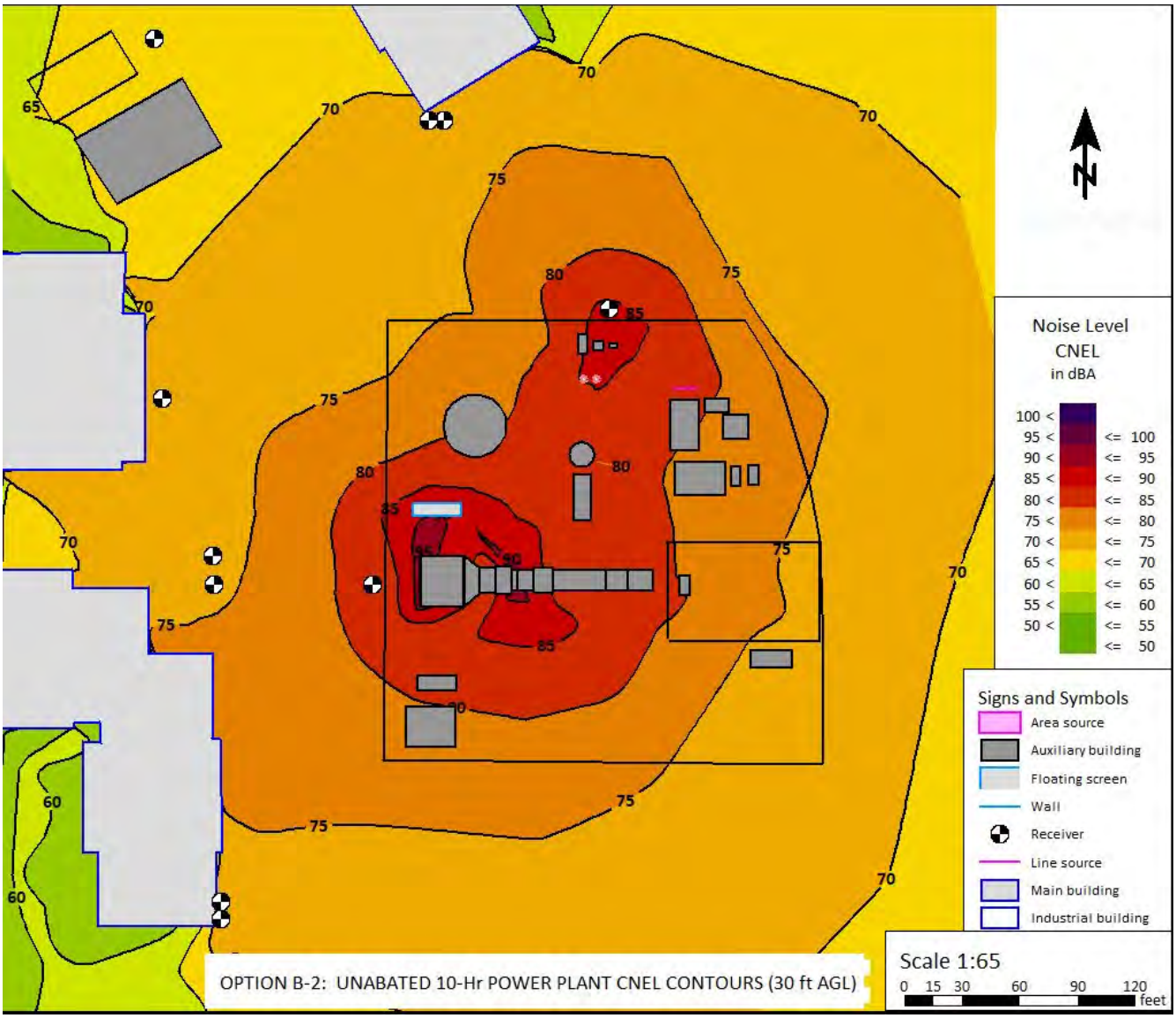


Figure 23: Option B-2 Unabated Project Noise Contours During NCPA Peaker Plant Operation – 10 hr CNEL, 30 ft AGL

The 4-hr CNEL unabated noise contours for the second noise survey are very similar to those from the initial noise survey with and elongation of the 65 dBA contour towards the hotel and residence to the west of the power plant due to the new building arrangements in that area. As with the results of the initial noise study, only the hotel property to the west of the power plant experiences sound levels of 65 dBA or greater at either 5 ft AGL or 30 ft AGL.

These contours depict the 24-hour CNEL noise levels. Measured data from the second survey is shown in Figure 24 and Figure 25 as examples of noise levels during actual plant operation.

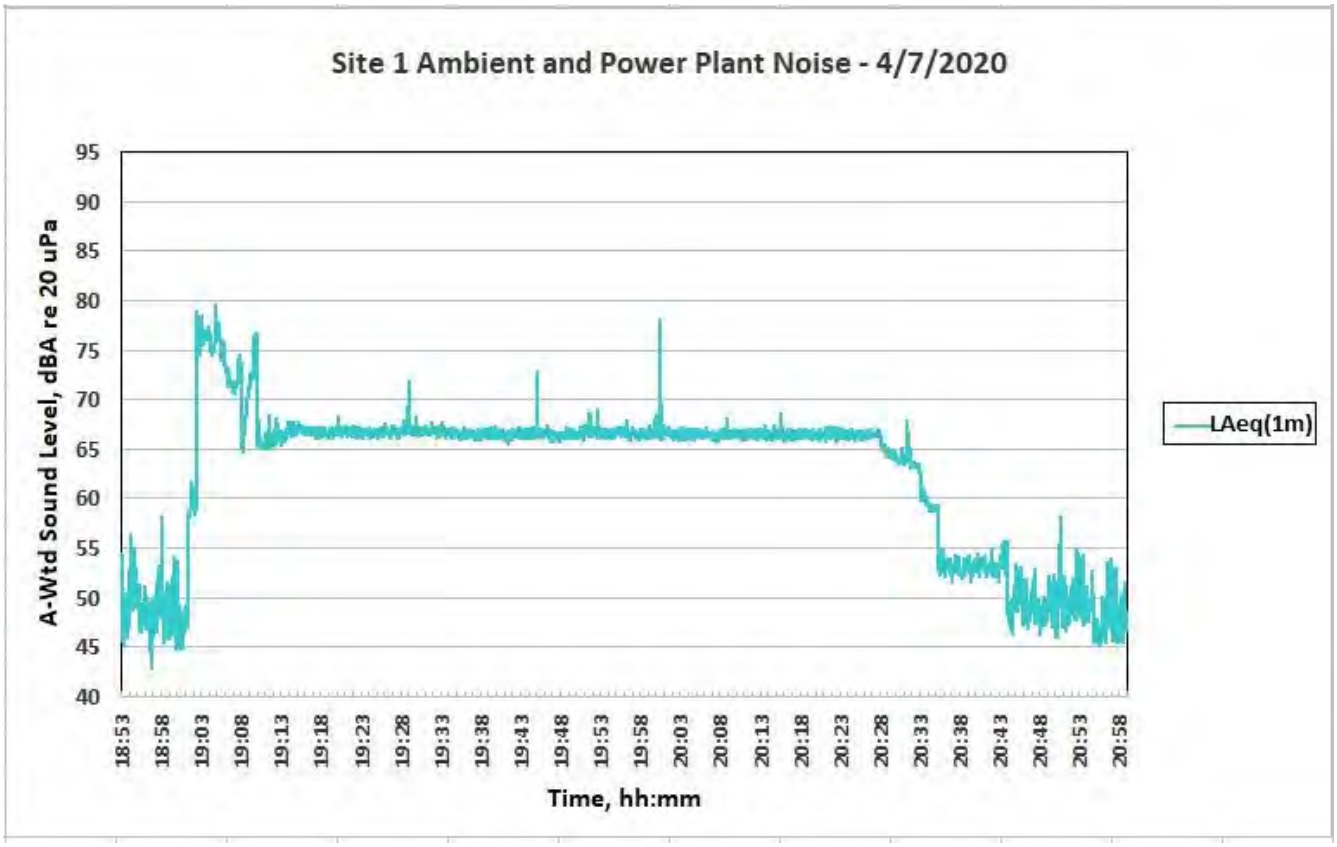


Figure 24: Site 1 Ambient + Plant Noise – 5 ft AGL

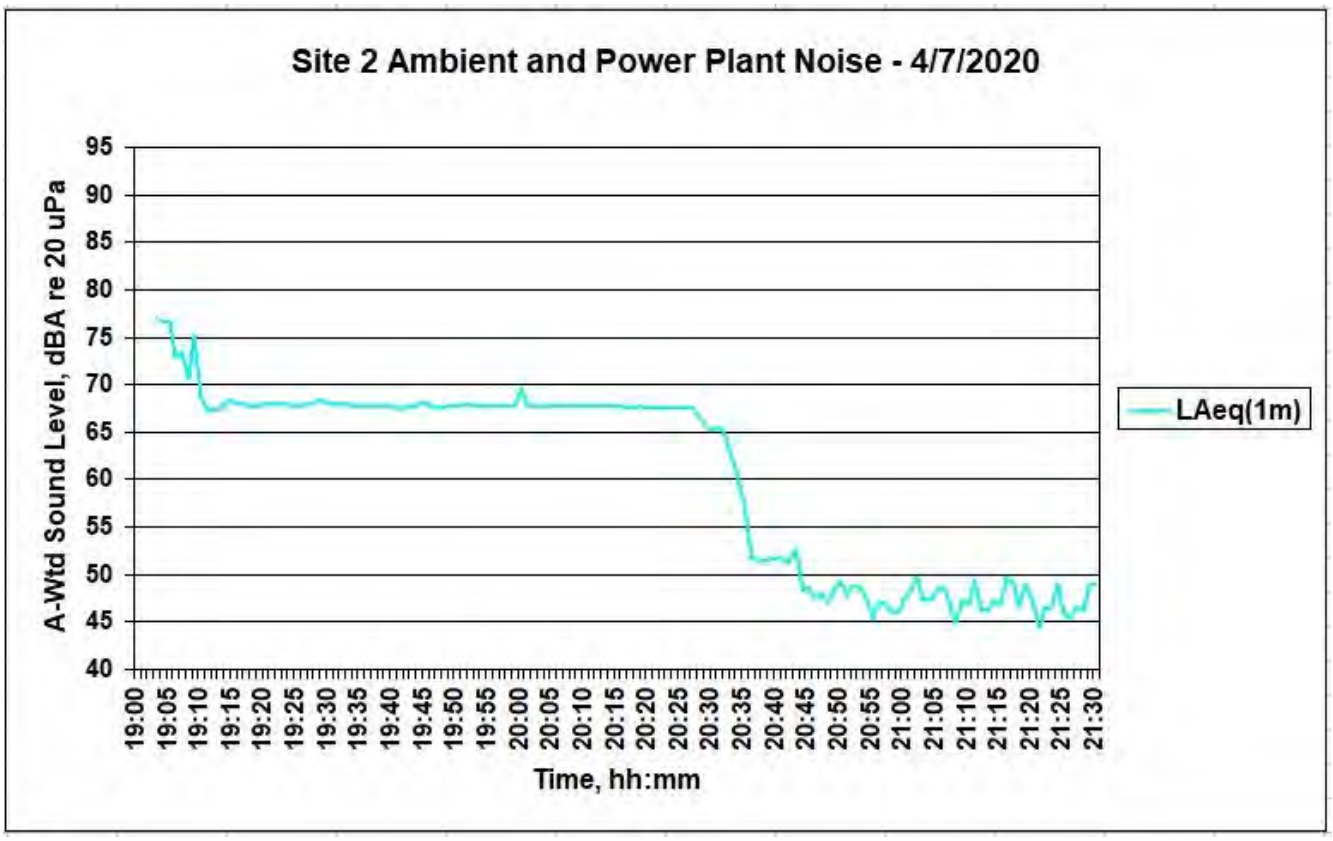


Figure 25: Site A Ambient + Plant Noise – 5 ft AGL

As with the results of the initial noise survey, it can be reasonably implied that the spikes seen during the power plant operating period seen in Figure 24 are due to external ambient effects and were not caused by plant operation.

From these data plots it is understood that at Site 1 (face of hotel west of the power plant) a high noise level of approximately 80 dBA is experienced that then reduces to approximately 67 dBA. Similarly, at Site 2 (residential building face west of the power plant) a high noise level of approximately 77 dBA is experienced that then reducing to approximately 68 dBA.

These findings are provided here as examples and show that mitigations are required to reduce noise levels to acceptable levels in accordance with City of Lodi Final General Plan. All site measured data plots can be found in Appendix A.

6. Mitigations

As can be seen in the project noise contours and data plots included in this report, mitigations are required for both Option A and Option B layouts for elevated areas (26 feet high sensor) west of the power plant and for all areas north of the power plant for Option A. After selection of Option B as the preferred building configuration, Option B-2 was evaluated as part of the second noise survey, which will require similar mitigations to that of Option B.

6.1 Sound Barrier Wall

6.1.1 Description of Mitigation

Worley evaluated installing a soundwall on the northern, western and southern boundaries of the power plant to shield the new development from operating sounds. This mitigation was selected for initial modelling as it would have no effect on existing operation and as a fourteen (14) feet high soundwall is already included the Development Project budget.

The soundwall was evaluated at heights of eight (8) feet, fourteen (14) feet and sixteen (16) feet. Higher walls were not considered as they would exceed normal construction limits.

6.1.2 Mitigation Results

Table 7 shows the power plant perimeter unabated and soundwall abated power plant CNEL noise modelling results for each designated wall height for the Option A layout based on the results of the initial noise survey. Values highlighted in blue for hours 16:00 to 19:00 are modelled with the sixteen (16) feet high soundwall. Site C1 is significantly lower than other locations for Option A as this site would be blocked by the building. The same data for Option B is provided in Table 8 based on the initial noise survey and for Option B-2 in Table 9 and Table 10 based on the second noise survey.

Project CNEL Noise Summary Table (Option A)										
		Site A (5')	Site E (26')	Site B (5')	Site F (26')	Site C1 (5')	Site C2 (5')	Site G (26')	Site D (5')	
Date	Time	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	
11/13/2019	15:00	51.3	52.6	47.4	49.0	50.8	*53.5*	*55.7*	49.7	
11/13/2019	16:00	53.3	54.6	49.8	51.4	52.5	*55.5*	*57.7*	51.2	
11/13/2019	17:00	55.3	56.6	52.1	53.7	56.2	*57.5*	*59.7*	53.5	
11/13/2019	18:00	55.9	57.2	51.5	53.1	54.4	*58.1*	*60.3*	53.2	
11/13/2019	19:00	54.2	55.5	50.7	52.3	53.0	*56.4*	*58.6*	52.2	
11/13/2019	20:00	51.2	52.5	48.5	50.1	50.5	*53.4*	*55.6*	49.7	
*11/13/2019**	*21:00*	51.5	52.8	46.5	48.1	48.5	*53.7*	*55.9*	48.7	
*11/13/2019**	*22:00*	47.3	48.6	46.2	47.8	47.4	*49.5*	*51.7*	46.3	
*11/13/2019**	*23:00*	44.7	46.0	44.4	46.0	46.1	*46.3*	*49.1*	44.0	
*11/14/2019**	*0:00*	43.4	44.7	43.7	45.3	45.2	*45.6*	*47.8*	42.8	
*11/14/2019**	*1:00*	42.3	43.6	43.6	45.2	45.1	*44.5*	*46.7*	42.2	
*11/14/2019**	*2:00*	41.2	42.5	42.8	44.4	44.5	*43.4*	*45.6*	40.8	
*11/14/2019**	*3:00*	42.4	43.7	43.4	45.0	44.9	*44.6*	*46.8*	42.1	
*11/14/2019**	*4:00*	44.5	45.8	44.3	45.9	46.0	*46.7*	*48.9*	43.7	
*11/14/2019**	*5:00*	48.5	49.8	46.6	48.2	48.1	*50.7*	*52.9*	47.1	
*11/14/2019**	*6:00*	52.0	53.3	48.9	50.5	50.4	*54.2*	*56.4*	50.3	
*11/14/2019**	*7:00*	54.2	55.5	50.6	52.2	52.5	*56.4*	*58.6*	52.2	
*11/14/2019**	*8:00*	52.1	53.4	49.6	51.2	51.8	*54.3*	*56.5*	50.8	
*11/14/2019**	*9:00*	51.2	52.5	49.1	50.7	51.7	*53.4*	*55.6*	50.2	
*11/14/2019**	*10:00*	50.0	51.3	46.4	48.0	49.4	*52.2*	*54.4*	47.9	
*11/14/2019**	*11:00*	51.6	52.9	47.0	48.6	50.1	*53.8*	*56.0*	49.5	
*11/14/2019**	*12:00*	50.6	51.9	48.7	50.3	*50.9*	55.2	*56.5*	*50.6*	
*11/14/2019**	*13:00*	51.5	52.8	49.5	51.1	*51.7*	55.5	*56.8*	*51.5*	
*11/14/2019**	*14:00*	55.0	56.3	52.8	54.4	*55.0*	57.0	*58.3*	*55.6*	
*11/14/2019**	*15:00*	63.2	66.3	57.5	69.0	56.9	63.7	67.0	65.4	plant starts
*11/14/2019**	*16:00*	63.5	66.0	62.2	73.5	52.9	65.0	68.3	65.7	< PLANT
*11/14/2019**	*17:00*	63.3	66.8	62.5	74.3	56.4	65.4	68.8	65.5	< PLANT
*11/14/2019**	*18:00*	63.2	66.4	62.5	74.0	54.7	65.2	68.0	65.4	< PLANT
*11/14/2019**	*19:00*	63.0	66.1	62.5	73.8	53.4	65.0	67.7	65.2	< PLANT
*11/14/2019**	*20:00*	51.8	54.9	47.5	58.7	57.7	52.7	57.0	51.7	plant stops
Ambient CNEL >		55.4	56.6	53.2	54.8	55.1	57.6	59.8	54.0	Ambient
CNEL w/ 4 hr Plant >		61.8	63.1	74.5	76.2	56.2	63.7	64.9	64.8	Unabated
CNEL w/ 8-ft Walls >		60.8	62.9	63.8	76.4	56.1	62.9	64.8	63.2	8-ft Walls
CNEL w/ 14-ft Walls >		59.8	62.1	58.6	69.0	56.1	62.0	64.3	61.8	14-ft Walls
* CNEL w/ 16-ft Walls >		59.5	62.1	58.1	68.4	56.1	61.4	64.1	60.9	16-ft Walls
NOTE: Calculated Missing Data										

Table 7: Ambient Noise and Modelled Unabated and Soundwall-Abated Power Plant Noise – Initial Noise Survey / Option A Layout

Project CNEL Noise Summary Table (Option B)										
		Site A (5')	Site E (26')	Site B (5')	Site F (26')	Site C1 (5')	Site C2 (5')	Site G (26')	Site D (5')	
Date	Time	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	
11/13/2019	15:00	51.3	52.6	47.4	49.0	50.8	*53.5*	*55.7*	49.7	
11/13/2019	16:00	53.3	54.6	49.8	51.4	52.5	*55.5*	*57.7*	51.2	
11/13/2019	17:00	55.3	56.6	52.1	53.7	56.2	*57.5*	*59.7*	53.5	
11/13/2019	18:00	55.9	57.2	51.5	53.1	54.4	*58.1*	*60.3*	53.2	
11/13/2019	19:00	54.2	55.5	50.7	52.3	53.0	*56.4*	*58.6*	52.2	
11/13/2019	20:00	51.2	52.5	48.5	50.1	50.5	*53.4*	*55.6*	49.7	
*11/13/2019**	*21:00*	51.5	52.8	46.5	48.1	48.5	*53.7*	*55.9*	48.7	
*11/13/2019**	*22:00*	47.3	48.6	46.2	47.8	47.4	*49.5*	*51.7*	46.3	
*11/13/2019**	*23:00*	44.7	46.0	44.4	46.0	46.1	*46.9*	*49.1*	44.0	
*11/14/2019**	*0:00*	43.4	44.7	43.7	45.3	45.2	*45.6*	*47.8*	42.8	
*11/14/2019**	*1:00*	42.3	43.6	43.6	45.2	45.1	*44.5*	*46.7*	42.2	
*11/14/2019**	*2:00*	41.2	42.5	42.8	44.4	44.5	*43.4*	*45.6*	40.8	
*11/14/2019**	*3:00*	42.4	43.7	43.4	45.0	44.9	*44.6*	*46.8*	42.1	
*11/14/2019**	*4:00*	44.5	45.8	44.3	45.9	46.0	*46.7*	*48.9*	43.7	
*11/14/2019**	*5:00*	48.5	49.8	46.6	48.2	48.1	*50.7*	*52.9*	47.1	
*11/14/2019**	*6:00*	52.0	53.3	48.9	50.5	50.4	*54.2*	*56.4*	50.3	
*11/14/2019**	*7:00*	54.2	55.5	50.6	52.2	52.5	*56.4*	*58.6*	52.2	
*11/14/2019**	*8:00*	52.1	53.4	49.6	51.2	51.8	*54.3*	*56.5*	50.8	
*11/14/2019**	*9:00*	51.2	52.5	49.1	50.7	51.7	*53.4*	*55.6*	50.2	
*11/14/2019**	*10:00*	50.0	51.3	46.4	48.0	49.4	*52.2*	*54.4*	47.9	
*11/14/2019**	*11:00*	51.6	52.9	47.0	48.6	50.1	*53.8*	*56.0*	49.5	
*11/14/2019**	*12:00*	50.6	51.9	48.7	50.3	*50.3*	55.2	*56.5*	*50.6*	
*11/14/2019**	*13:00*	51.5	52.8	49.5	51.1	*51.7*	55.5	*56.8*	*51.5*	
*11/14/2019**	*14:00*	55.0	56.3	52.8	54.4	*55.0*	57.0	*58.3*	*55.0*	
*11/14/2019**	*15:00*	63.2	66.3	57.5	69.0	56.9	63.7	67.0	65.4	plant starts
*11/14/2019**	*16:00*	63.5	66.0	62.2	73.5	52.9	65.0	68.3	65.7	< PLANT
*11/14/2019**	*17:00*	63.3	66.8	62.5	74.3	56.4	65.4	68.8	65.5	< PLANT
*11/14/2019**	*18:00*	63.2	66.4	62.5	74.0	54.7	65.2	68.0	65.4	< PLANT
*11/14/2019**	*19:00*	63.0	66.1	62.5	73.8	53.4	65.0	67.7	65.2	< PLANT
*11/14/2019**	*20:00*	51.8	54.9	47.5	58.7	57.7	52.7	57.0	51.7	plant stops
Ambient CNEL >		55.4	56.6	53.2	54.8	55.1	57.6	59.8	54.0	Ambient
CNEL w/ 4 hr Plant >		61.8	63.1	74.5	76.2	63.6	63.7	64.9	64.8	Unabated
CNEL w/ 8-ft Walls >		60.3	62.9	63.7	76.2	56.1	62.3	64.3	62.7	8-ft Walls
CNEL w/ 14-ft Walls >		59.7	62.3	58.3	71.2	56.1	61.4	63.7	61.3	14-ft Walls
* CNEL w/ 16-ft Walls >		59.5	62.0	57.9	68.6	56.1	61.2	63.6	60.4	16-ft Walls
NOTE: Calculated Missing Data										

Table 8: Ambient Noise and Modelled Unabated and Soundwall-Abated Power Plant Noise – Initial Noise Survey / Option B Layout

Measured and Calculated Project Site Hourly Noise with and without Power Plant 4-hour Operation

24-hour Ambient w/ Plant	24-hour	Date	Time	Site 1 (5') LAeq(1hr)	Site 1 (30') LAeq(1hr)	Site 2 (5') LAeq(1hr)	Site 3 (5') LAeq(1hr)	Site 4 (5') LAeq(1hr)	Site 4 (30') LAeq(1hr)	Site 5 (5') LAeq(1hr)	Site 6 (5') LAeq(1hr)
	Ambient	4/7/2020	17:00	55.3	56.6	52.0	50.5	50.0	51.3	52.1	56.4
	1	4/7/2020	18:00	55.9	57.2	52.4	51.2	54.4	55.5	51.5	57.2
	2	4/7/2020	19:00	54.2	55.5	50.3	49.4	53.0	54.3	50.7	55.4
	3	4/7/2020	20:00	51.2	52.5	47.7	46.5	50.5	51.6	48.5	52.1
	4	4/7/2020	21:00	51.5	52.8	48.2	46.7	48.5	49.8	48.5	52.1
	5	4/7/2020	22:00	47.3	48.6	43.6	42.6	47.4	48.6	46.2	48.4
	6	4/7/2020	23:00	44.7	46.0	41.4	39.9	46.1	47.4	44.4	45.6
	7	4/7/2020	0:00	43.4	44.7	39.3	38.7	45.2	46.4	43.7	44.5
	8	4/7/2020	1:00	42.3	43.6	39.0	37.5	45.1	46.3	43.6	43.5
	9	4/7/2020	2:00	41.2	42.5	37.7	36.5	44.5	45.7	42.8	42.0
	10	4/7/2020	3:00	42.4	43.7	39.1	37.6	44.9	46.2	43.4	43.4
	11	4/7/2020	4:00	44.5	45.8	41.0	39.8	46.0	47.1	44.3	45.6
1	12	4/7/2020*	5:00	48.5	49.8	45.2	43.7	48.1	49.4	46.6	49.8
2	13	4/7/2020*	6:00	52.0	53.3	48.5	47.3	50.4	51.5	48.9	53.2
3	14	4/7/2020*	7:00	54.2	55.5	50.9	49.4	52.5	53.8	50.6	55.3
4	15	4/7/2020*	8:00	52.1	53.4	48.6	47.4	51.8	53.0	49.6	53.1
5	16	4/7/2020*	9:00	51.2	52.5	47.9	46.4	51.7	52.7	49.1	52.4
6	17	4/7/2020*	10:00	50.0	51.3	46.5	45.3	49.4	50.4	46.4	50.8
7	18	4/7/2020*	11:00	51.6	52.9	48.3	46.8	50.1	51.4	47.9	52.6
8	19	4/7/2020*	12:00	50.6	51.9	47.1	45.9	48.7	49.9	48.7	51.8
9	20	4/7/2020*	13:00	51.5	52.8	48.2	46.7	49.5	50.6	49.5	52.8
10	21	4/7/2020*	14:00	55.0	56.3	51.5	50.3	52.8	54.1	52.8	56.2
11	22	4/7/2020*	15:00	51.3	52.6	48.0	46.5	49.8	51.1	49.8	52.5
12	23	4/7/2020*	16:00	53.3	54.6	49.8	48.6	51.4	52.6	50.3	54.0
13	24	4/7/2020*	17:00	55.3	56.6	52.0	50.5	53.3	54.4	53.8	56.5
14		4/7/2020*	18:00	55.0	56.3	51.5	50.3	52.8	54.1	52.0	56.4
15		4/7/2020*	19:00	66.8	68.1	69.7	65.6	70.1	66.8	93.8	75.9
16		4/7/2020*	20:00	66.6	67.8	67.7	65.5	70.0	66.6	93.7	75.8
17		4/7/2020*	21:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
18		4/7/2020*	22:00	63.9	65.5	67.6	64.8	69.1	65.5	93.2	75.7
19		4/7/2020*	23:00	44.7	46.0	41.4	39.9	46.1	47.4	44.4	45.6
20		4/7/2020*	0:00	43.4	44.7	39.9	38.7	45.2	46.4	43.7	44.5
21		4/7/2020*	1:00	42.3	43.6	39.0	37.5	45.1	46.3	43.6	43.5
22		4/7/2020*	2:00	41.2	42.5	37.7	36.5	44.5	45.7	42.8	42.0
23		4/7/2020*	3:00	42.4	43.7	39.1	37.6	44.9	46.2	43.4	43.4
24		4/7/2020*	4:00	44.5	45.8	41.0	39.8	46.0	47.1	44.3	45.6
		4/8/2020	5:00	48.5	49.8	45.2	43.7	48.1	49.4	46.6	49.8
			Ambient Leq 24 hr>	51.2	52.4	47.8	46.4	49.9	51.1	48.6	52.3
			Ambient CNEL >	55.4	56.6	52.0	50.6	54.8	56.0	53.3	56.5
			*CNEL w/ 4 hr Plant >	61.7	62.9	61.7	59.2	63.3	61.6	85.8	68.7
			Unabated Model CNEL w/ 4 hr Plant >	63.4	64.3	63.3	54.9	63.2	63.0	74.8	71.8
			Wall Abated Model CNEL w/ 4 hr Plant >	60.8	63.8	60.3	48.4	54.7	57.8	74.8	64.2

NOTE 1: Calculated Ambient Data

NOTE 2: All other data are measured 2020 Plant and 2019 or 2020 Ambient Data

Table 9: Ambient Noise and Modelled Unabated and Soundwall-Abated Power Plant Noise – Second Noise Survey / Option B-2 Layout / 4-hr CNEL

		Measured and Calculated Project Site Hourly Noise with and without Power Plant 10-hour Operation									
				Site 1 (5')	Site 1 (30')	Site 2 (5')	Site 3 (5')	Site 4 (5')	Site 4 (30')	Site 5 (5')	Site 6 (5')
	24-hour	Date	Time	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)	LAeq(1hr)
	Ambient	4/7/2020	17:00	55.3	56.6	52.0	50.5	50.0	51.3	52.1	56.4
	1	4/7/2020	18:00	55.9	57.2	52.4	51.2	54.4	55.5	51.5	57.2
	2	4/7/2020	19:00	54.2	55.5	50.3	49.4	53.0	54.3	50.7	55.4
	3	4/7/2020	20:00	51.2	52.5	47.7	48.5	50.5	51.6	48.5	52.1
	4	4/7/2020	21:00	51.5	52.8	48.2	46.7	48.5	49.8	46.5	52.7
	5	4/7/2020	22:00	47.3	48.6	43.8	42.8	47.4	48.6	48.2	48.4
	6	4/7/2020	23:00	44.7	46.0	41.4	39.3	46.1	47.4	44.4	45.6
	7	4/7/2020	0:00	43.4	44.7	39.9	38.7	45.2	46.4	43.7	44.5
	8	4/7/2020	1:00	42.3	43.6	39.0	37.5	45.1	46.3	43.6	43.5
24-hour	9	4/7/2020	2:00	41.2	42.5	37.7	36.5	44.5	45.7	42.8	42.0
Ambient	10	4/7/2020	3:00	42.4	43.7	39.1	37.6	44.9	46.2	43.4	43.4
w/ Plant	11	4/7/2020	4:00	44.5	45.8	41.0	39.8	46.0	47.1	44.3	45.6
1	12	4/7/2020*	5:00	48.5	49.8	45.2	43.7	48.1	49.4	46.6	49.8
2	13	4/7/2020*	6:00	52.0	53.3	48.5	47.1	50.4	51.5	48.9	53.2
3	14	4/7/2020*	7:00	54.2	55.5	50.9	49.4	52.5	53.8	50.6	55.3
4	15	4/7/2020*	8:00	52.1	53.4	48.8	47.9	51.8	53.0	49.6	53.3
5	16	4/7/2020*	9:00	51.2	52.5	47.9	46.4	51.7	52.7	49.1	52.4
6	17	4/7/2020*	10:00	50.0	51.3	46.5	45.3	49.4	50.4	46.9	50.8
7	18	4/7/2020*	11:00	51.6	52.9	48.4	46.8	50.1	51.4	47.0	52.6
8	19	4/7/2020*	12:00	50.6	51.9	47.3	45.9	48.7	49.9	48.7	51.6
9	20	4/7/2020*	13:00	51.5	52.8	48.2	46.7	49.5	50.6	48.5	52.4
10	21	4/7/2020*	14:00	55.0	56.3	51.5	50.3	52.8	54.1	53.9	56.2
11	22	4/7/2020*	15:00	51.3	52.6	48.0	46.5	49.8	51.1	49.8	51.3
12	23	4/7/2020*	16:00	53.3	54.6	49.8	48.6	51.4	52.6	50.3	54.8
13	24	4/7/2020*	17:00	55.3	56.6	52.0	50.5	53.3	54.4	53.8	56.5
14		4/7/2020*	18:00	55.0	56.3	51.5	50.3	52.8	54.1	52.0	56.4
15		4/7/2020*	19:00	66.8	68.8	69.7	65.6	70.2	66.8	93.8	75.9
16		4/7/2020*	20:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
17		4/7/2020*	21:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
18		4/7/2020*	22:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
19		4/7/2020*	23:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
20		4/7/2020*	0:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
21		4/7/2020*	1:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
22		4/7/2020*	2:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
23		4/7/2020*	3:00	66.6	67.6	67.7	65.5	70.0	66.6	93.7	75.8
24		4/7/2020*	4:00	63.9	65.5	67.6	64.8	69.1	65.5	93.2	75.7
		4/8/2020	5:00	48.5	49.8	45.2	43.7	48.1	49.4	46.6	49.8
			Ambient Leq 24 hr >	51.2	52.4	47.8	46.4	49.9	51.1	48.6	52.3
			Ambient CNEL >	55.4	56.6	52.0	50.6	54.8	56.0	53.3	56.5
			*CNEL w/10 hr Plant >	64.2	65.3	64.7	62.4	66.7	64.1	89.9	72.3
			Unabated Model CNEL w/ 10 hr Plant >	73.2	73.8	72.4	64.3	73.2	73.1	85.1	81.9
			Wall Abated Model CNEL w/ 10 hr Plant >	71.1	73.8	70.0	57.4	63.8	67.1	70.7	74.6
		NOTE 1: Calculated Ambient Data									
		NOTE 2: All other data are measured 2020 Plant and 2019 or 2020 Ambient Data									

Table 10: Ambient Noise and Modelled Unabated and Soundwall-Abated Power Plant Noise – Second Noise Survey / Option B-2 Layout / 10-hr CNEL

In accordance with the limits provided in Table 3 as obtained from Chapter 9 "Noise" of the City of Lodi Final General Plan – April 2010, noise levels for the Development Project must be maintained at or below 60 dBA for outside spaces. However, Table 2 indicates that residential noise levels of 65 dBA are acceptable for multifamily residential installations. Therefore, the use of a fourteen (14) feet soundwall would be sufficient except at Site F (third story level over building on northern boundary of the power plant) in the Option A layout and for all sites in the Option B layout as Site B and Site F do not apply to this layout. Site 5 and Site 6 for the Option B-2 layout have higher than acceptable noise levels. However, these sites were selected to assist in providing a better understanding and calibration and are not living spaces associated with the housing plan.

Considering an extreme case of a 10-hour plant operation was part of the second noise survey evaluation. This was done to provide noise levels that could occur if the plant were to be required to operate for longer than normal , which would be considered an emergency situation which in turn enables exceptions to the local noise statutes. For this reason, the data has been provided for information as requested but was not included in determining noise mitigations.

The noise contours for the Option A and Option B layouts considering the initial noise survey with a fourteen (14) feet high soundwall at five (5) feet AGL and 26 feet AGL are shown in Figure 26, Figure 27, Figure 28 and Figure 29 respectively. Noise contours for the 4-hour CNEL scenario are shown for the Option B-2 layout with inclusion of the second noise survey results with a fourteen (14) feet high soundwall at five (5) feet AGL and 30 feet AGL are shown in Figure 30 and Figure 31. Contours using a fourteen (14) feet high soundwall were selected as there is minimal gain by increasing the soundwall to sixteen (16) ft. Abated and unabated contours, included those for the 10-hour CNEL scenario, can also be found in Appendix B.

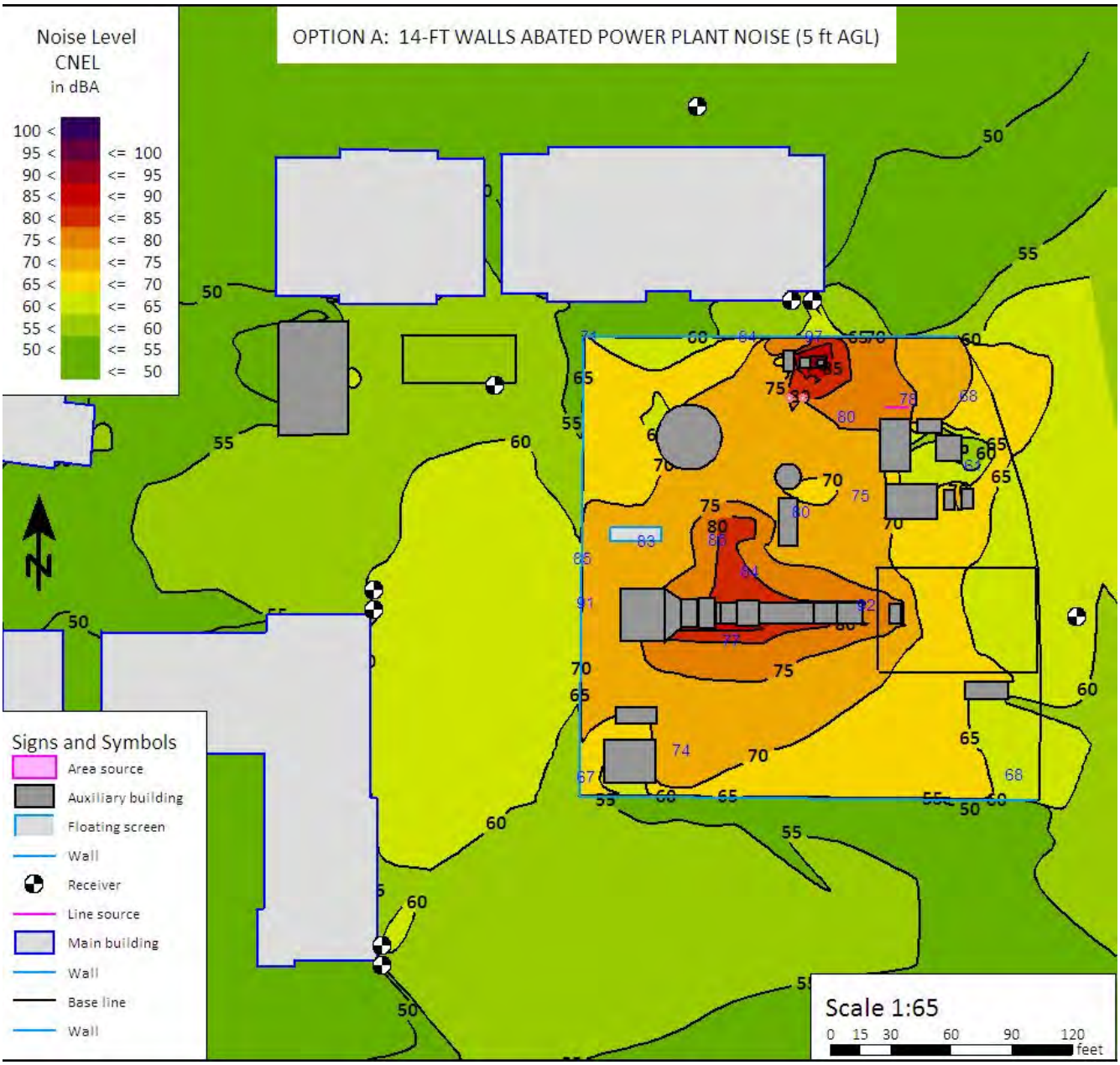


Figure 26: Noise Contours with 14 ft High Soundwall – Initial Noise Survey / Option A @ 5 ft AGL

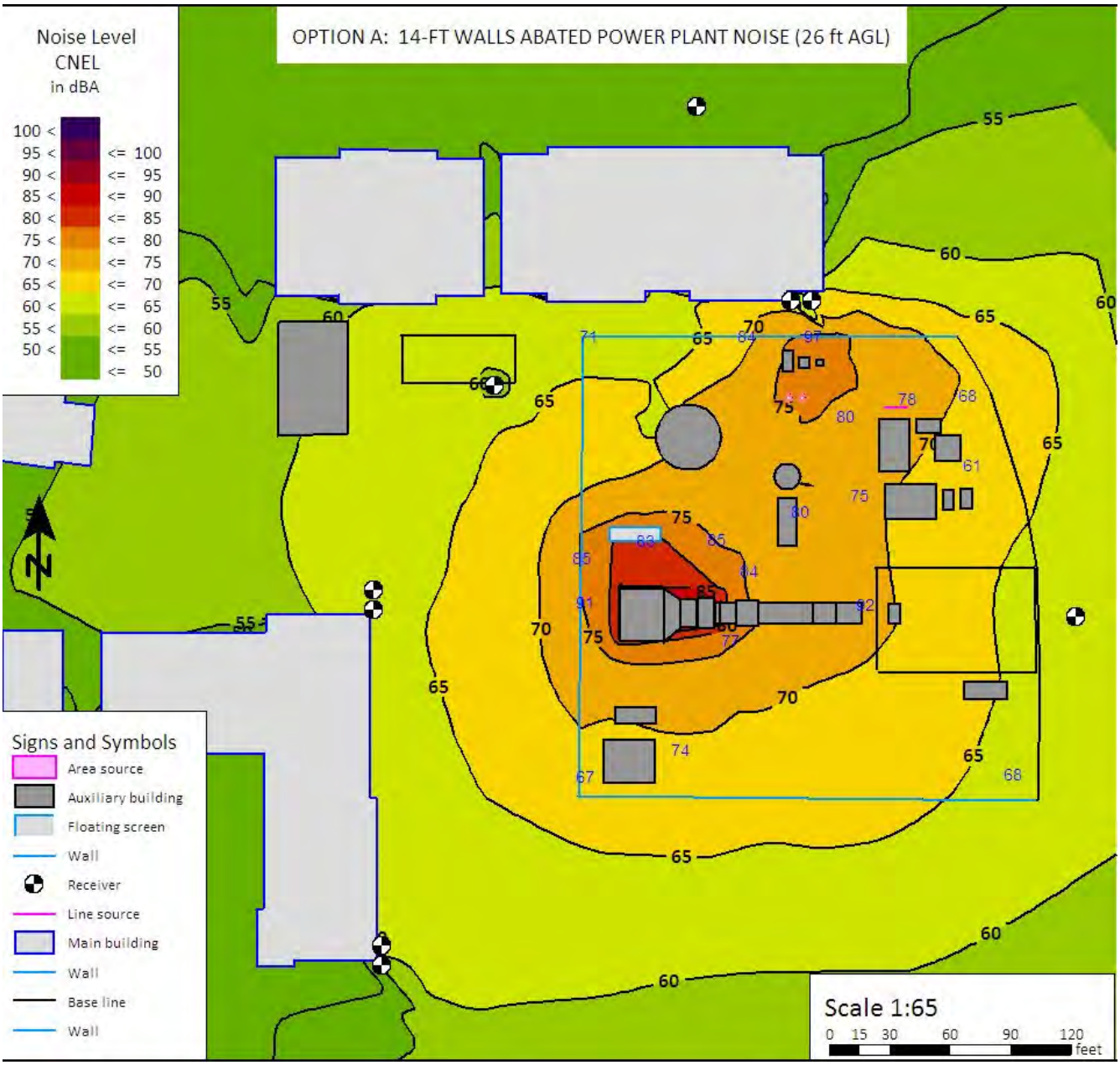


Figure 27: Noise Contours with 14 ft High Soundwall – Initial Noise Survey / Option A @ 26 ft AGL

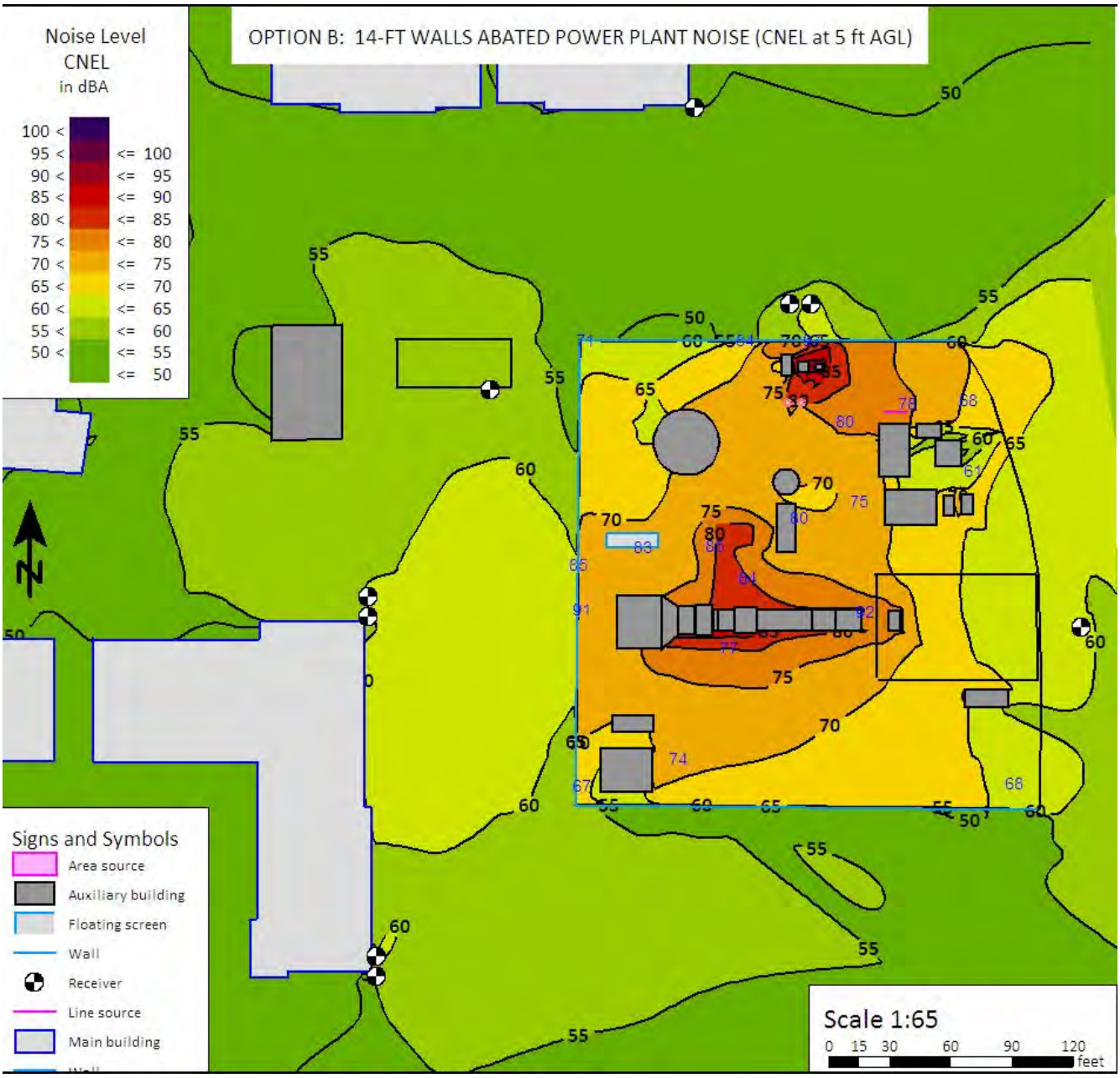


Figure 28: Noise Contours with 14 ft High Soundwall – Initial Noise Survey / Option B @ 5 ft AGL

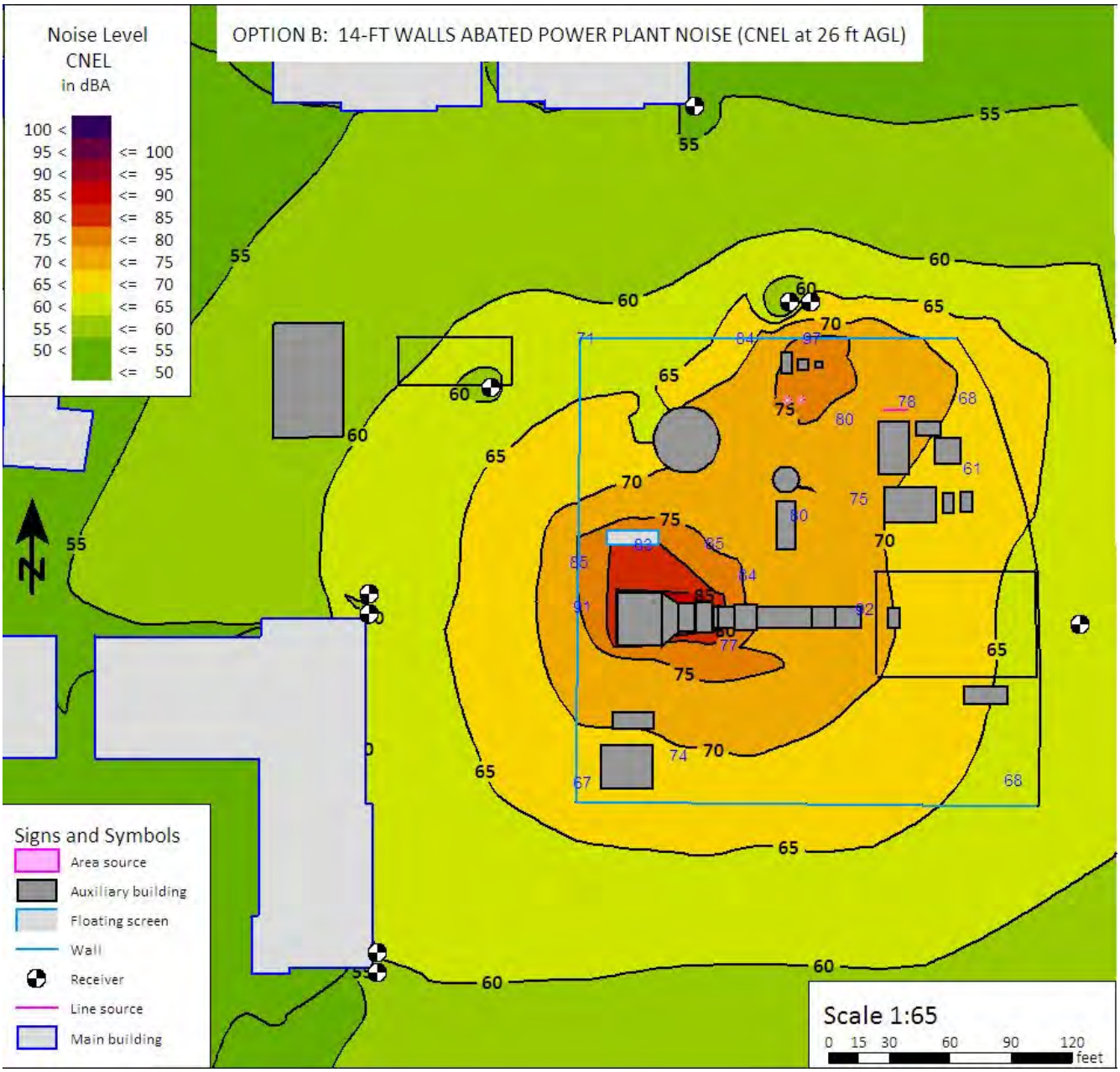


Figure 29: Noise Contours with 14 ft High Soundwall – Initial Noise Survey / Option B @ 26 ft AGL

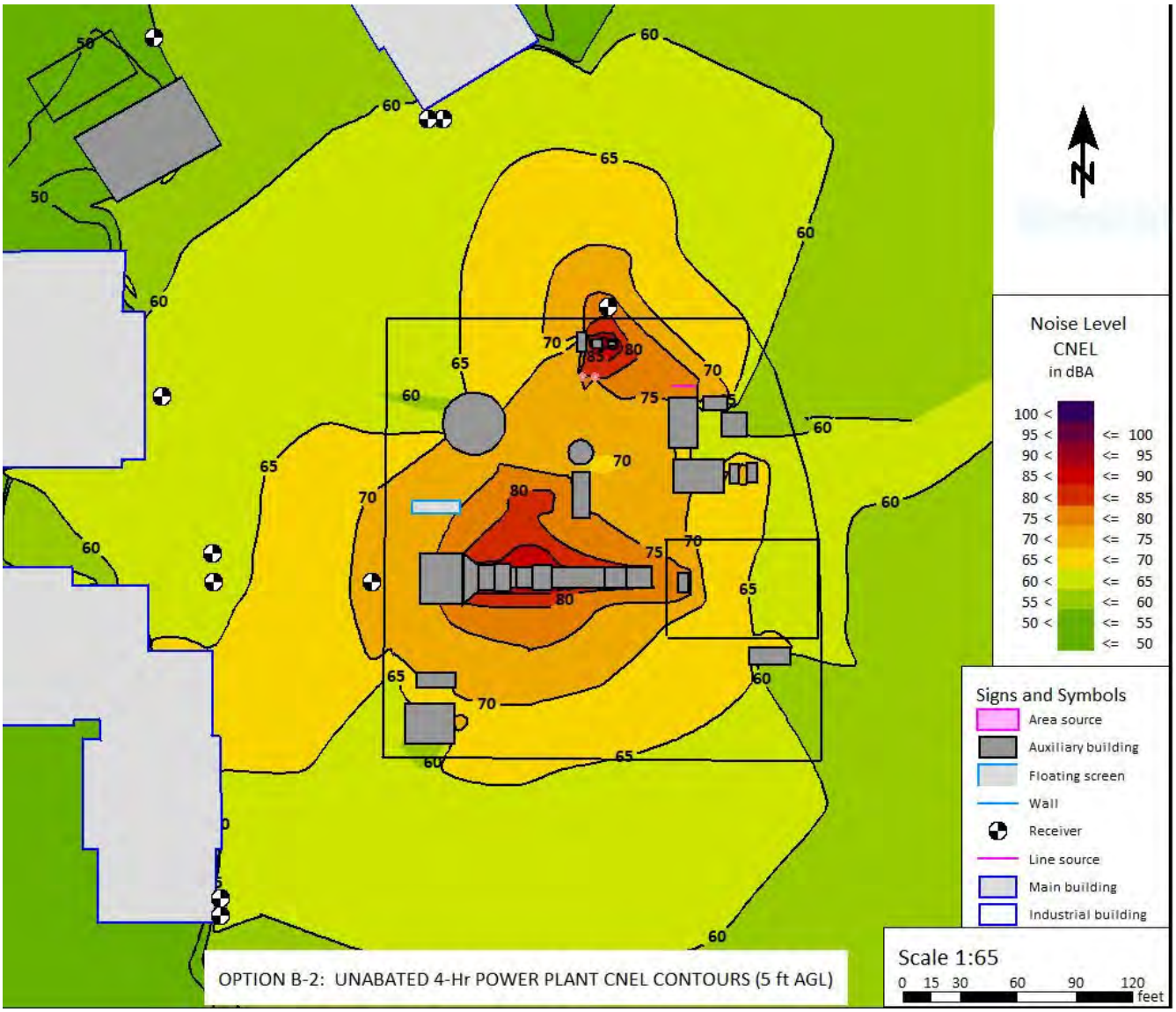


Figure 30: Noise Contours with 14 ft High Soundwall – Second Noise Survey / Option B-2 @ 5 ft AGL

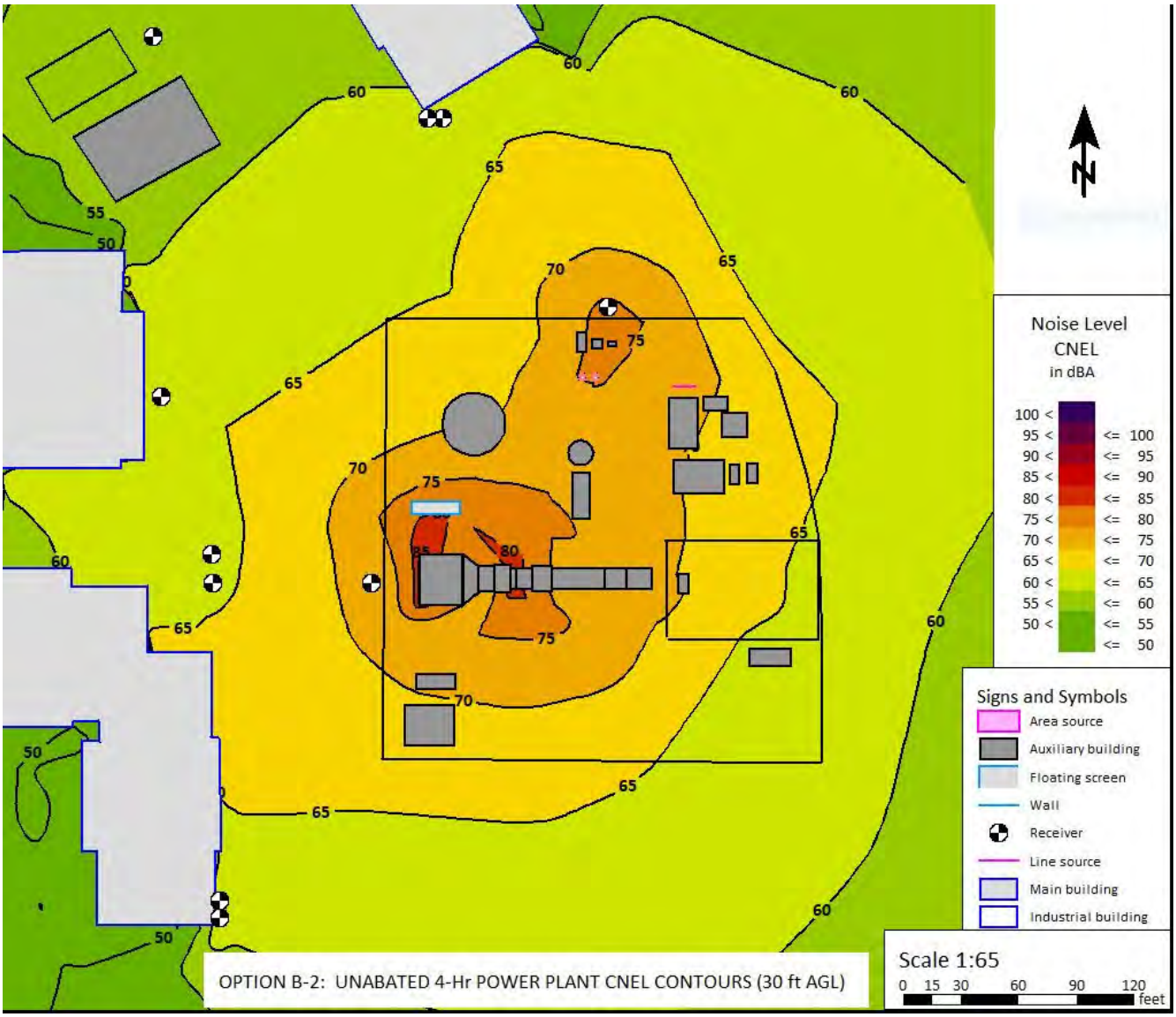


Figure 31: Noise Contours with 14 ft High Soundwall – Second Noise Survey / Option B @ 26 ft AGL

When considering Site H to the east of the power plant, installation of a 14-feet high soundwall will have little effect on noise propagation towards the east. Focusing primarily on the five (5) feet AGL level as this is the predominant receptor level for recreational users on Lodi Lake, the noise level will increase marginally from 58.9 dBA to slightly above 60 dBA for both Option A and Option B layouts, which is less than a noise level change deemed "just barely perceptible" (3 dBA, see Section 2). Therefore, the addition of the soundwalls is not anticipated to have any discernible effect on recreational users of Lodi Lake.

As with the unabated case, noise levels at thirty-six (36) feet AGL were modelled at critical sites (Site C1, Site E, Site F and Site G). As can be seen in the comparison of the modelled elevated CNELs in Table 11, the noise levels with a fourteen (14) feet high soundwall increases at the higher elevations for nearby building faces (Site C1 and Site E). This is due to the soundwall abatement reducing noise levels at the lower elevation further than at the

higher elevations. For example, Site E noise levels at thirty-six (36) feet AGL remains essentially unchanged from unabated to inclusion of the soundwall.

Site	CNEL @ 26 ft AGL[2]	CNEL @ 36 ft AGL
C1	54.3 dBA	55.3 dBA
E	61.6 dBA	62.5 dBA
F	67.8 dBA	70.9 dBA
G	60.9 dBA	59.7 dBA

Table 11: Comparison of CNEL for Elevated Building Faces with 14 ft High Soundwall

The results of the second noise survey evaluation also show that for both five (5) feet AGL and thirty (30) feet AGL the noise level remains below the limit of 65 dBA for all living space areas (excluding Site 5 and Site 6 which are not living spaces) with the exception of the eastern face of the hotel building located west of the power plant (Site 1). Further mitigation techniques for this building are describe in Section 6.2.1.

6.1.3 Capital Cost Estimate

To install a sound barrier on the northern, southern and western boundaries of the power plant, approximately 660 feet of wall will be required. While only a fourteen (14) feet high wall would be necessary, the use of a sixteen (16) feet high wall if selected would require an additional two (2) feet of wall height above that already being considered by NJA. Therefore, an additional 1,320 square feet (sf) of wall would be required at a cost of approximately $35/sf[3] and a total cost of approximately $46,000.

As no residential spaces are proposed south of the power plant, removal of the southern soundwall may be possible upon further consideration. This would provide removal of approximately 230 feet of fourteen (14) feet high wall (3,220 sf) resulting in a savings of approximately $113,000.

6.1.4 Operation and Maintenance Cost Estimate

No addition operation and maintenance costs would be required by the plant for implementation of this mitigation technique.

6.1.5 Effects on NCPA Peaker Plant

No adverse effects on the power plant would be expected due to implementation of this mitigation technique.

[2] The values in Table 11 are for the time period of plant operation and are for comparison only. These values do not include all ambient noise and thus do not match the values in Table 8.

[3] Unit cost estimated from data available from the U.S. Department of Transportation Federal Highway Administration for block and absorptive noise barrier walls.

6.2 Interior Environment Mitigations

6.2.1 Building Design

Noise levels at the building faces of the hotel to the west and residences to the north fall in the range of 57.8 dBA (Site 4 at 30 feet AGL) to 63.8 dBA (Site 1 at 30 ft AGL) while a maximum interior CNEL of 45 dBA is permitted by the City of Lodi as shown in Table 3. Standard building construction will provide approximately a 15 dBA reduction with partially open windows and 20 dBA to 25 dBA with windows closed and forced-air ventilation. Interior CNEL requirements are based on conditions with closed windows and doors.

Based on the modelled results in Table 12, standard construction is acceptable for the buildings. It can be seen in the noise contours shown in Figure 30 and Figure 31 that the residency to the north of the power plant remains at a CNEL of approximately 60 dBA, which when considering the sound model accuracy of 3 dBA to 5 dBA, the maximum CNEL will remain at or below 65 dBA and thus normal building construction is suitable and outdoor living spaces would be acceptable.

However, it can be seen from the same contours that the eastern face of the hotel to the west of the power plant must be constructed with closed windows, no outdoor living spaces (i.e. balconies) and forced-air ventilation. When increasing model results by 5 dBA to consider model accuracy, Site E and Site G noise levels of 67.3 dBA and 68.7 dBA respectively from the initial noise survey and Site 1 of 68.8 dBA from the second noise survey can be used to provide a conservative design. While standard construction materials can potentially reduce interior noise levels to the 45 dBA requirement, special construction such as sound rated windows, doors and exterior walls should be included.

7. Conclusions

Two (2) noise assessments were conducted for the Lodi Lakes Housing Plan with focus on the noise levels emitted by the existing adjacent NCPA Peaker Plant. Using the noise data collected by onsite measurements, the SoundPLAN computer program predicted 4-hour CNEL levels ranging from 61.8 dBA to 84.8 dBA Leq at the receptors during power plant operation with the loudest being at Site 5 on the northern boundary of the power plant property. When selecting the Option B-2 layout and considering living spaces only, all remaining sites had a 4-hour CNEL less than 65 dBA.

SoundPLAN was then used to model possible sound mitigation techniques for which capital cost, operating cost and effects on plant efficiency were estimated to determine the options with the lowest possible impact to the NCPA Peaker Plant.

Based on the data provided in this report, Worley advises the following mitigations:

1. Utilize the alternative Option B-2 where all buildings are located outside of the diesel tank safety zone.
2. Install a minimum fourteen (14) feet high soundwall on the northern, southern and western boundaries.
3. Design hotel building envelope to have no opening windows, no outdoor living spaces, forced-air ventilation and consider sound rated materials for all living spaces on the eastern side of the hotel.
4. Properly locate external living spaces to further reduce potential noise impacts on residents.

While utilizing the Option B-2 layout is enough to reduce the CNEL to below 65 dBA in living spaces, the combination of this with the remaining mitigations further reduces the CNEL at both five (5) feet AGL and 30 feet AGL with the highest levels being recorded to the west of the power plant. Table 12 summarizes the unabated and abated CNEL for each receptor that applies to the Option B-2 layout.

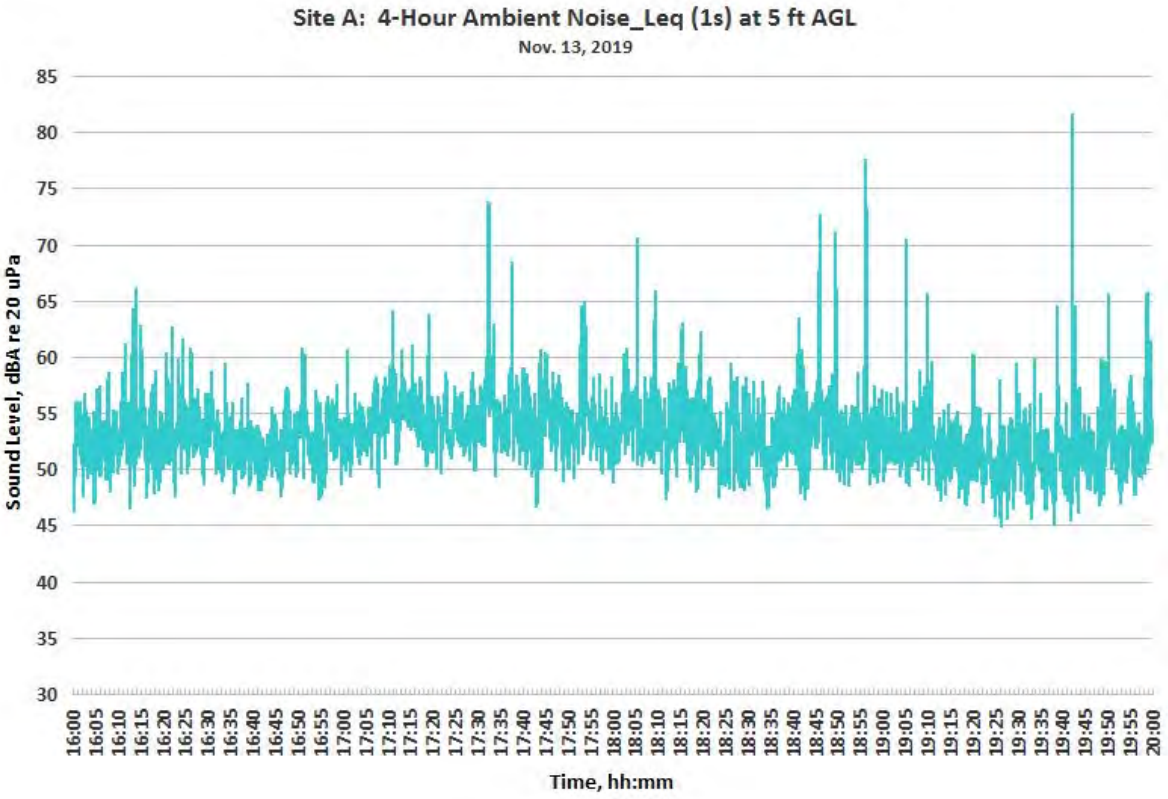
	Site A (5')	Site 2 (5')	Site E (25')	Site C1 (5')	Site 4 (5')	Site 4 (30')	Site G (25')	Site 1 (5')	Site 1 (30')	Site D (5')	Site 3 (5')
Ambient CNEL	**55.4**	**47.8**	**56.6**	**55.1**	**49.9**	**51.1**	**59.8**	**51.2**	**52.4**	**54.0**	**46.4**
CNEL w/4 hr Plant	**61.8**	**61.7**	**63.1**	**63.6**	**63.3**	**61.6**	**64.9**	**61.7**	**62.9**	**64.8**	**59.2**
CNEL w/ 14-ft Walls	**59.7**	**60.3**	**62.3**	**56.1**	**54.7**	**57.8**	**63.7**	**60.8**	**63.8**	**61.3**	**48.4**

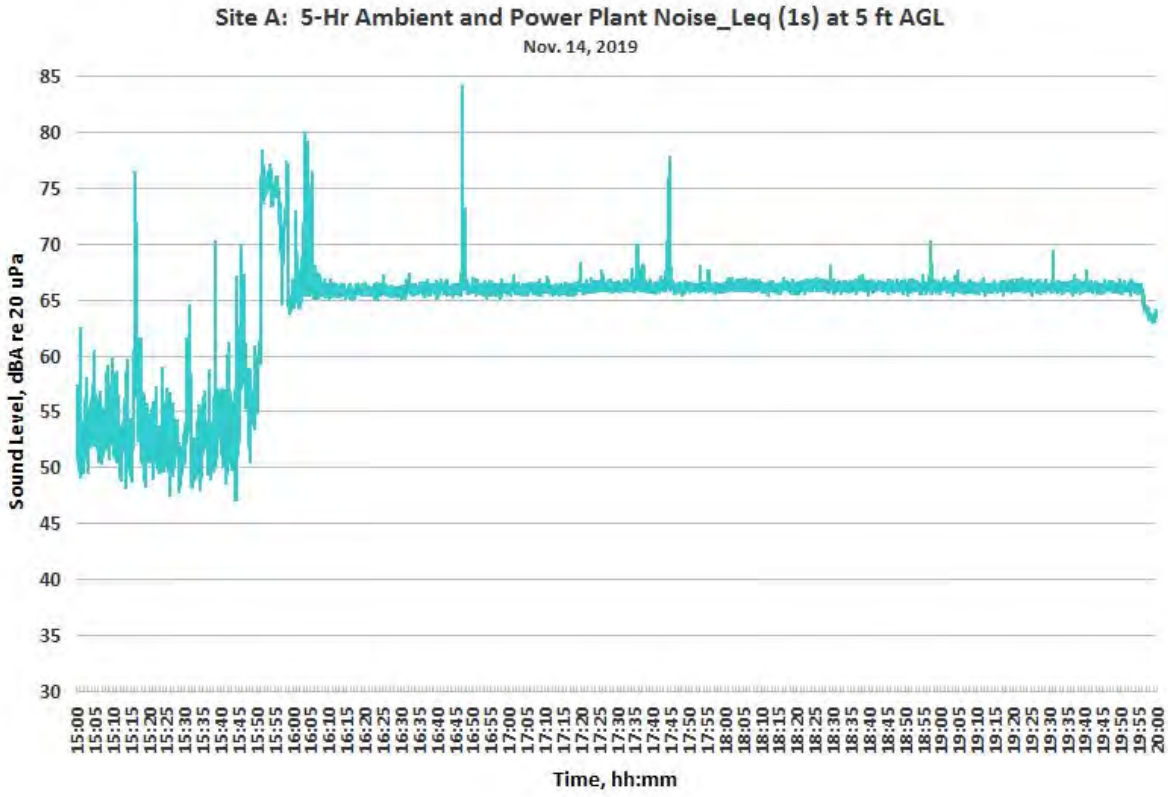
Table 12: 14-ft Soundwall 4-hr CNEL Summary, LAeq(1hr)

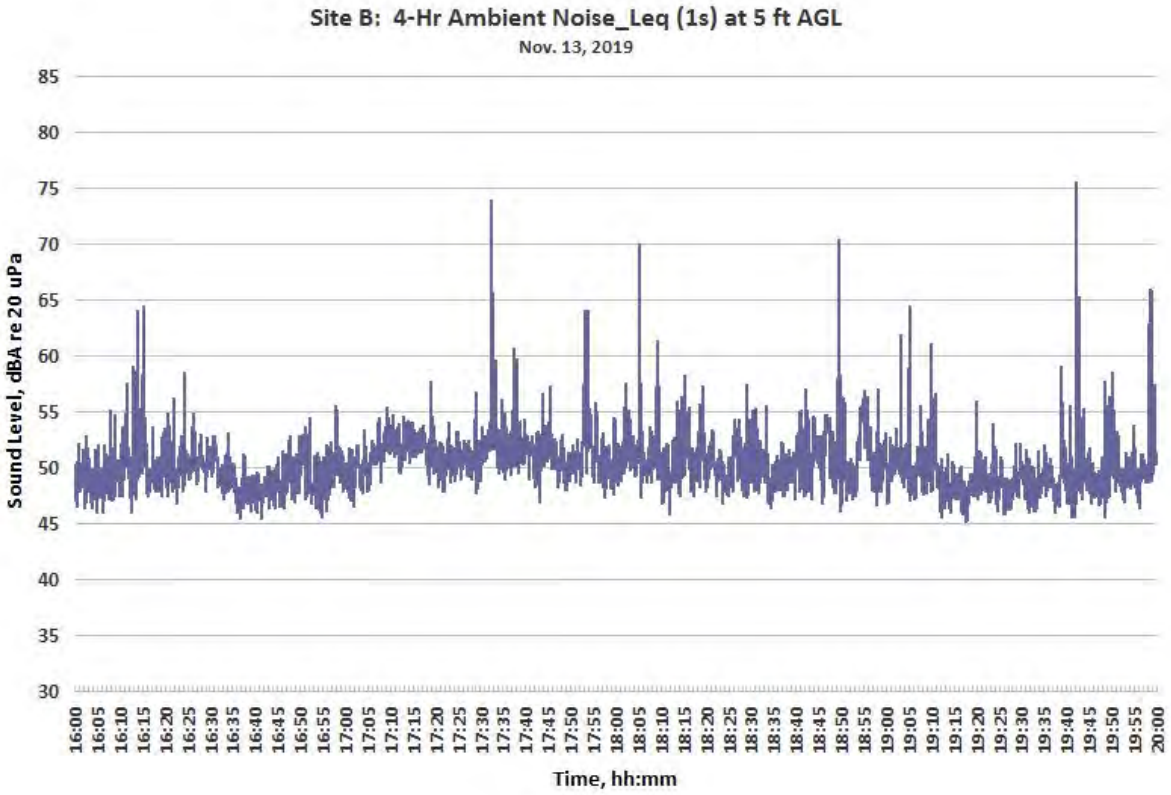
Increasing the wall height to a maximum of sixteen (16) feet has minimal effect on the noise levels but can be considered to provide contingency if preferred as additional costs to increase the wall height are not significant. The hotel to the west of power plant must also include special design requirements for eastern facing living spaces to limit interior noise levels that will include, at a minimum, no outdoor living spaces, sealed windows and forced-air ventilation with the possibility of including sound rated materials for structures such as windows, doors and exterior walls to further ensure interior noise levels meet City of Lodi ordinances.

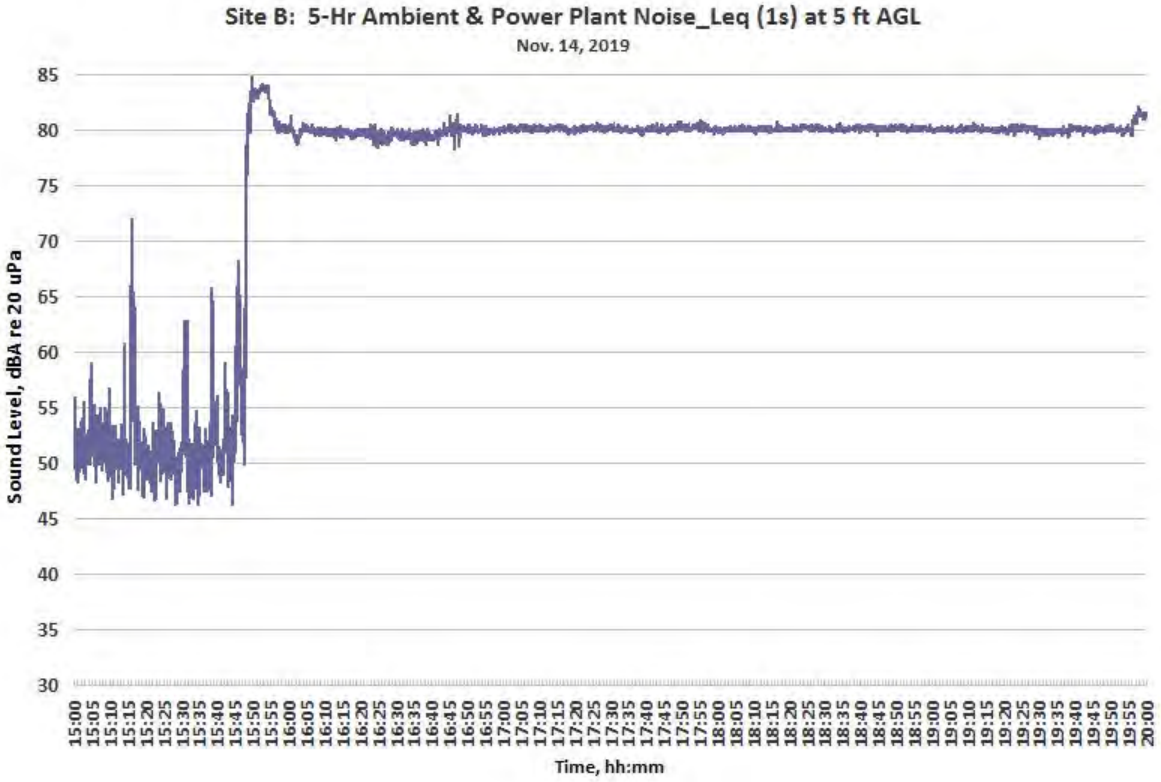
Usable vibration measurements were recorded during the second noise survey which showed that the maximum vibration recorded at shutdown (76 AdB(Z)) is below the Frequent Event rating (80.27 AdB(Z)) when adjusted to the correct reference. The vibration acceptability becomes even more pronounced when considering that plant shutdown is considered an Infrequent Event corresponding to a higher vibration allowance and vibration during operation is less than 60 AdB(Z).

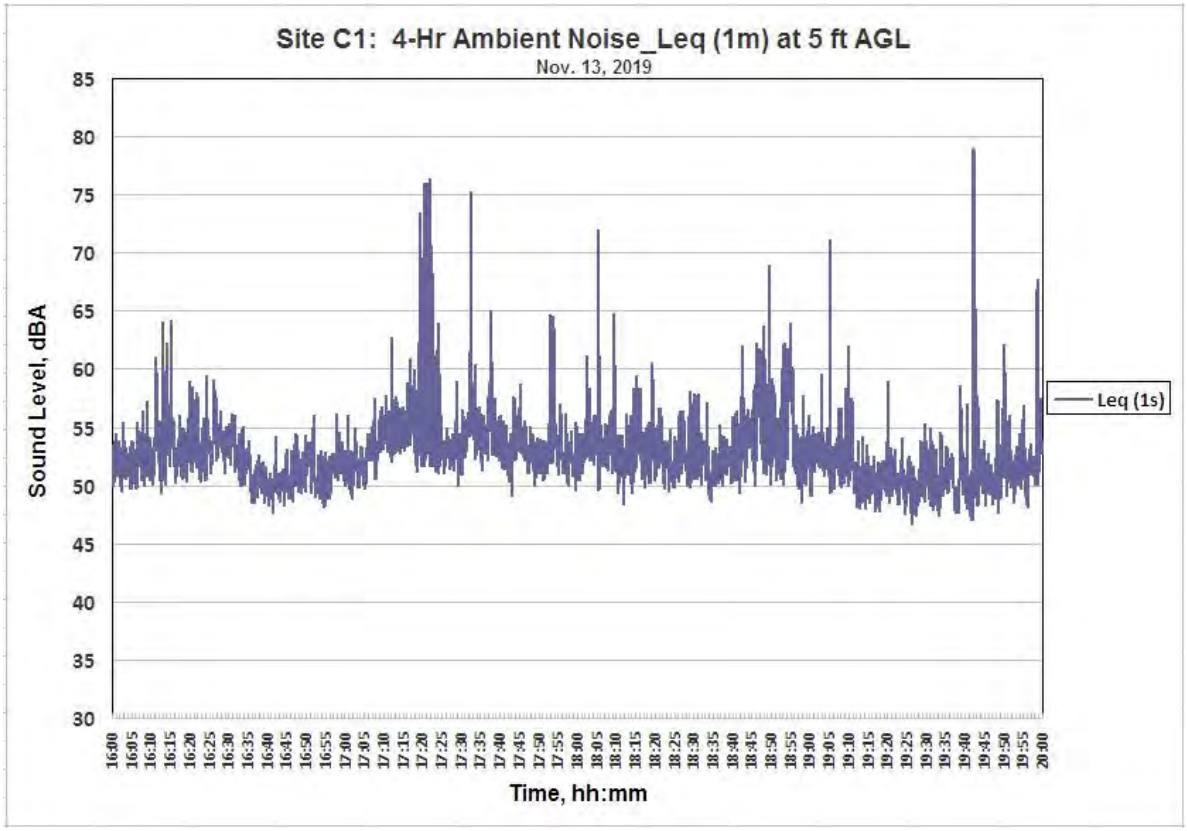
Appendix A. Ambient Noise Data Plots

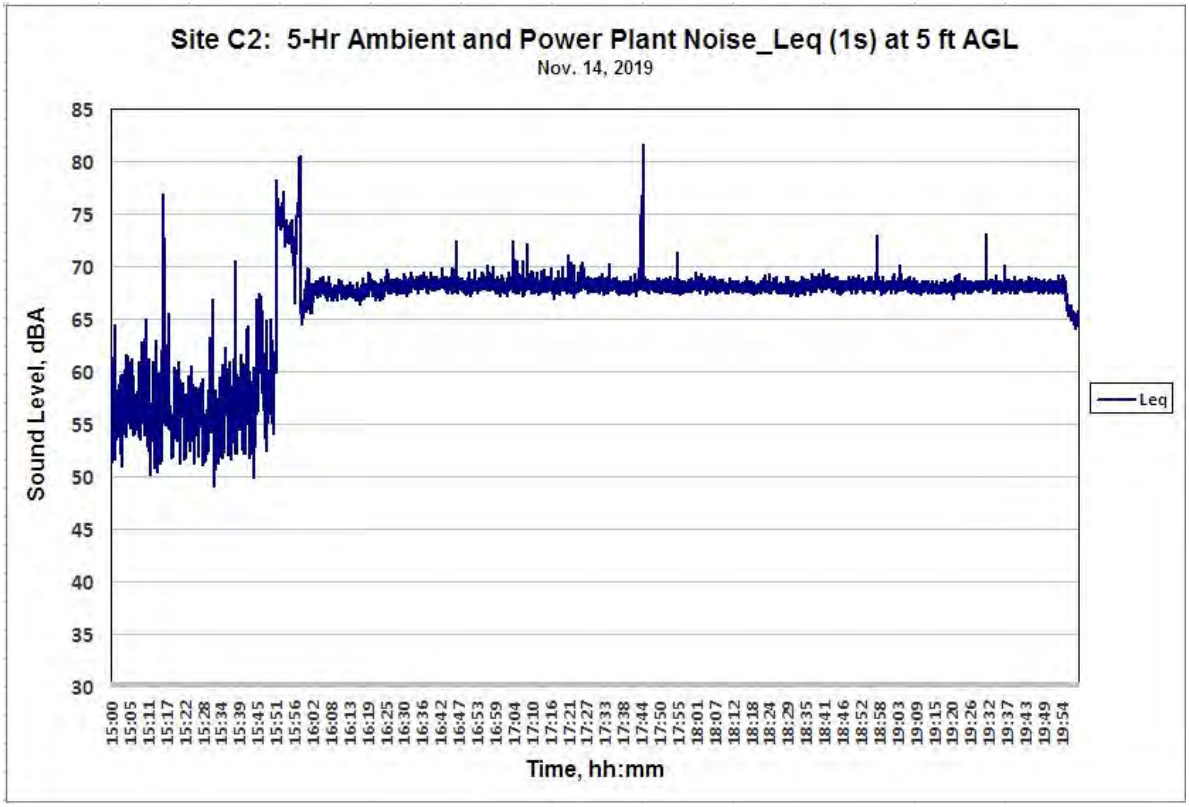

Site A: 4-Hour Ambient Noise_Leq (1s) at 5 ft AGL
Nov. 13, 2019
Sound Level, dBA re 20 uPa
85
80
75
70
65
60
55
50
45
40
35
30
16:00 16:05 16:10 16:15 16:20 16:25 16:30 16:35 16:40 16:45 16:50 16:55 17:00 17:05 17:10 17:15 17:20 17:25 17:30 17:35 17:40 17:45 17:50 17:55 18:00 18:05 18:10 18:15 18:20 18:25 18:30 18:35 18:40 18:45 18:50 18:55 19:00 19:05 19:10 19:15 19:20 19:25 19:30 19:35 19:40 19:45 19:50 19:55 20:00
Time, hh:mm

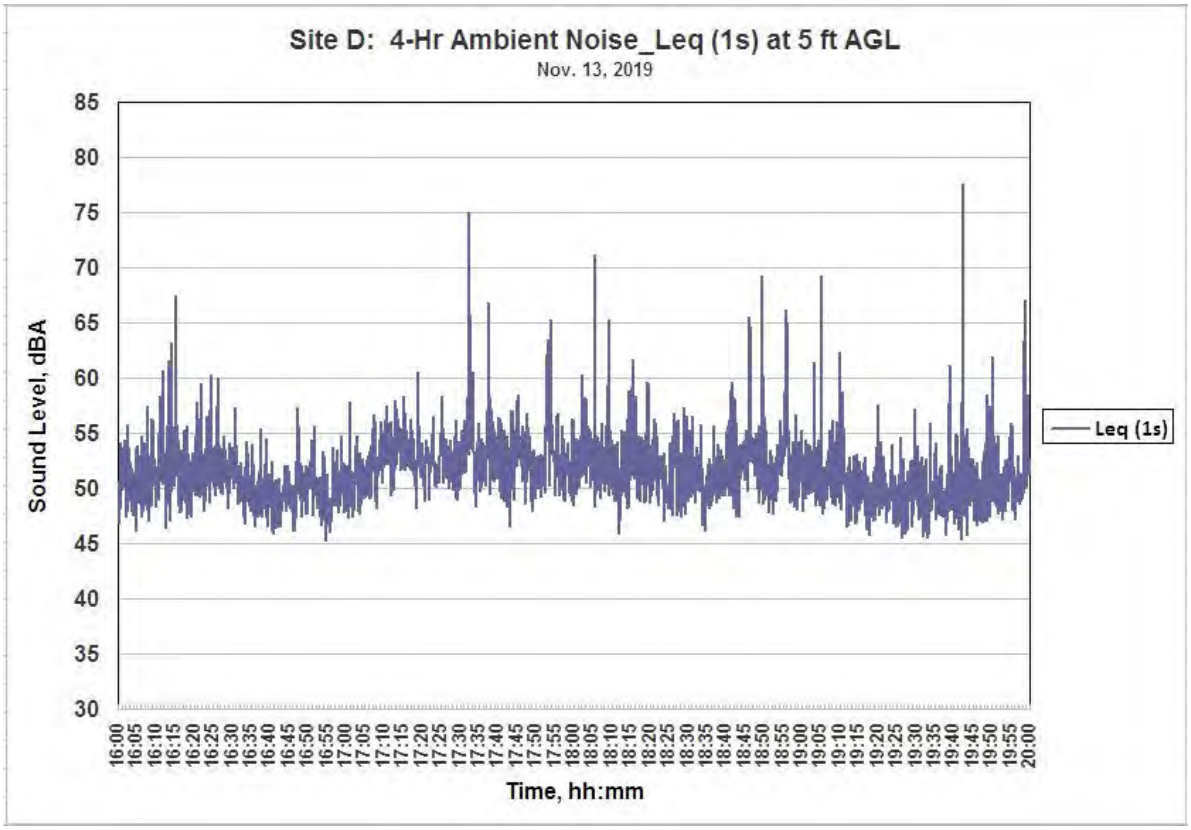

Site A: 5-Hr Ambient and Power Plant Noise_Leq (1s) at 5 ft AGL
Nov. 14, 2019
Sound Level, dBA re 20 uPa
85
80
75
70
65
60
55
50
45
40
35
30
15:00 15:05 15:10 15:15 15:20 15:25 15:30 15:35 15:40 15:45 15:50 15:55 16:00 16:05 16:10 16:15 16:20 16:25 16:30 16:35 16:40 16:45 16:50 16:55 17:00 17:05 17:10 17:15 17:20 17:25 17:30 17:35 17:40 17:45 17:50 17:55 18:00 18:05 18:10 18:15 18:20 18:25 18:30 18:35 18:40 18:45 18:50 18:55 19:00 19:05 19:10 19:15 19:20 19:25 19:30 19:35 19:40 19:45 19:50 19:55 20:00
Time, hh:mm

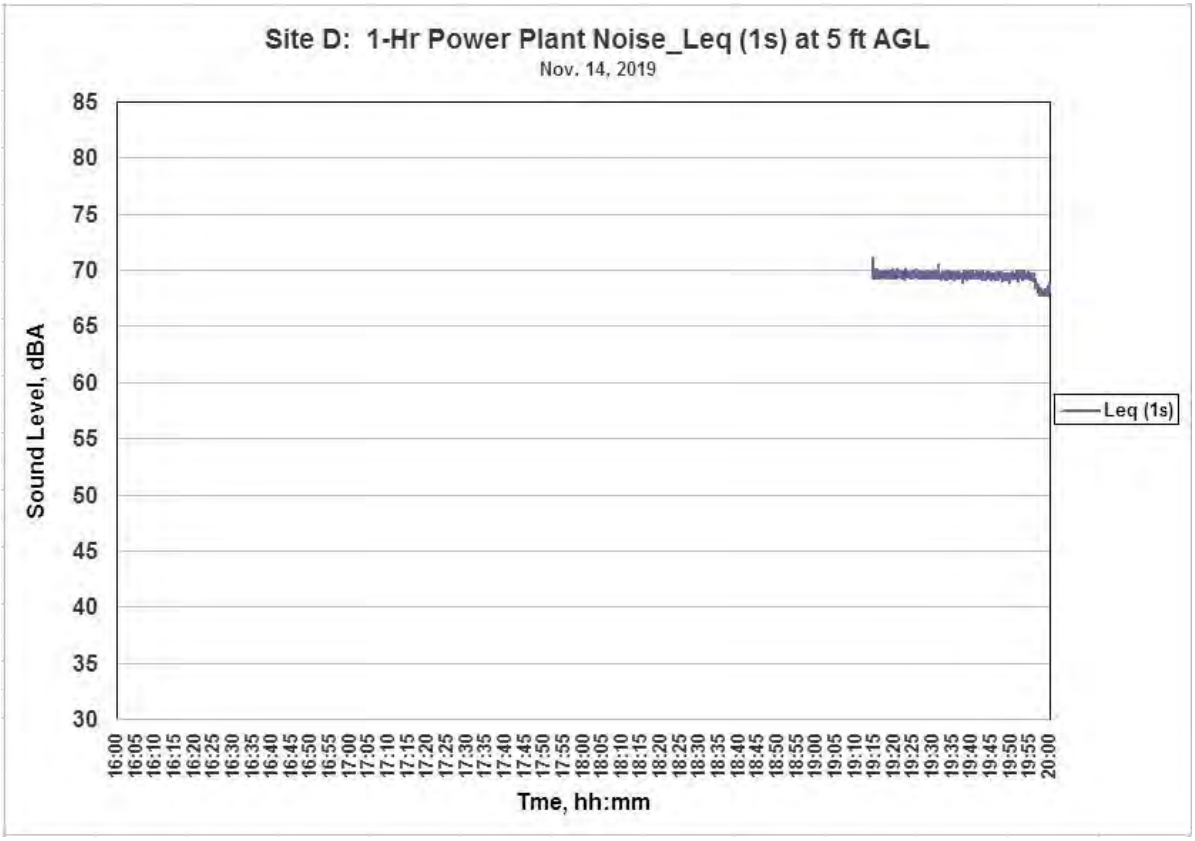

Site B: 4-Hr Ambient Noise_Leq (1s) at 5 ft AGL
Nov. 13, 2019
Sound Level, dBA re 20 uPa
85
80
75
70
65
60
55
50
45
40
35
30
16:00 16:05 16:10 16:15 16:20 16:25 16:30 16:35 16:40 16:45 16:50 16:55 17:00 17:05 17:10 17:15 17:20 17:25 17:30 17:35 17:40 17:45 17:50 17:55 18:00 18:05 18:10 18:15 18:20 18:25 18:30 18:35 18:40 18:45 18:50 18:55 19:00 19:05 19:10 19:15 19:20 19:25 19:30 19:35 19:40 19:45 19:50 19:55 20:00
Time, hh:mm

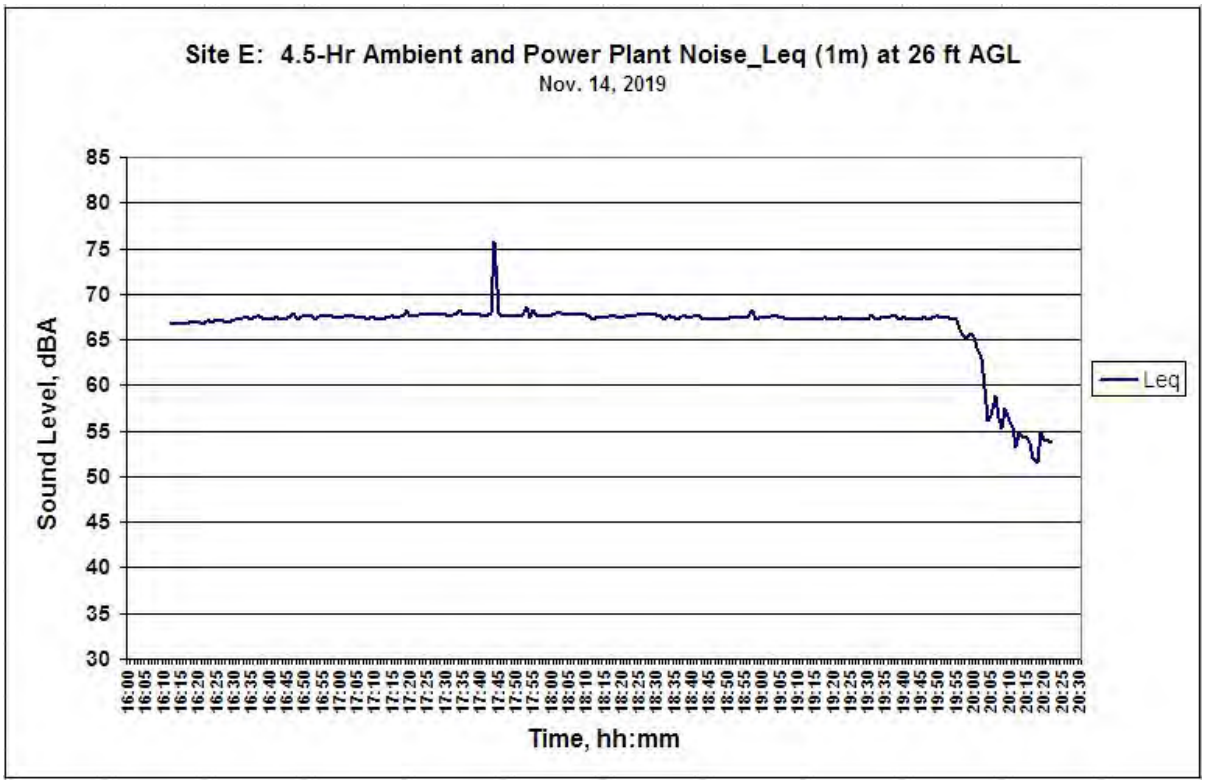

Site B: 5-Hr Ambient & Power Plant Noise_Leq (1s) at 5 ft AGL
Nov. 14, 2019
Sound Level, dBA re 20 uPa
85
80
75
70
65
60
55
50
45
40
35
30
15:00 15:05 15:10 15:15 15:20 15:25 15:30 15:35 15:40 15:45 15:50 15:55 16:00 16:05 16:10 16:15 16:20 16:25 16:30 16:35 16:40 16:45 16:50 16:55 17:00 17:05 17:10 17:15 17:20 17:25 17:30 17:35 17:40 17:45 17:50 17:55 18:00 18:05 18:10 18:15 18:20 18:25 18:30 18:35 18:40 18:45 18:50 18:55 19:00 19:05 19:10 19:15 19:20 19:25 19:30 19:35 19:40 19:45 19:50 19:55 20:00
Time, hh:mm

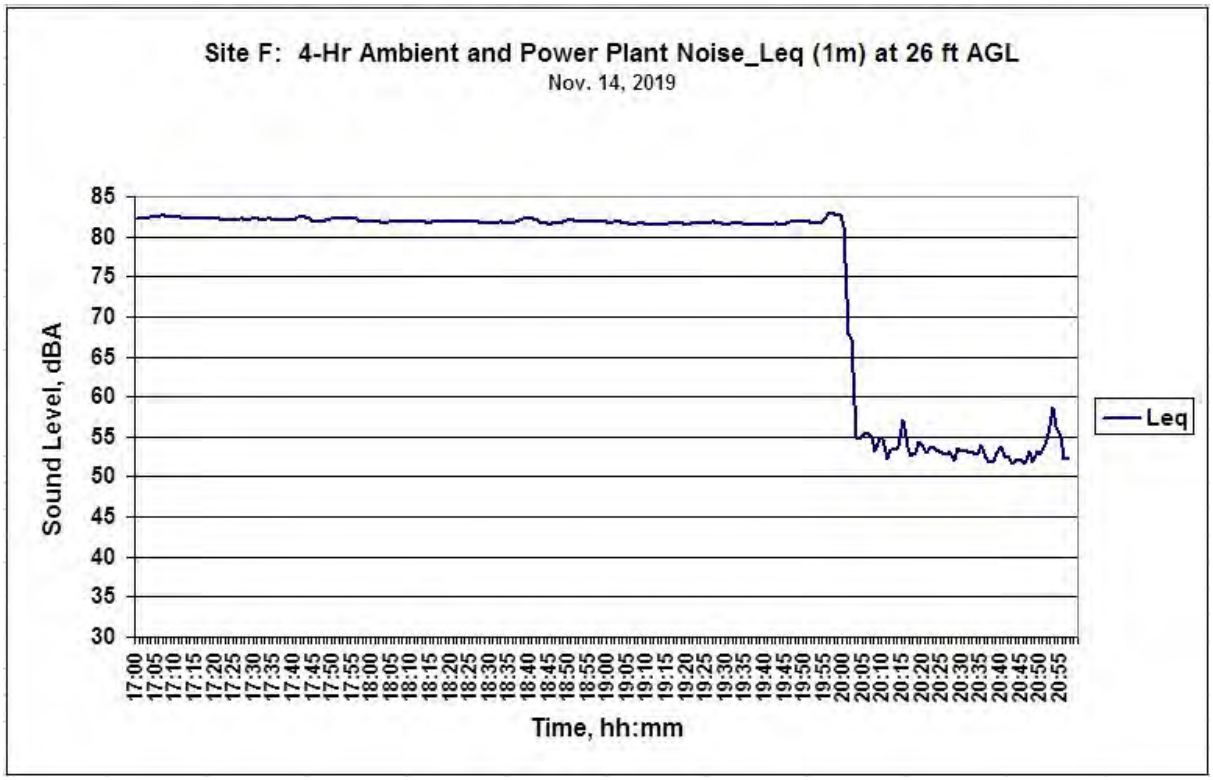

Site C1: 4-Hr Ambient Noise_Leq (1m) at 5 ft AGL
Nov. 13, 2019
Sound Level, dBA
85
80
75
70
65
60
55
50
45
40
35
30
Leq (1s)
Time, hh:mm

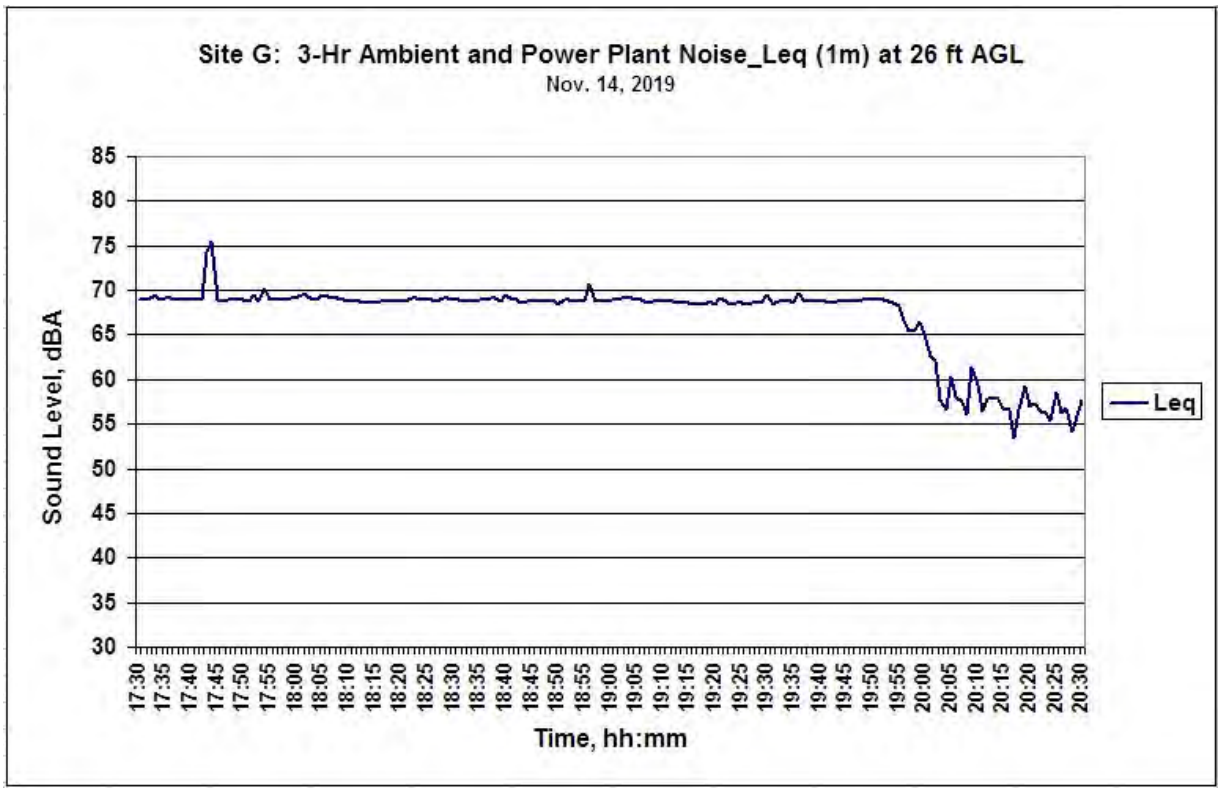

Site C2: 5-Hr Ambient and Power Plant Noise_Leq (1s) at 5 ft AGL
Nov. 14, 2019
Sound Level, dBA
85
80
75
70
65
60
55
50
45
40
35
30
Leq
Time, hh:mm

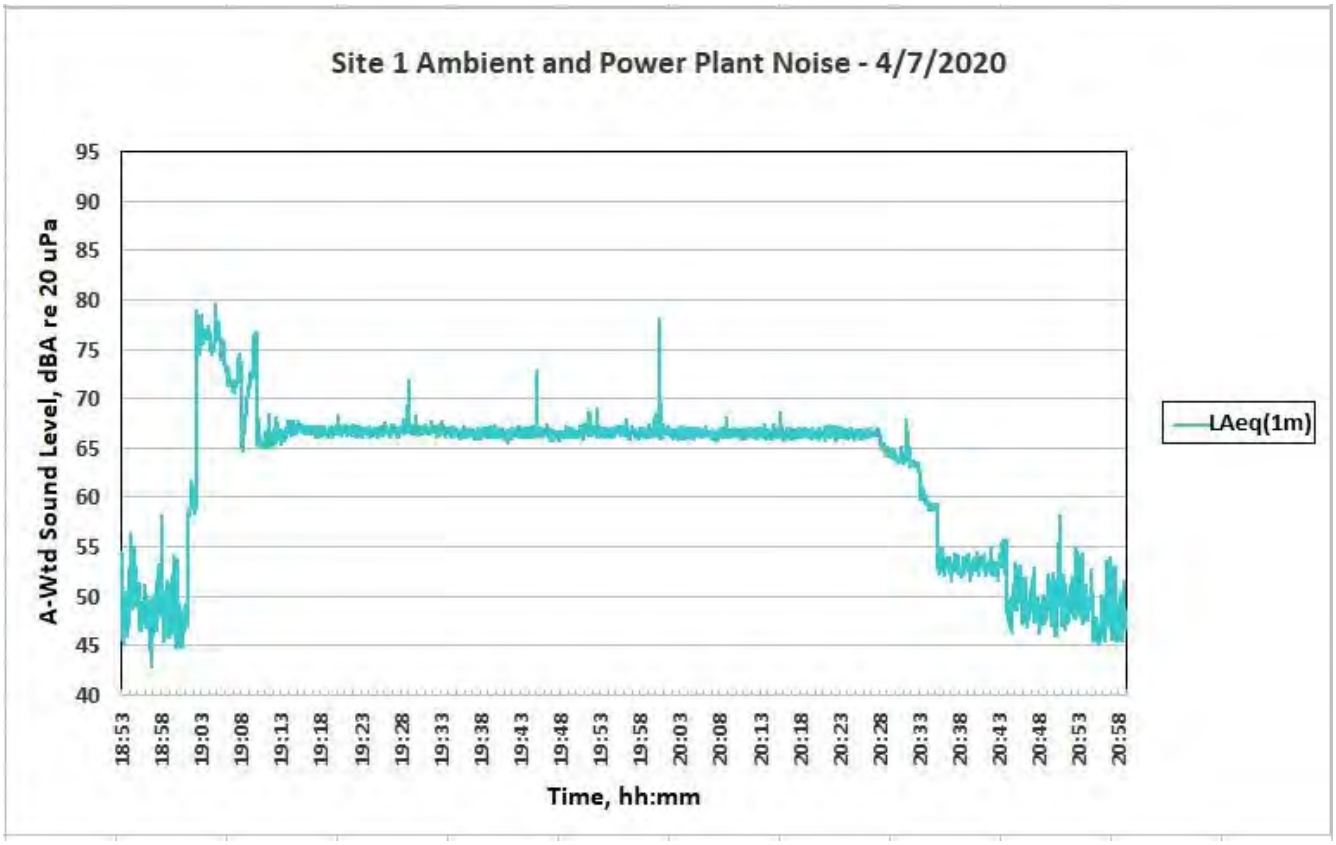

Site D: 4-Hr Ambient Noise_Leq (1s) at 5 ft AGL
Nov. 13, 2019
Sound Level, dBA
85
80
75
70
65
60
55
50
45
40
35
30
16:00 16:05 16:10 16:15 16:20 16:25 16:30 16:35 16:40 16:45 16:50 16:55 17:00 17:05 17:10 17:15 17:20 17:25 17:30 17:35 17:40 17:45 17:50 17:55 18:00 18:05 18:10 18:15 18:20 18:25 18:30 18:35 18:40 18:45 18:50 18:55 19:00 19:05 19:10 19:15 19:20 19:25 19:30 19:35 19:40 19:45 19:50 19:55 20:00
Time, hh:mm
Leq (1s)

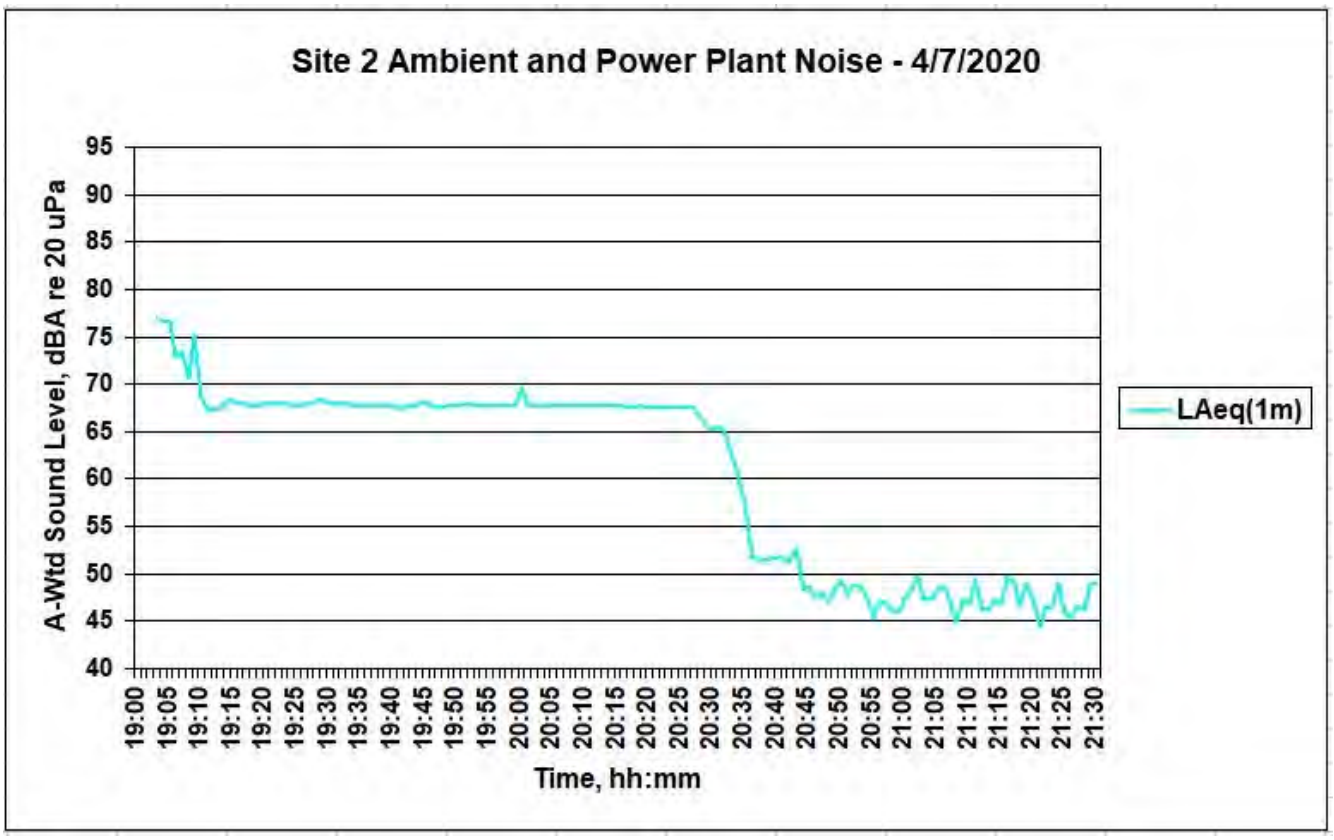

Site D: 1-Hr Power Plant Noise_Leq (1s) at 5 ft AGL
Nov. 14, 2019
Sound Level, dBA
85
80
75
70
65
60
55
50
45
40
35
30
16:00 16:05 16:10 16:15 16:20 16:25 16:30 16:35 16:40 16:45 16:50 16:55 17:00 17:05 17:10 17:15 17:20 17:25 17:30 17:35 17:40 17:45 17:50 17:55 18:00 18:05 18:10 18:15 18:20 18:25 18:30 18:35 18:40 18:45 18:50 18:55 19:00 19:05 19:10 19:15 19:20 19:25 19:30 19:35 19:40 19:45 19:50 19:55 20:00
Tme, hh:mm
Leq (1s)

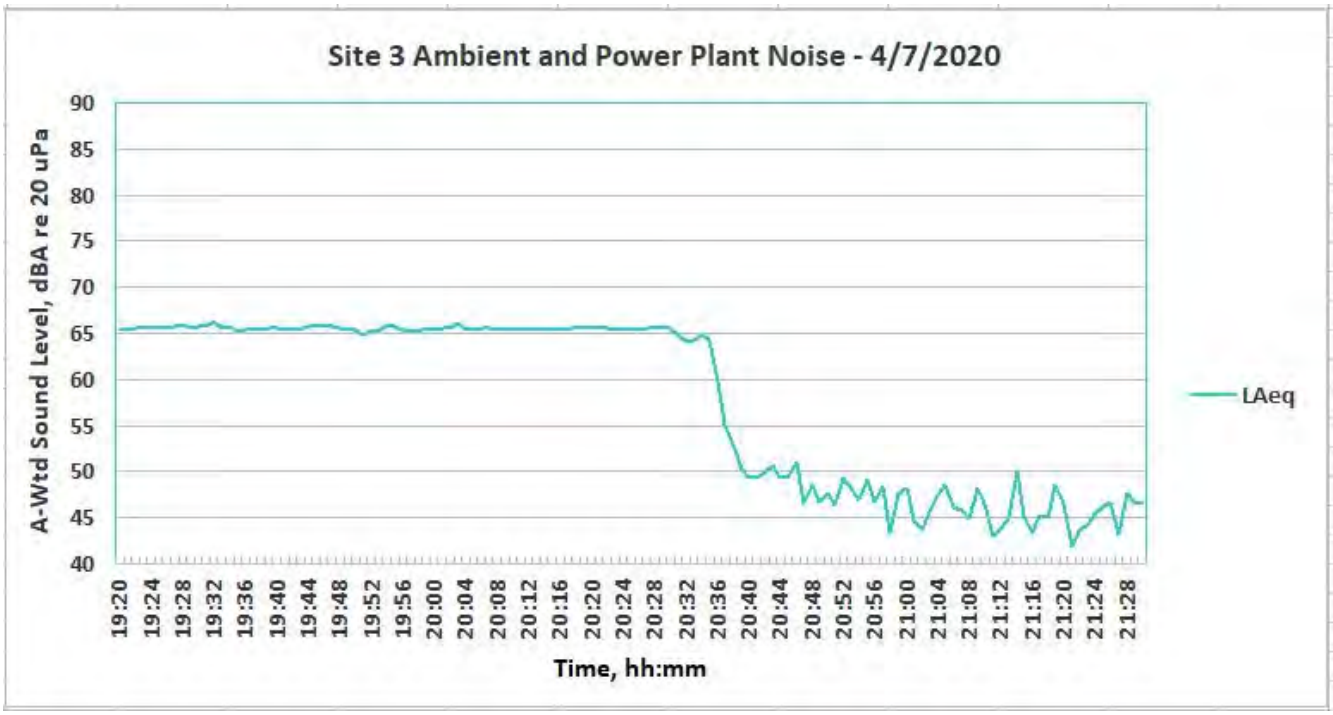

Site E: 4.5-Hr Ambient and Power Plant Noise_Leq (1m) at 26 ft AGL
Nov. 14, 2019
Sound Level, dBA
85
80
75
70
65
60
55
50
45
40
35
30
Leq
Time, hh:mm

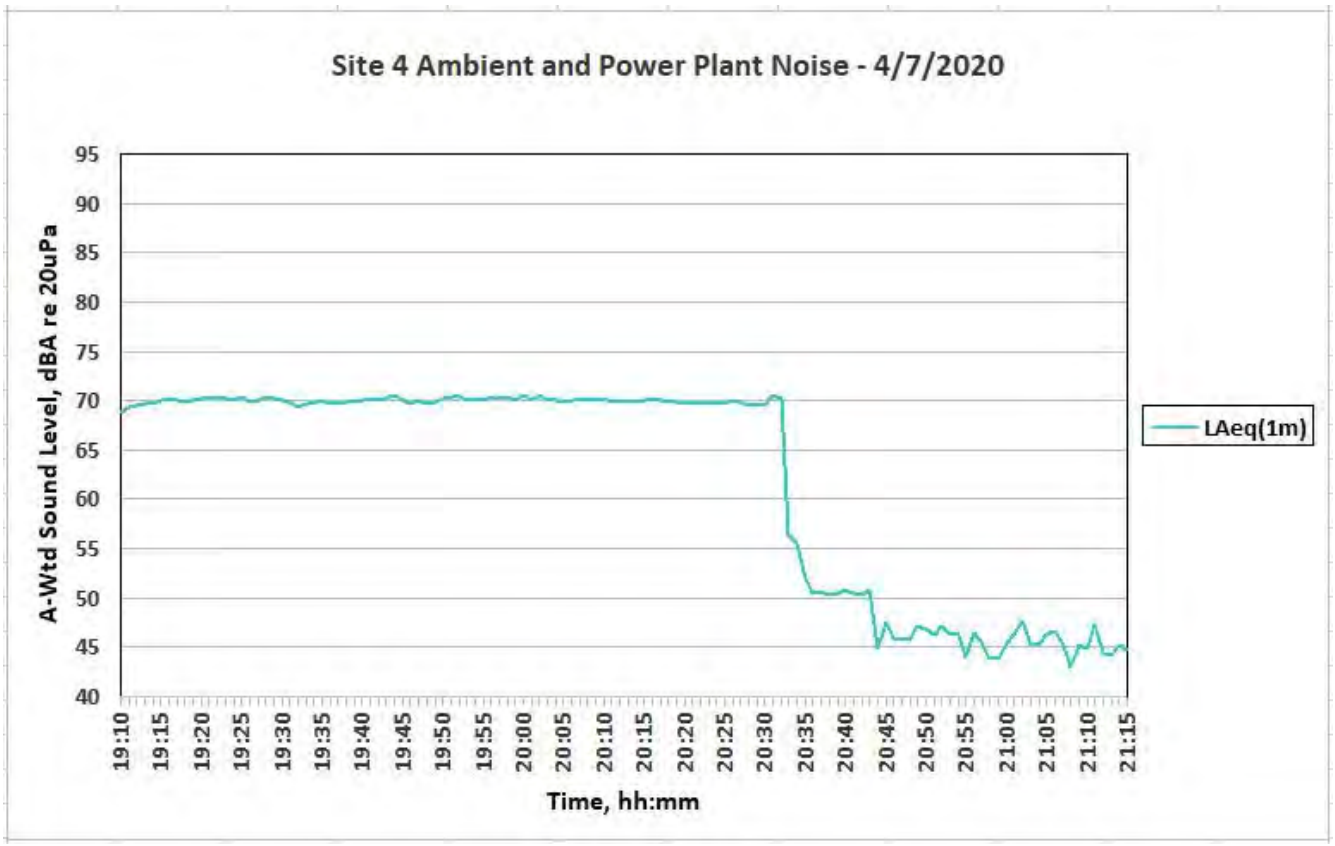

Site F: 4-Hr Ambient and Power Plant Noise_Leq (1m) at 26 ft AGL
Nov. 14, 2019
Sound Level, dBA
85
80
75
70
65
60
55
50
45
40
35
30
Leq
Time, hh:mm

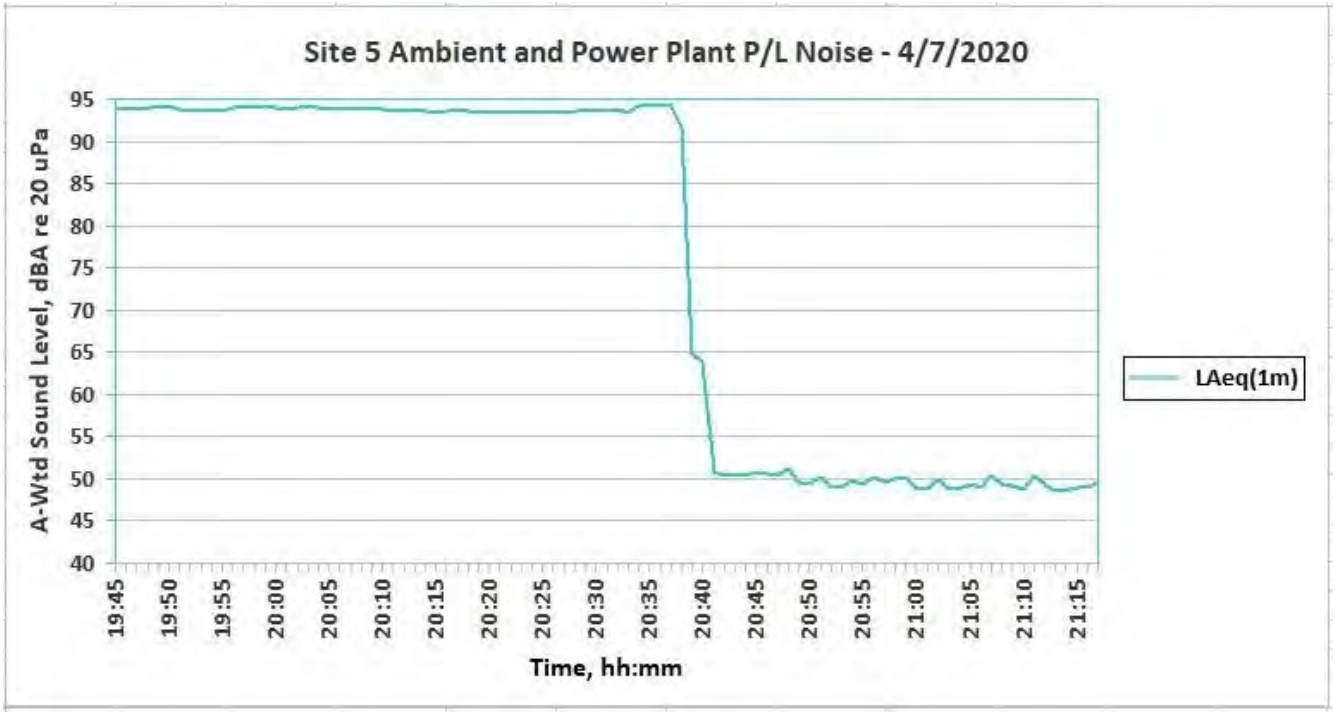

Site G: 3-Hr Ambient and Power Plant Noise_Leq (1m) at 26 ft AGL
Nov. 14, 2019
Sound Level, dBA
85
80
75
70
65
60
55
50
45
40
35
30
17:30
17:35
17:40
17:45
17:50
17:55
18:00
18:05
18:10
18:15
18:20
18:25
18:30
18:35
18:40
18:45
18:50
18:55
19:00
19:05
19:10
19:15
19:20
19:25
19:30
19:35
19:40
19:45
19:50
19:55
20:00
20:05
20:10
20:15
20:20
20:25
20:30
Time, hh:mm
Leq

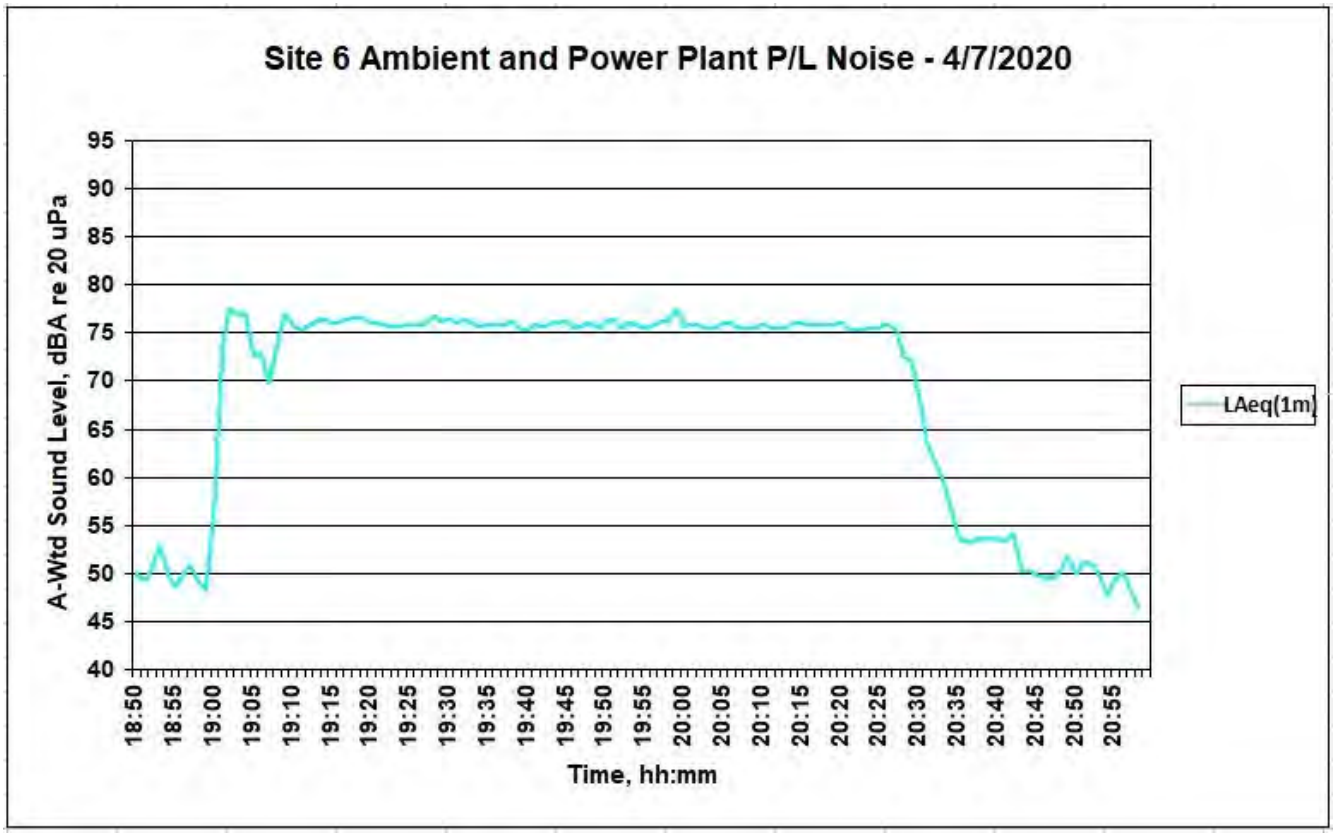

Site 1 Ambient and Power Plant Noise - 4/7/2020
A-Wtd Sound Level, dBA re 20 uPa
95
90
85
80
75
70
65
60
55
50
45
40
18:53
18:58
19:03
19:08
19:13
19:18
19:23
19:28
19:33
19:38
19:43
19:48
19:53
19:58
20:03
20:08
20:13
20:18
20:23
20:28
20:33
20:38
20:43
20:48
20:53
20:58
Time, hh:mm
LAeq(1m)


Site 2 Ambient and Power Plant Noise - 4/7/2020
A-Wtd Sound Level, dBA re 20 uPa
95
90
85
80
75
70
65
60
55
50
45
40
19:00
19:05
19:10
19:15
19:20
19:25
19:30
19:35
19:40
19:45
19:50
19:55
20:00
20:05
20:10
20:15
20:20
20:25
20:30
20:35
20:40
20:45
20:50
20:55
21:00
21:05
21:10
21:15
21:20
21:25
21:30
Time, hh:mm
LAeq(1m)

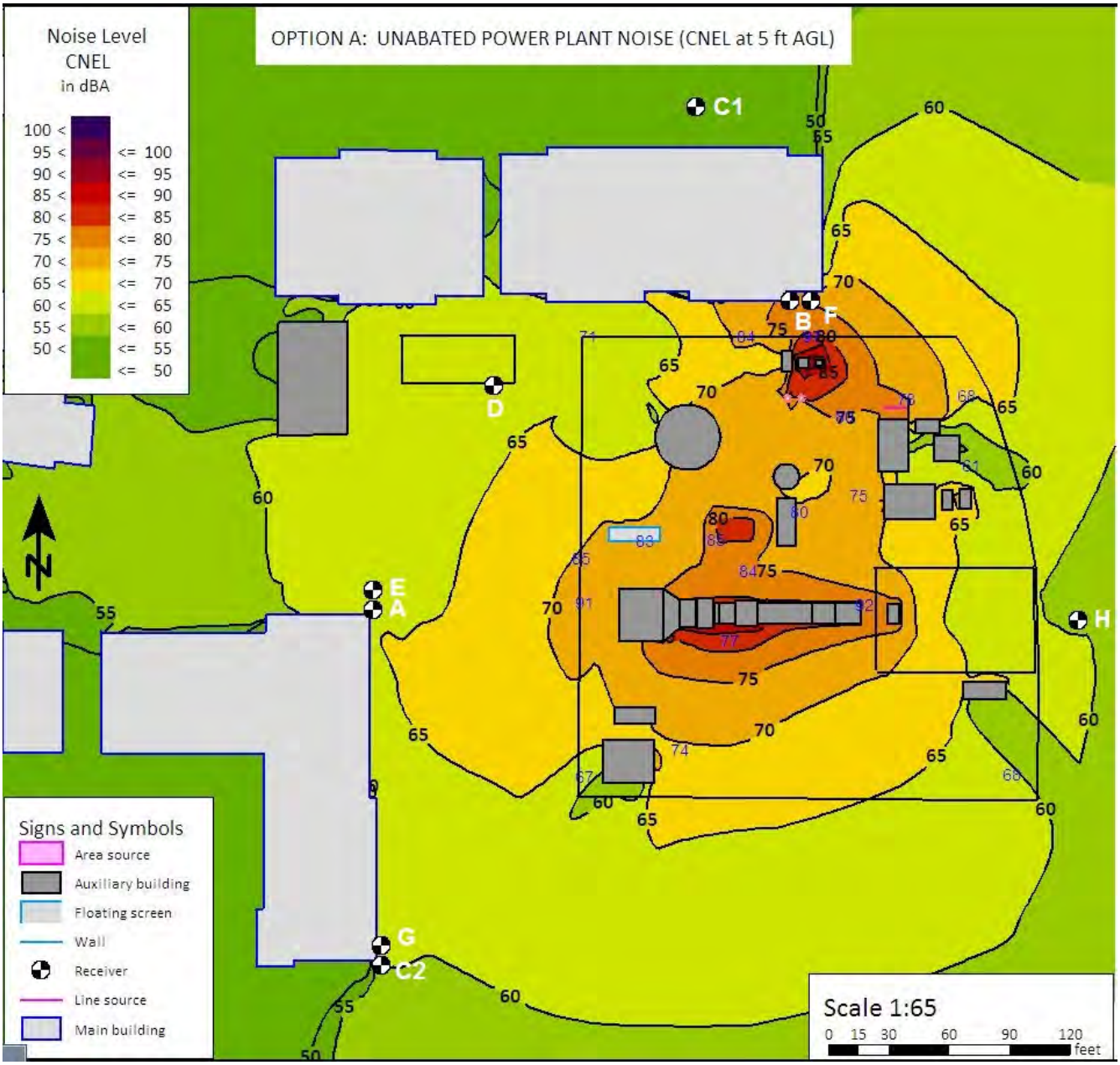

Site 3 Ambient and Power Plant Noise - 4/7/2020
A-Wtd Sound Level, dBA re 20 uPa
90
85
80
75
70
65
60
55
50
45
40
19:20
19:24
19:28
19:32
19:36
19:40
19:44
19:48
19:52
19:56
20:00
20:04
20:08
20:12
20:16
20:20
20:24
20:28
20:32
20:36
20:40
20:44
20:48
20:52
20:56
21:00
21:04
21:08
21:12
21:16
21:20
21:24
21:28
Time, hh:mm
LAeq

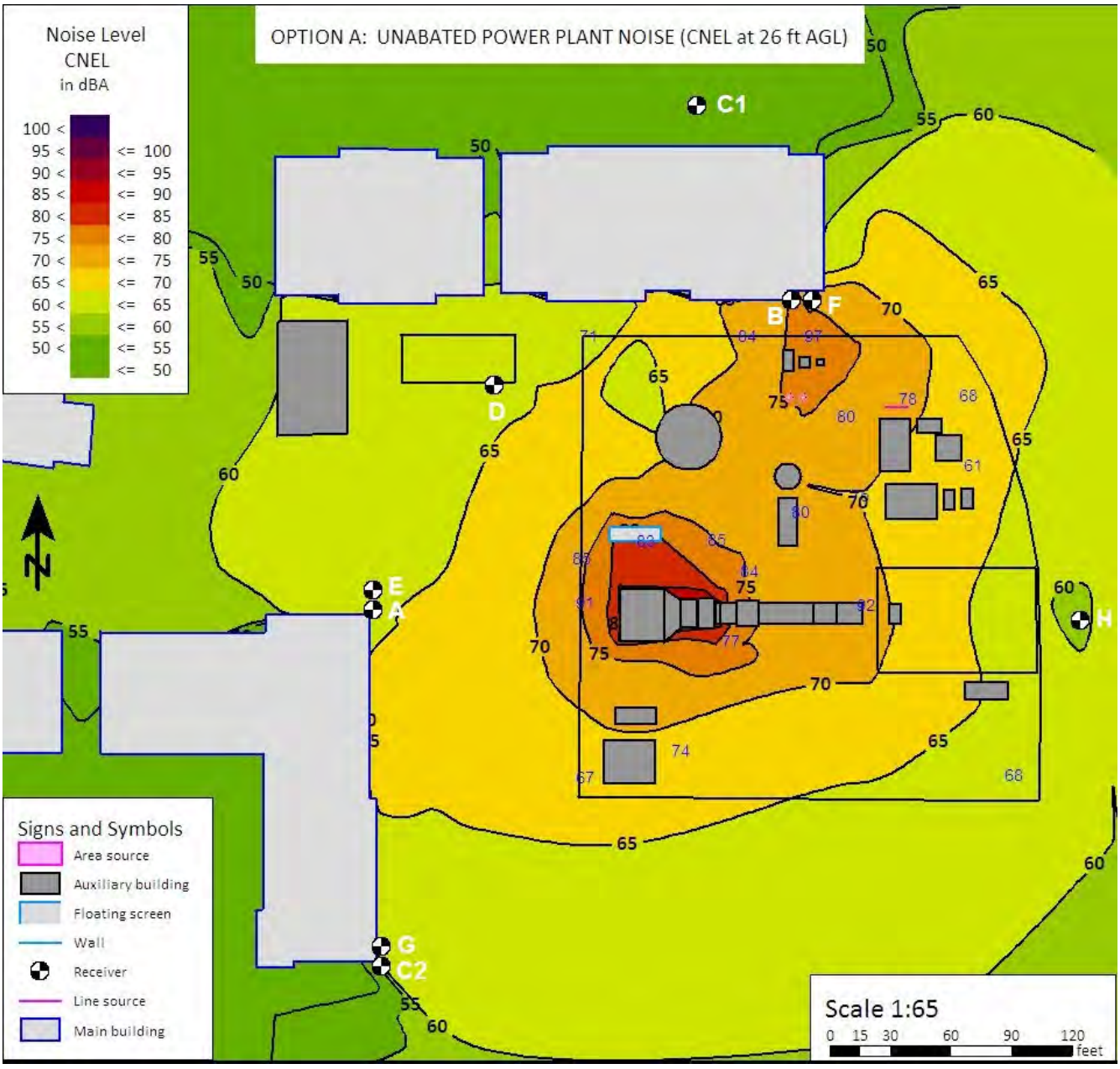

Site 4 Ambient and Power Plant Noise - 4/7/2020
A-Wtd Sound Level, dBA re 20uPa
95
90
85
80
75
70
65
60
55
50
45
40
19:10
19:15
19:20
19:25
19:30
19:35
19:40
19:45
19:50
19:55
20:00
20:05
20:10
20:15
20:20
20:25
20:30
20:35
20:40
20:45
20:50
20:55
21:00
21:05
21:10
21:15
Time, hh:mm
LAeq(1m)

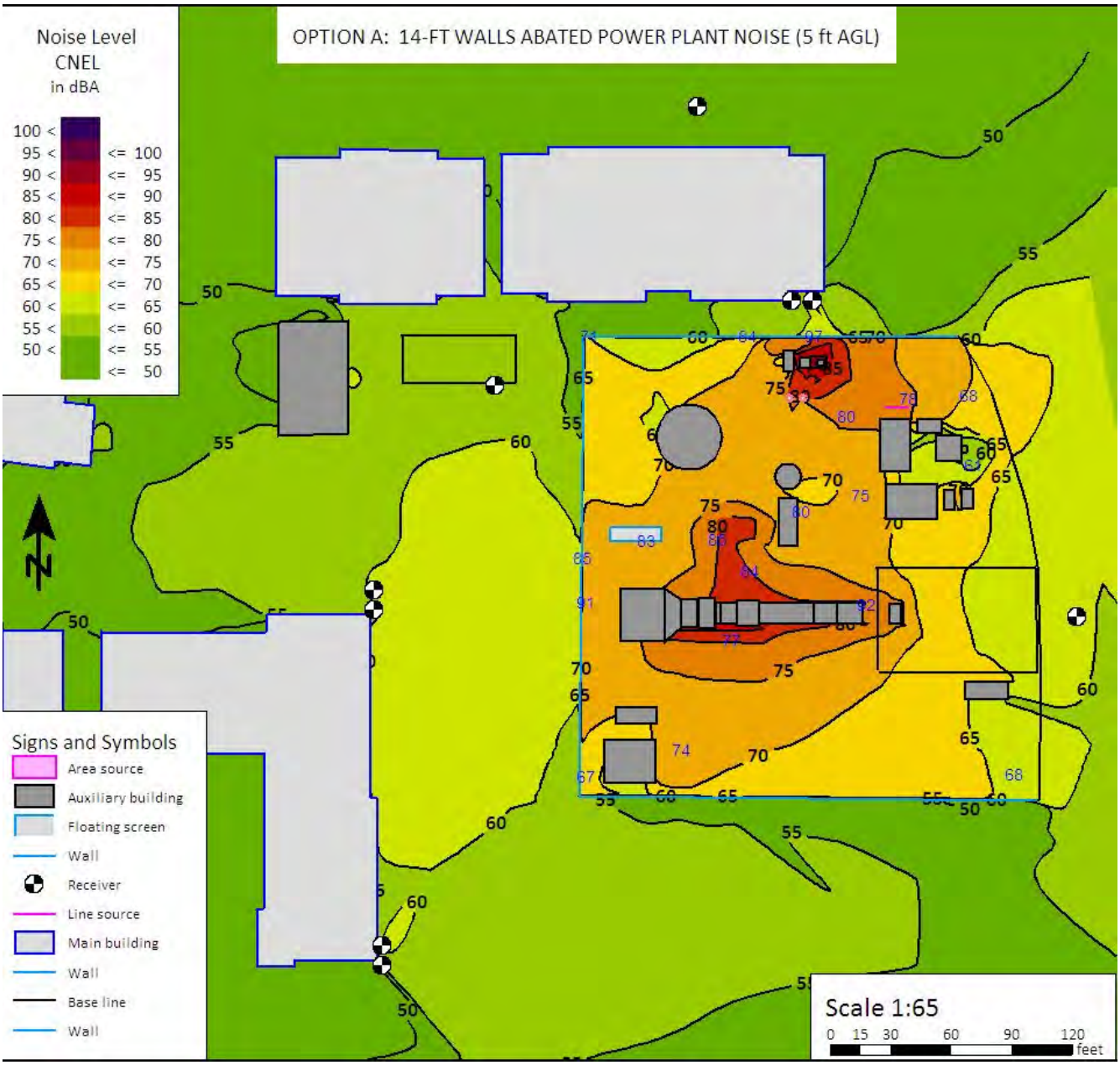

Site 5 Ambient and Power Plant P/L Noise - 4/7/2020
A-Wtd Sound Level, dBA re 20 uPa
95
90
85
80
75
70
65
60
55
50
45
40
19:45
19:50
19:55
20:00
20:05
20:10
20:15
20:20
20:25
20:30
20:35
20:40
20:45
20:50
20:55
21:00
21:05
21:10
21:15
Time, hh:mm
LAeq(1m)

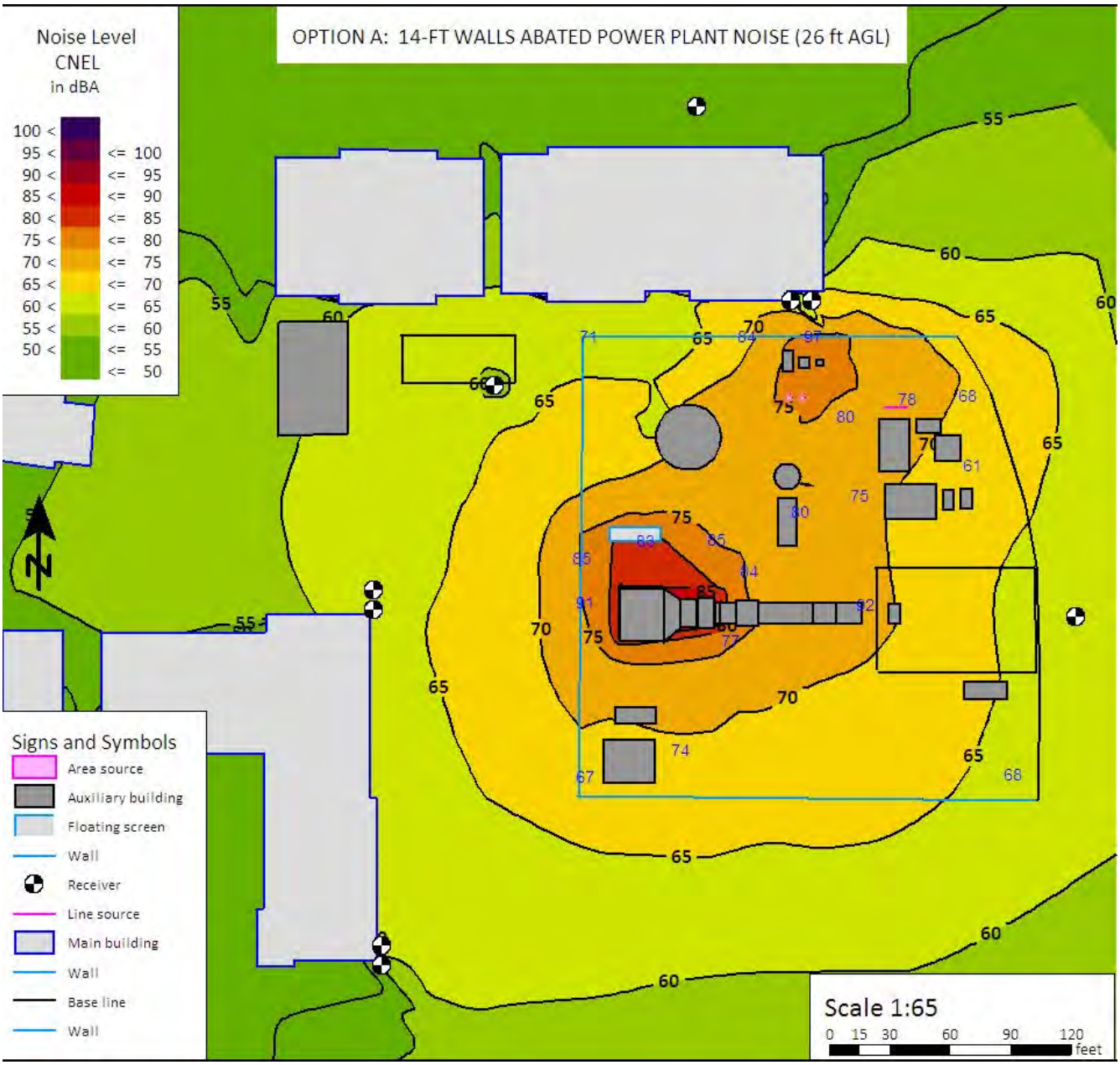

Site 6 Ambient and Power Plant P/L Noise - 4/7/2020
A-Wtd Sound Level, dBA re 20 uPa
95
90
85
80
75
70
65
60
55
50
45
40
18:50
18:55
19:00
19:05
19:10
19:15
19:20
19:25
19:30
19:35
19:40
19:45
19:50
19:55
20:00
20:05
20:10
20:15
20:20
20:25
20:30
20:35
20:40
20:45
20:50
20:55
Time, hh:mm
LAeq(1m)

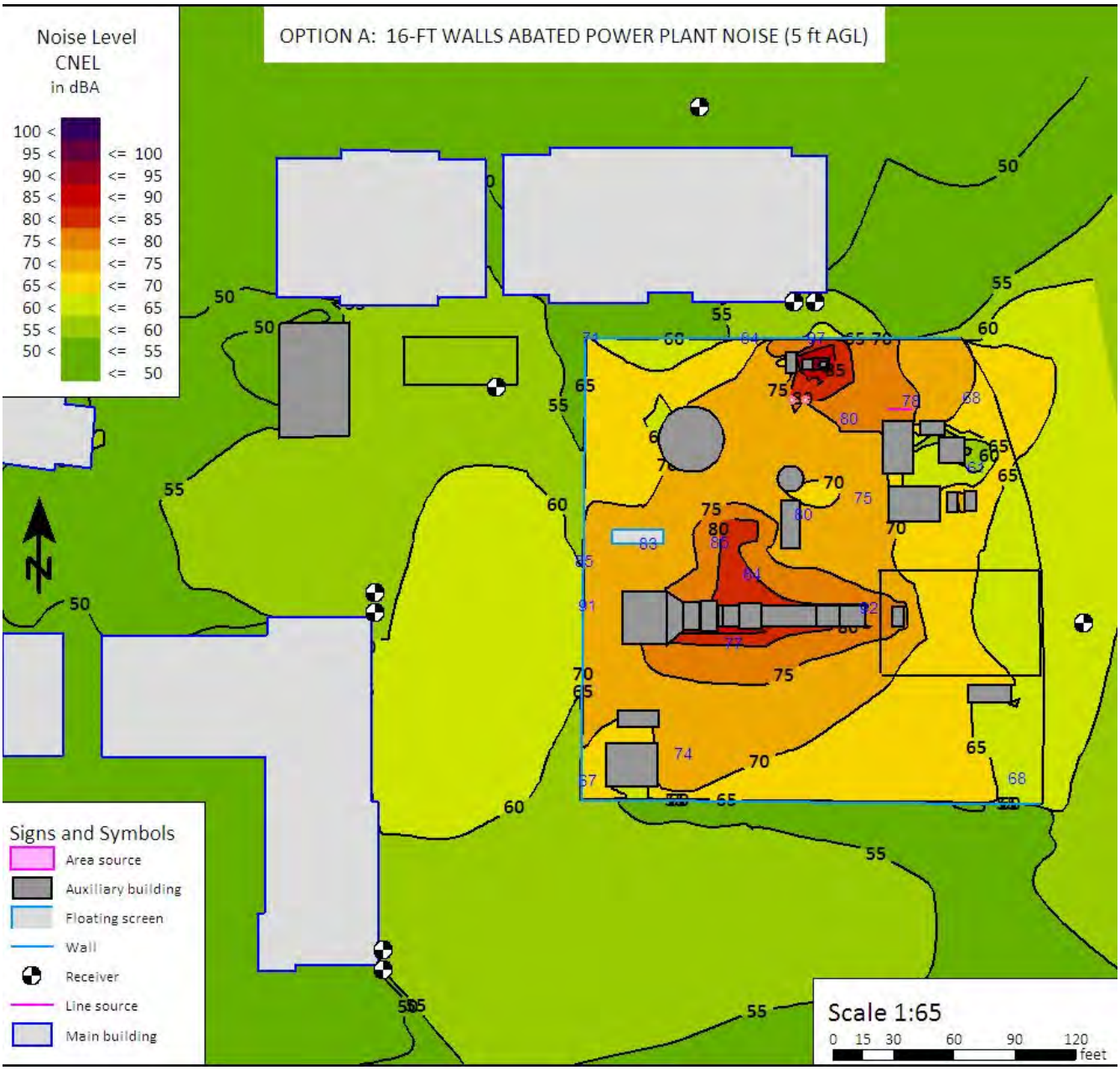
Appendix B. Power Plant Noise Contours – Initial Noise Survey

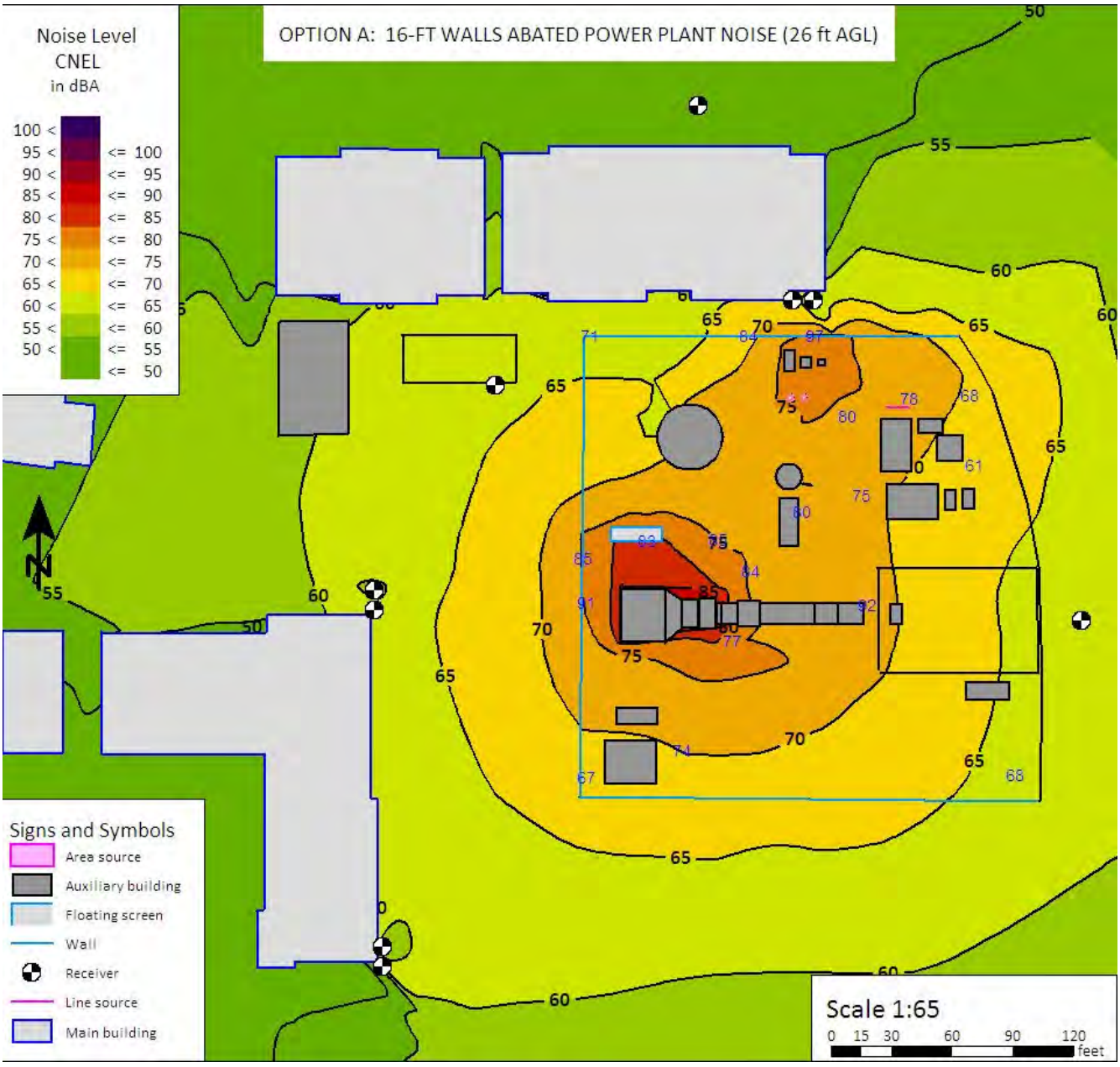

OPTION A: UNABATED POWER PLANT NOISE (CNEL at 5 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
C1
B
F
D
E
A
H
G
C2
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

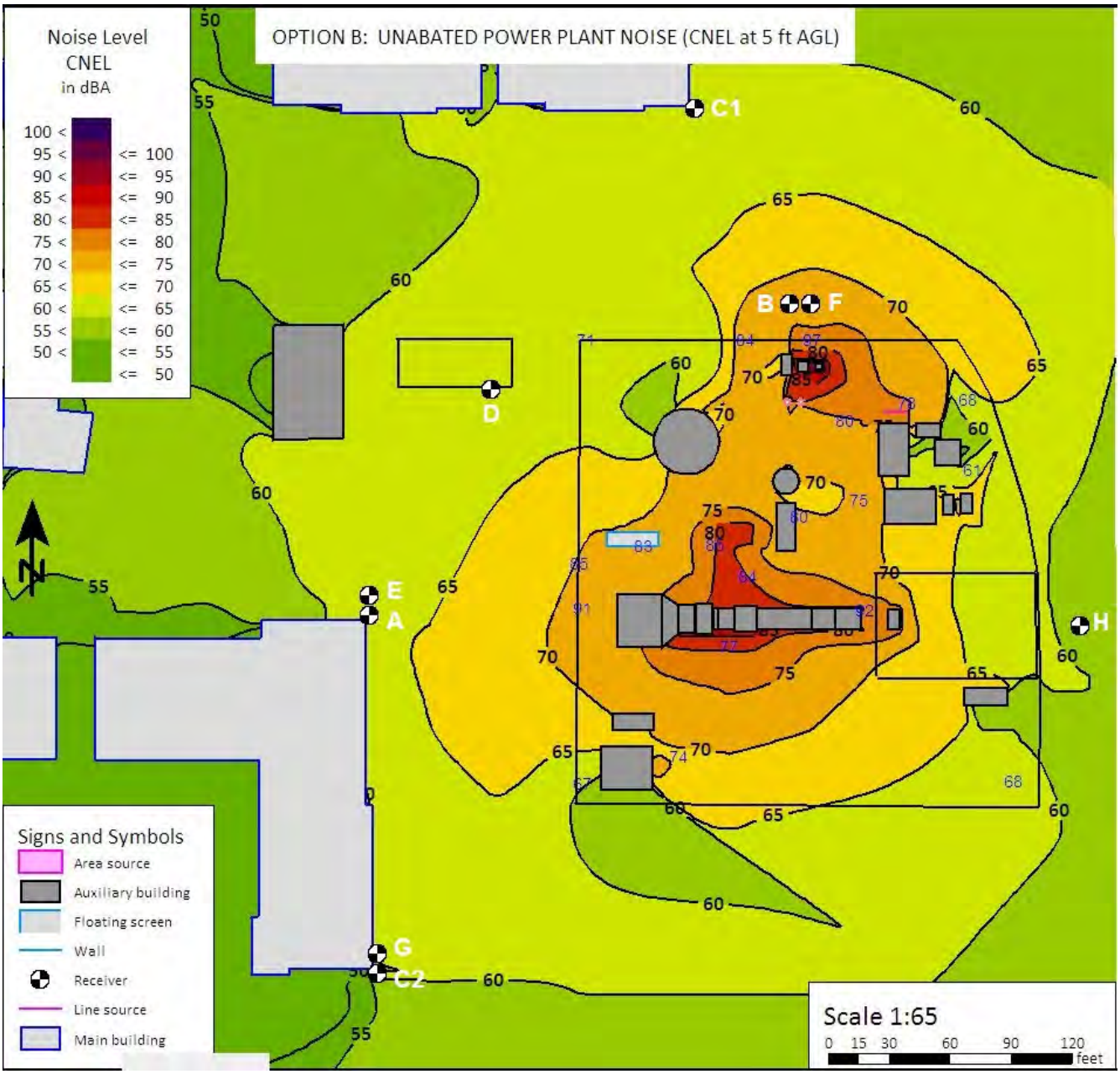

OPTION A: UNABATED POWER PLANT NOISE (CNEL at 26 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
C1
B
F
D
E
A
H
G
C2
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

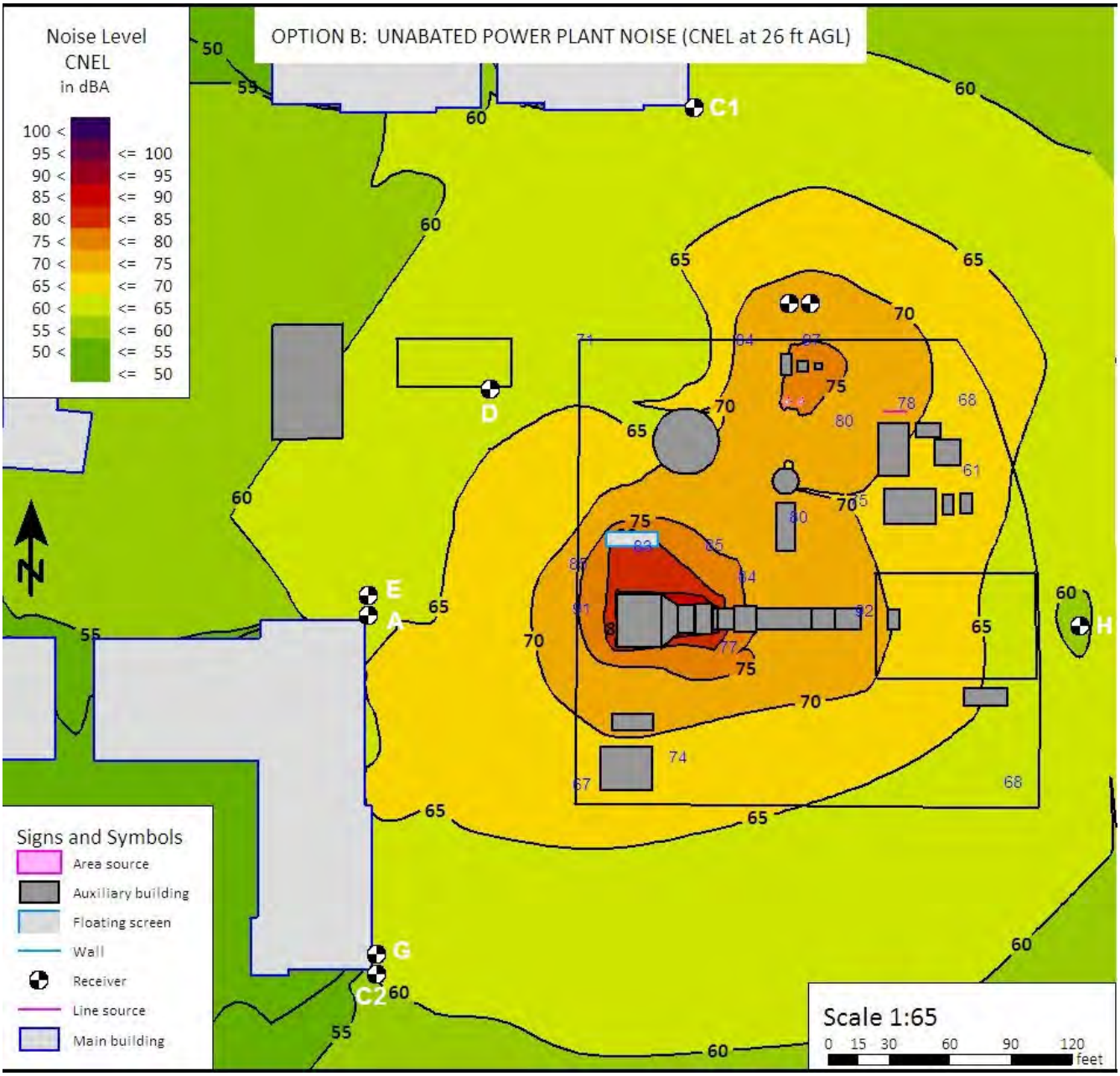

OPTION A: 14-FT WALLS ABATED POWER PLANT NOISE (5 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Wall
Base line
Wall
Scale 1:65
0 15 30 60 90 120
feet

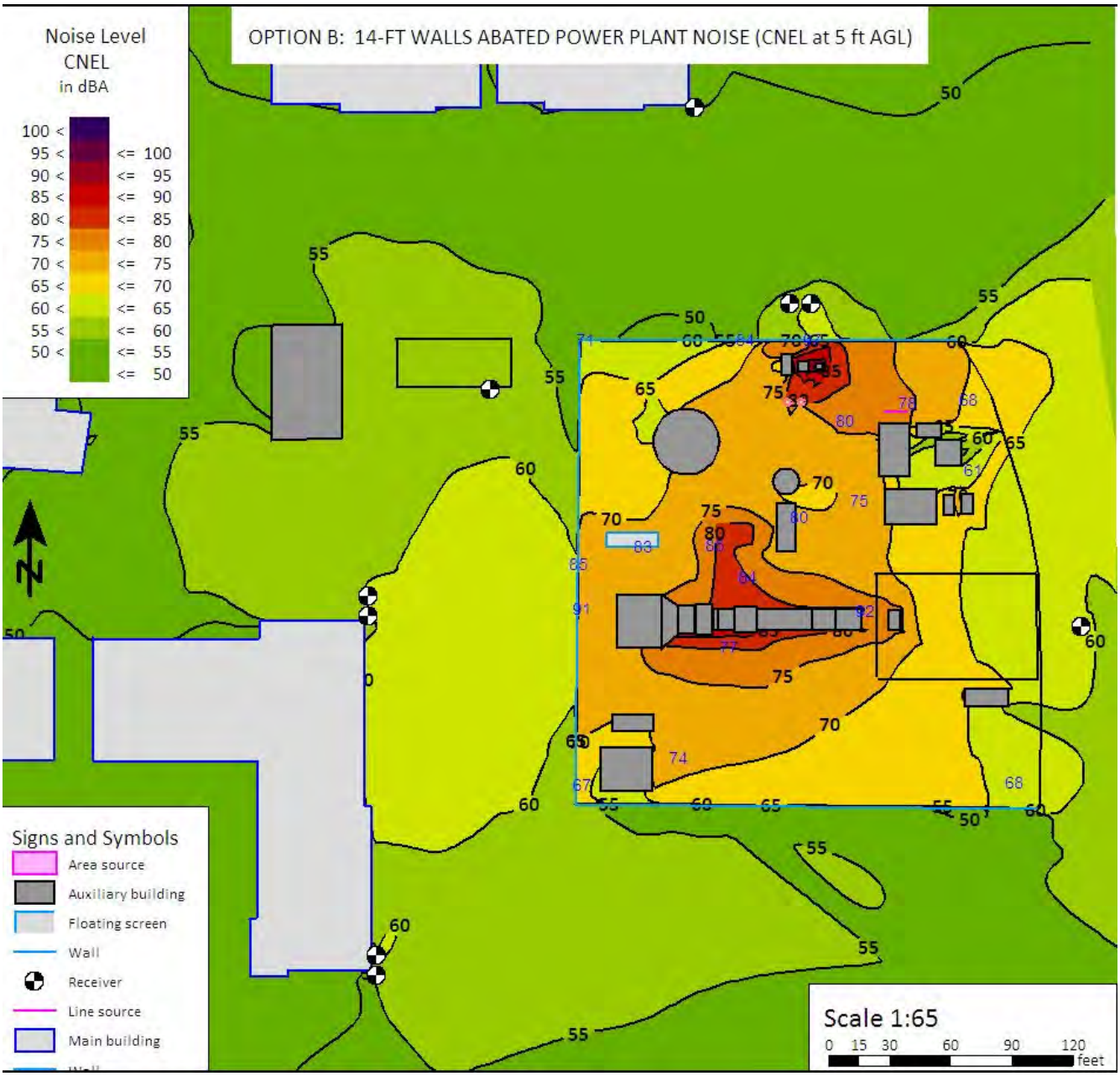

OPTION A: 14-FT WALLS ABATED POWER PLANT NOISE (26 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Wall
Base line
Wall
Scale 1:65
0 15 30 60 90 120
feet

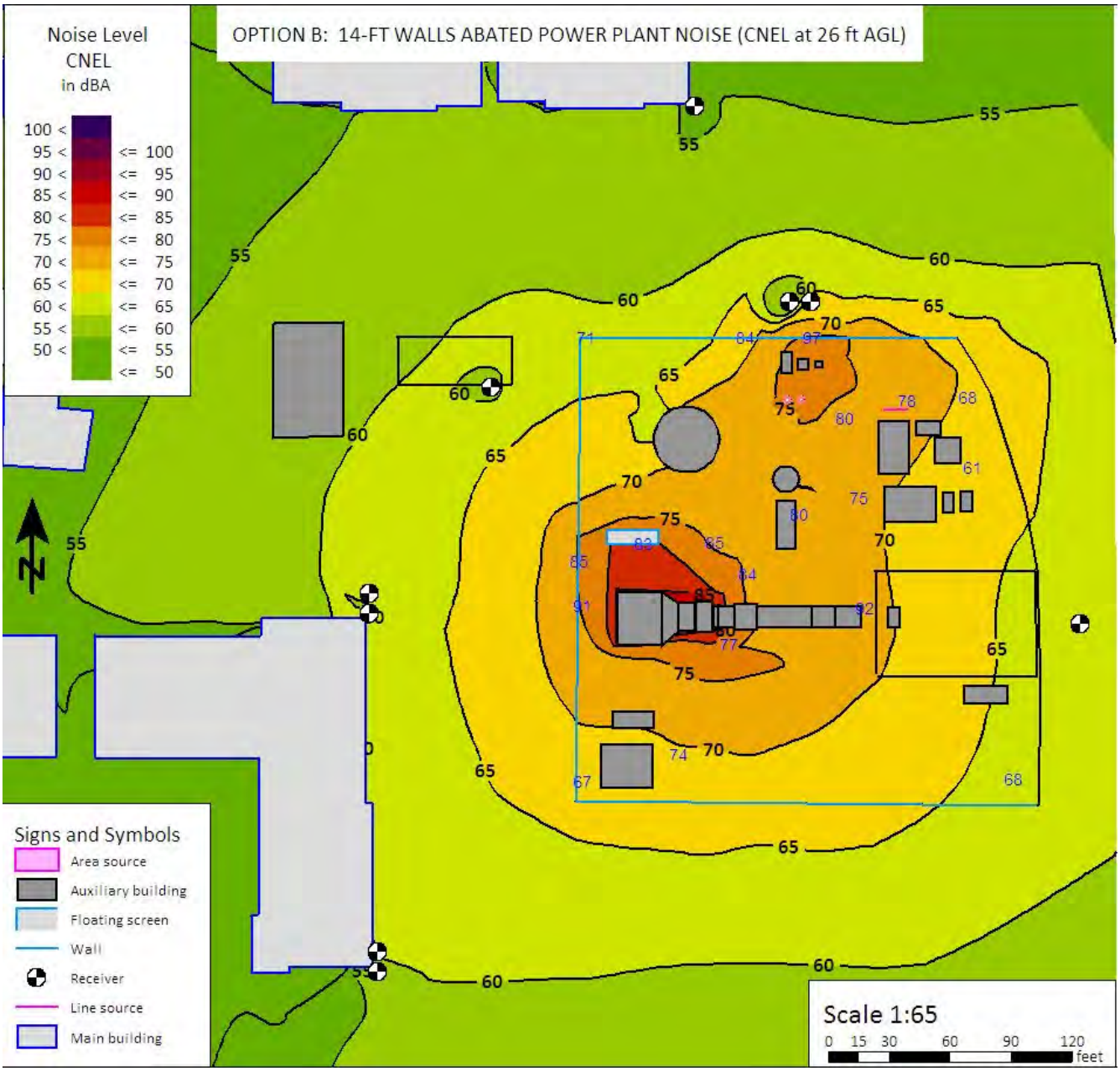

OPTION A: 16-FT WALLS ABATED POWER PLANT NOISE (5 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

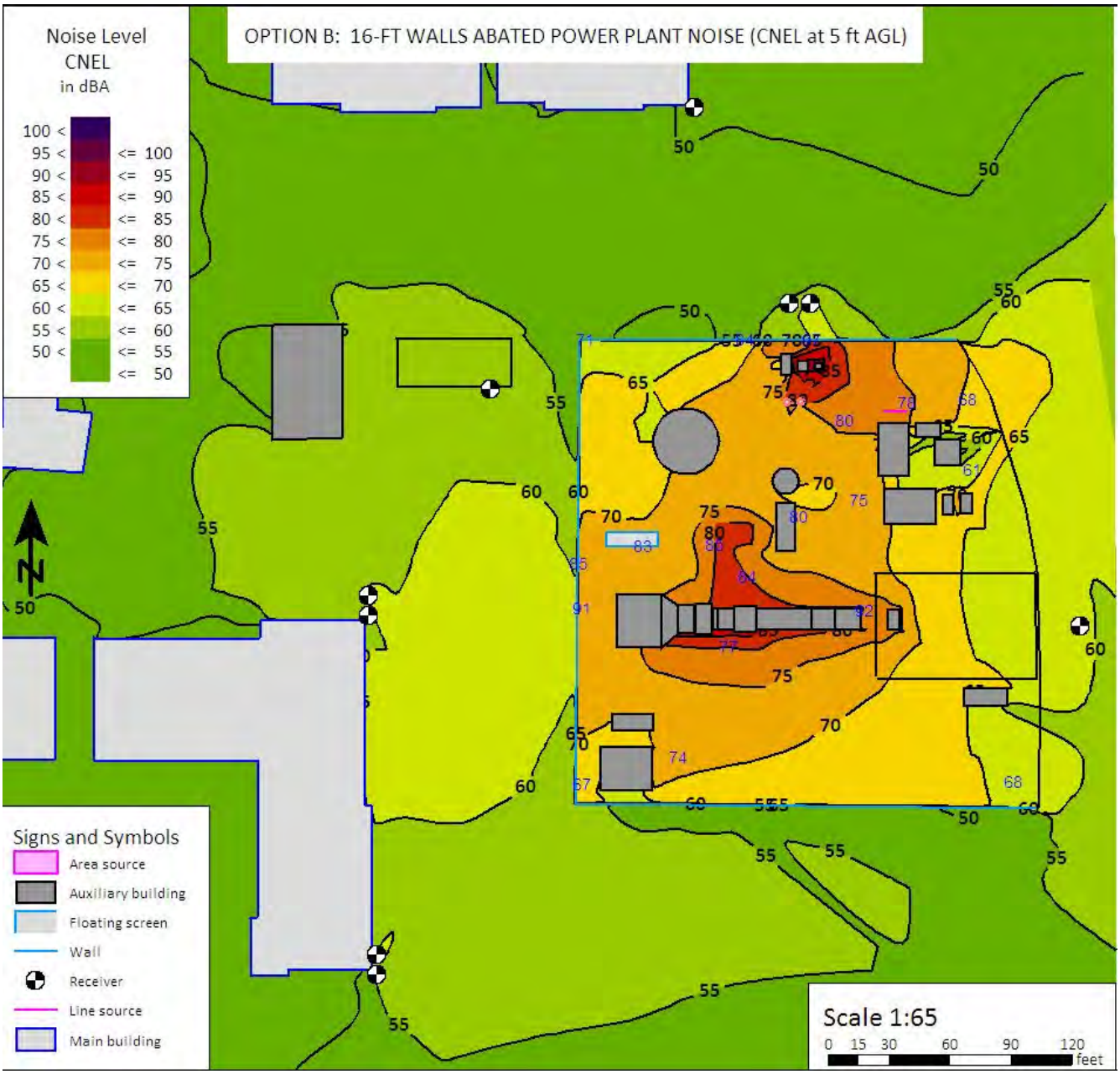

OPTION A: 16-FT WALLS ABATED POWER PLANT NOISE (26 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

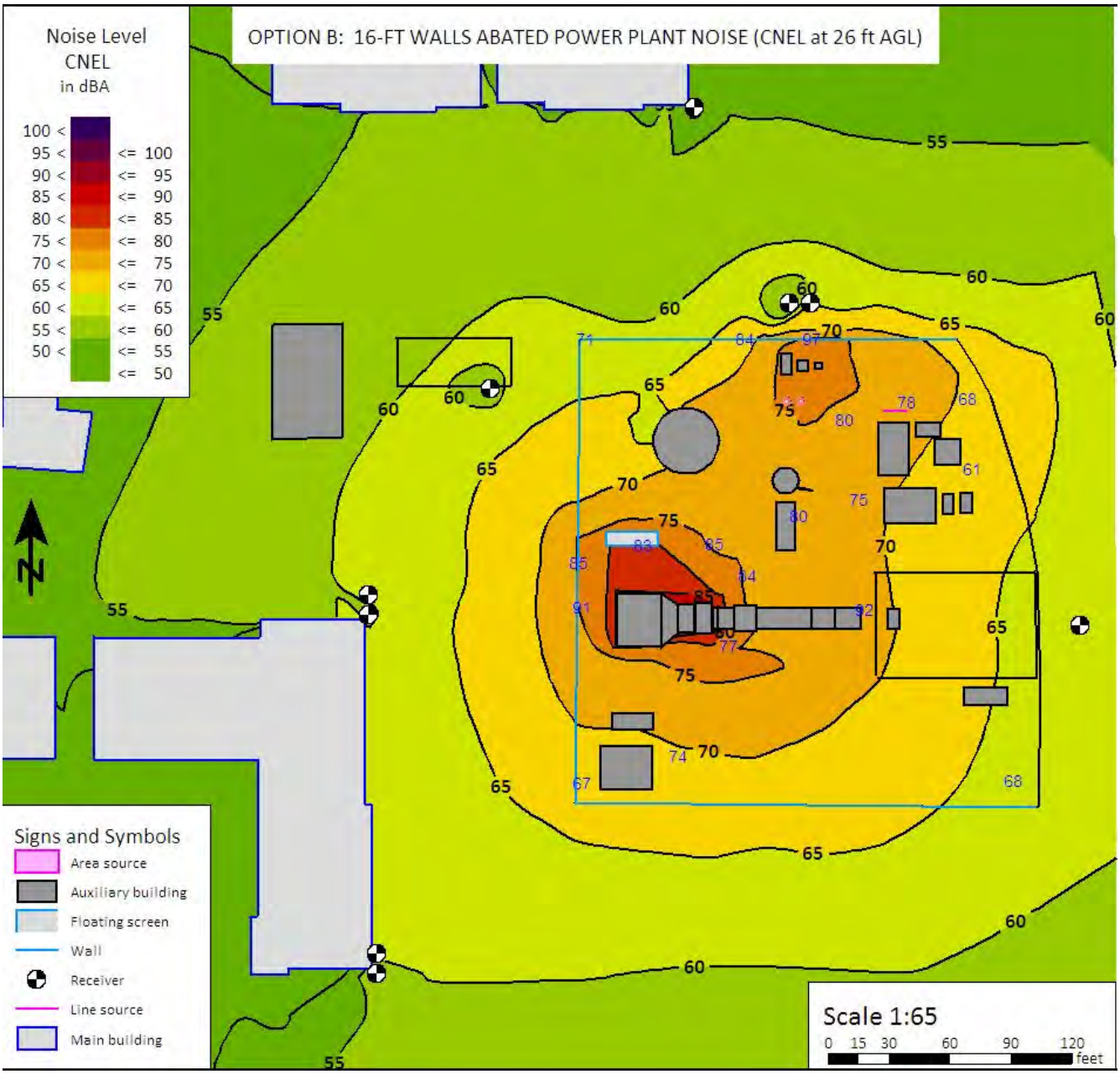

OPTION B: UNABATED POWER PLANT NOISE (CNEL at 5 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
C1
B
F
D
E
A
H
G
C2
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

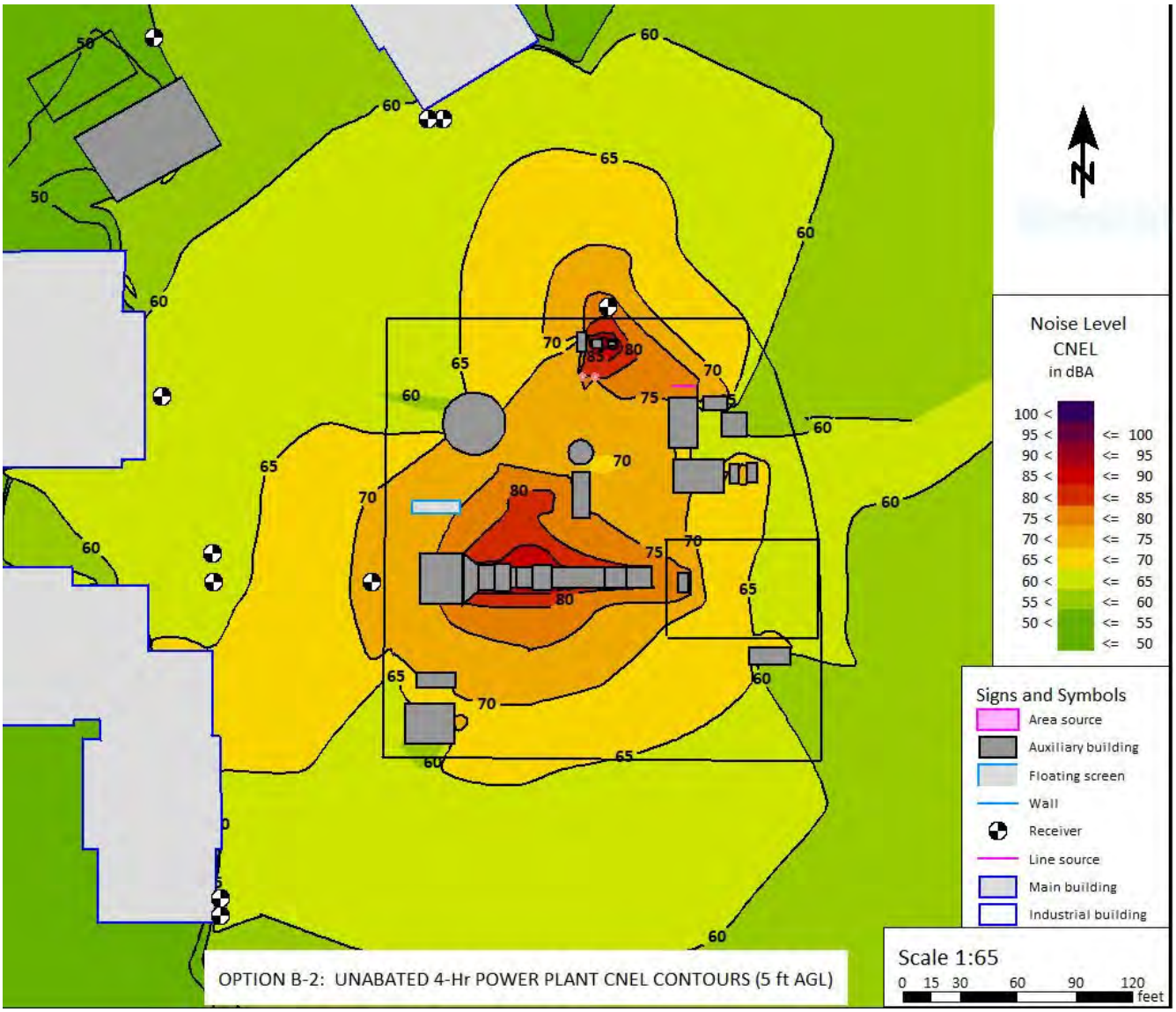

OPTION B: UNABATED POWER PLANT NOISE (CNEL at 26 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 70
70 < <= 75
65 < <= 70
60 < <= 65
55 < <= 60
50 < <= 55
<= 50
C1
D
E
A
G
C2
H
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

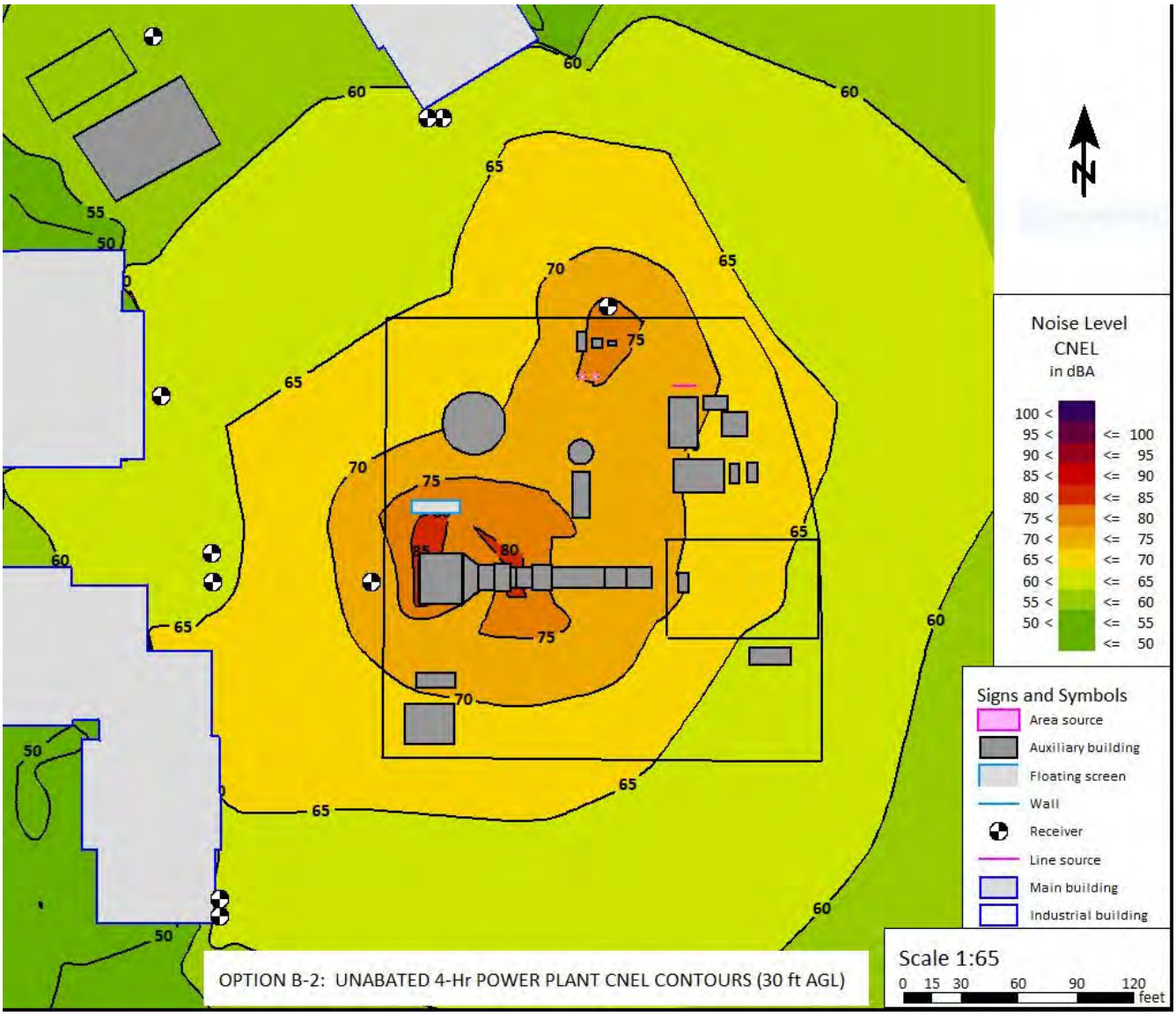

OPTION B: 14-FT WALLS ABATED POWER PLANT NOISE (CNEL at 5 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

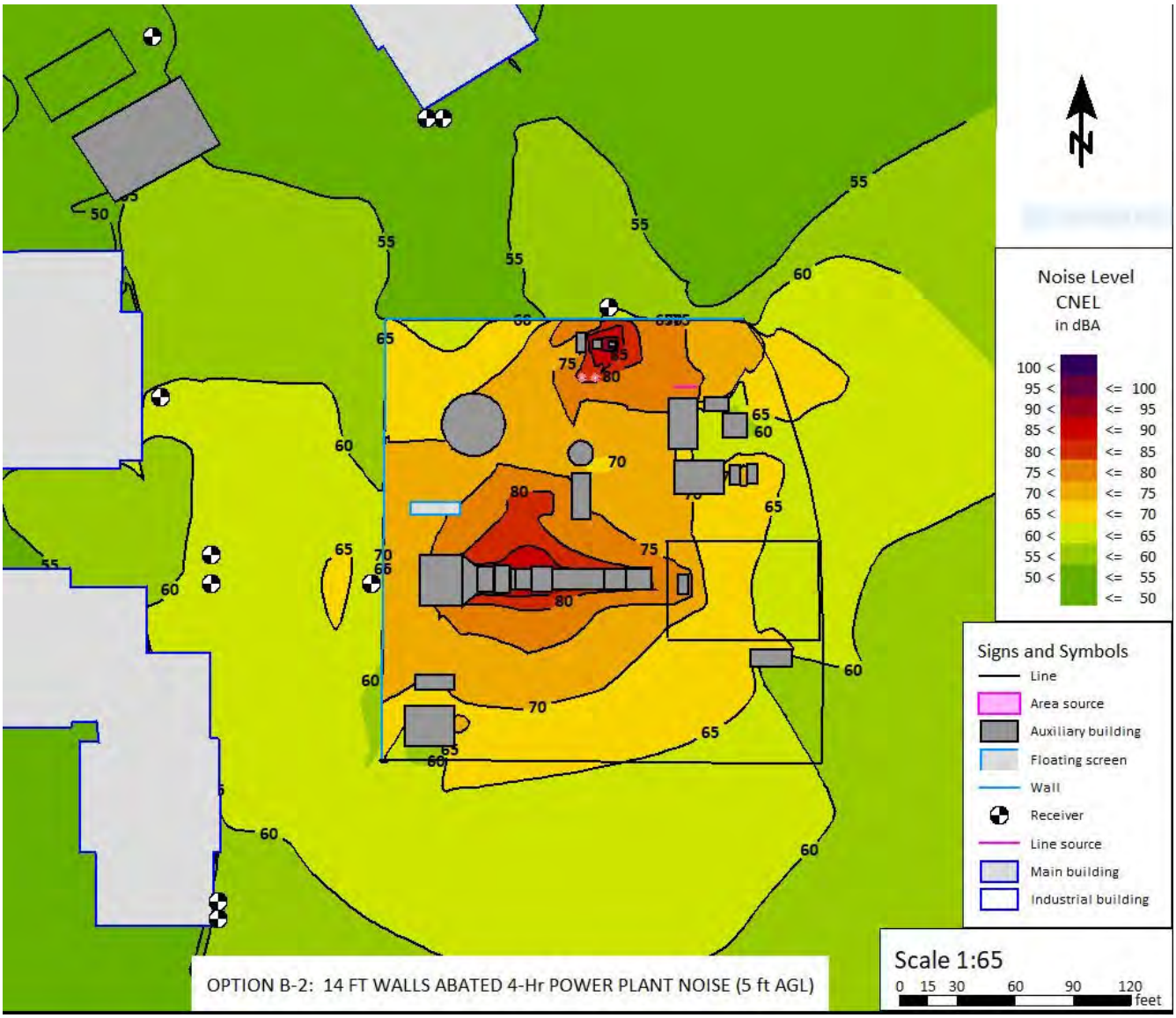

OPTION B: 14-FT WALLS ABATED POWER PLANT NOISE (CNEL at 26 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 85
75 < <= 80
70 < <= 75
65 < <= 70
60 < <= 65
55 < <= 60
50 < <= 55
<= 50
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

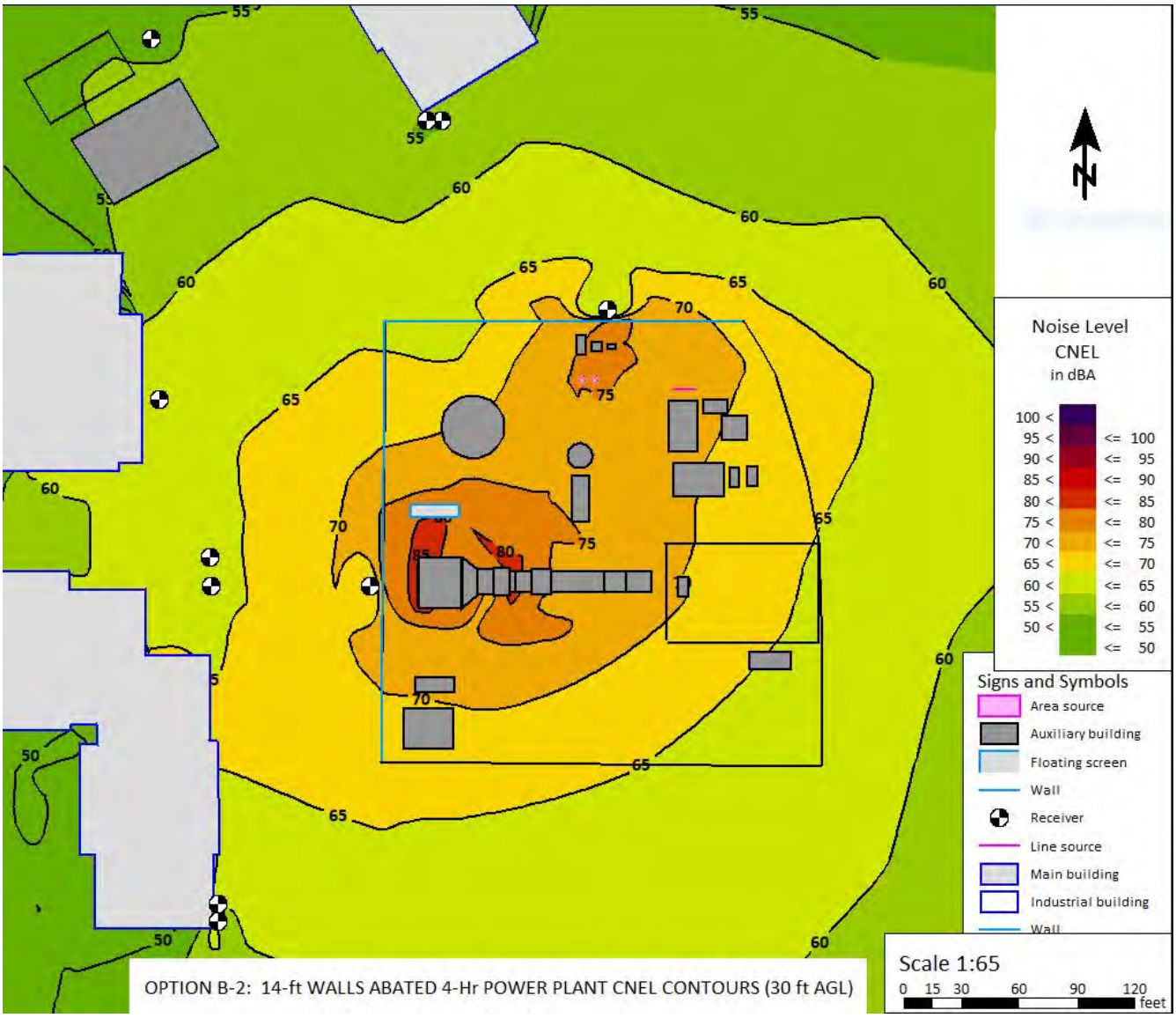

OPTION B: 16-FT WALLS ABATED POWER PLANT NOISE (CNEL at 5 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 85
75 < <= 80
70 < <= 75
65 < <= 70
60 < <= 65
55 < <= 60
50 < <= 55
<= 50
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

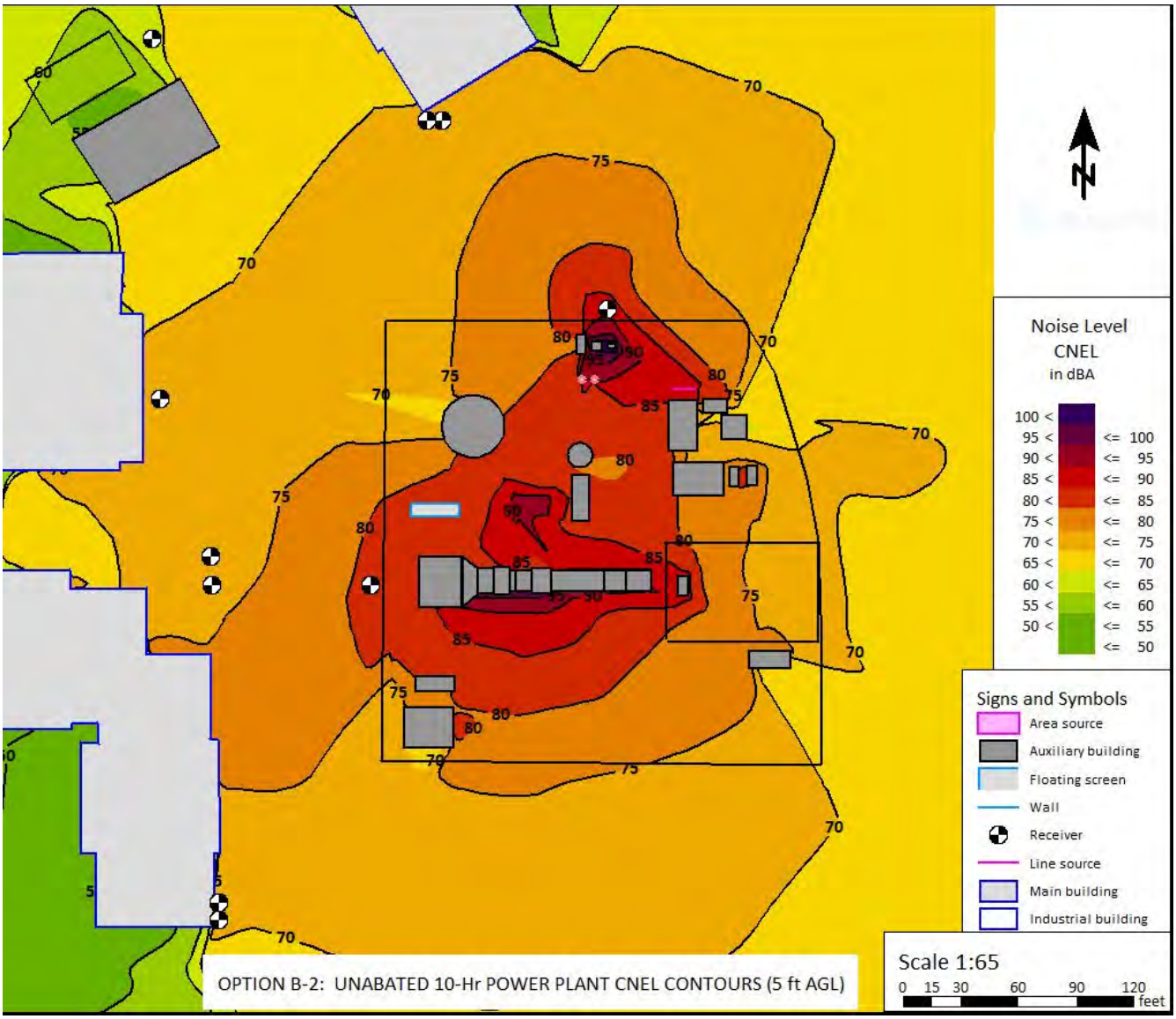

OPTION B: 16-FT WALLS ABATED POWER PLANT NOISE (CNEL at 26 ft AGL)
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 75
75 < <= 80
70 < <= 75
65 < <= 70
60 < <= 65
55 < <= 60
50 < <= 55
<= 50
N
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Scale 1:65
0 15 30 60 90 120
feet

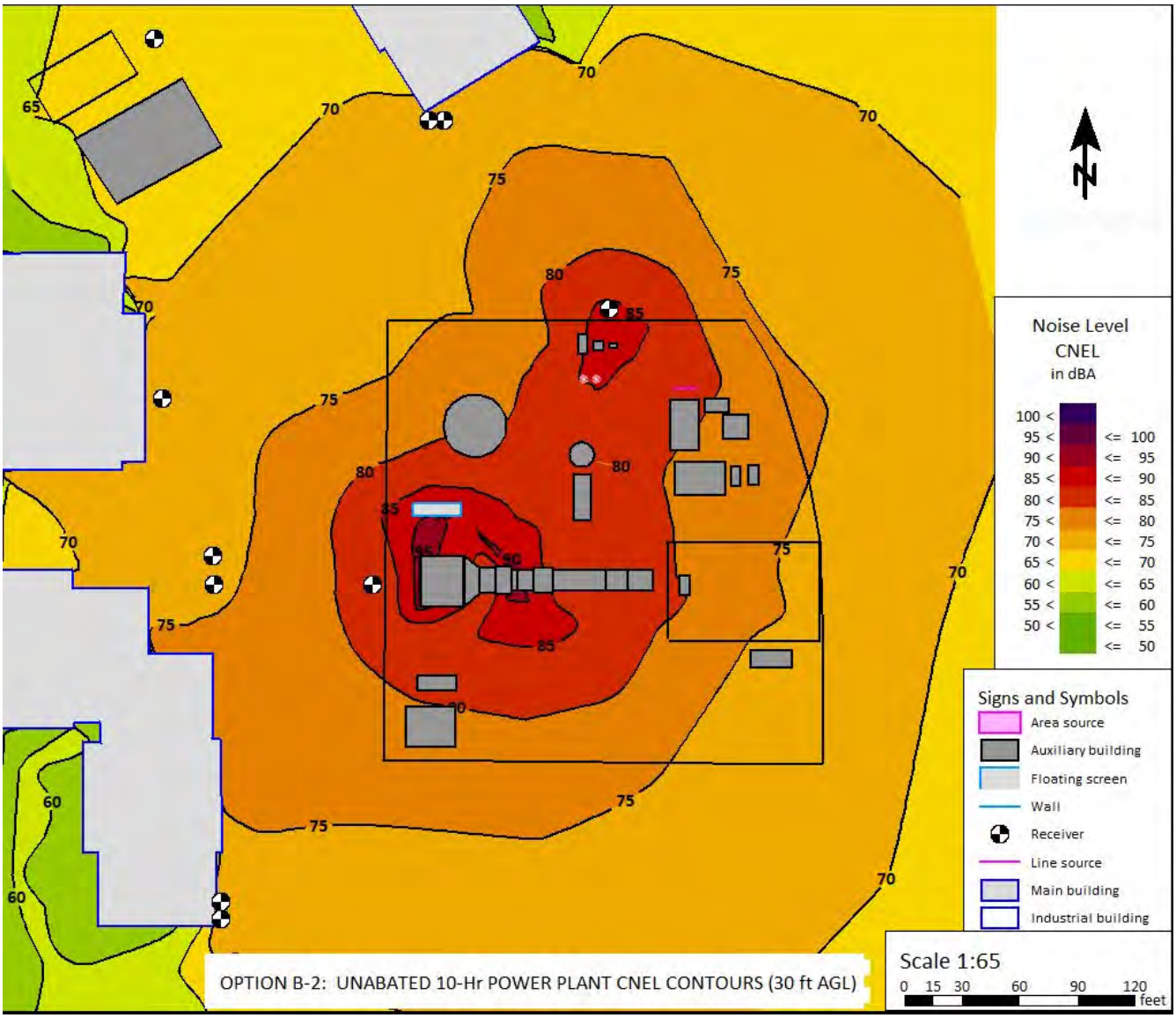

Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Industrial building
Scale 1:65
0 15 30 60 90 120
feet
OPTION B-2: UNABATED 4-Hr POWER PLANT CNEL CONTOURS (5 ft AGL)

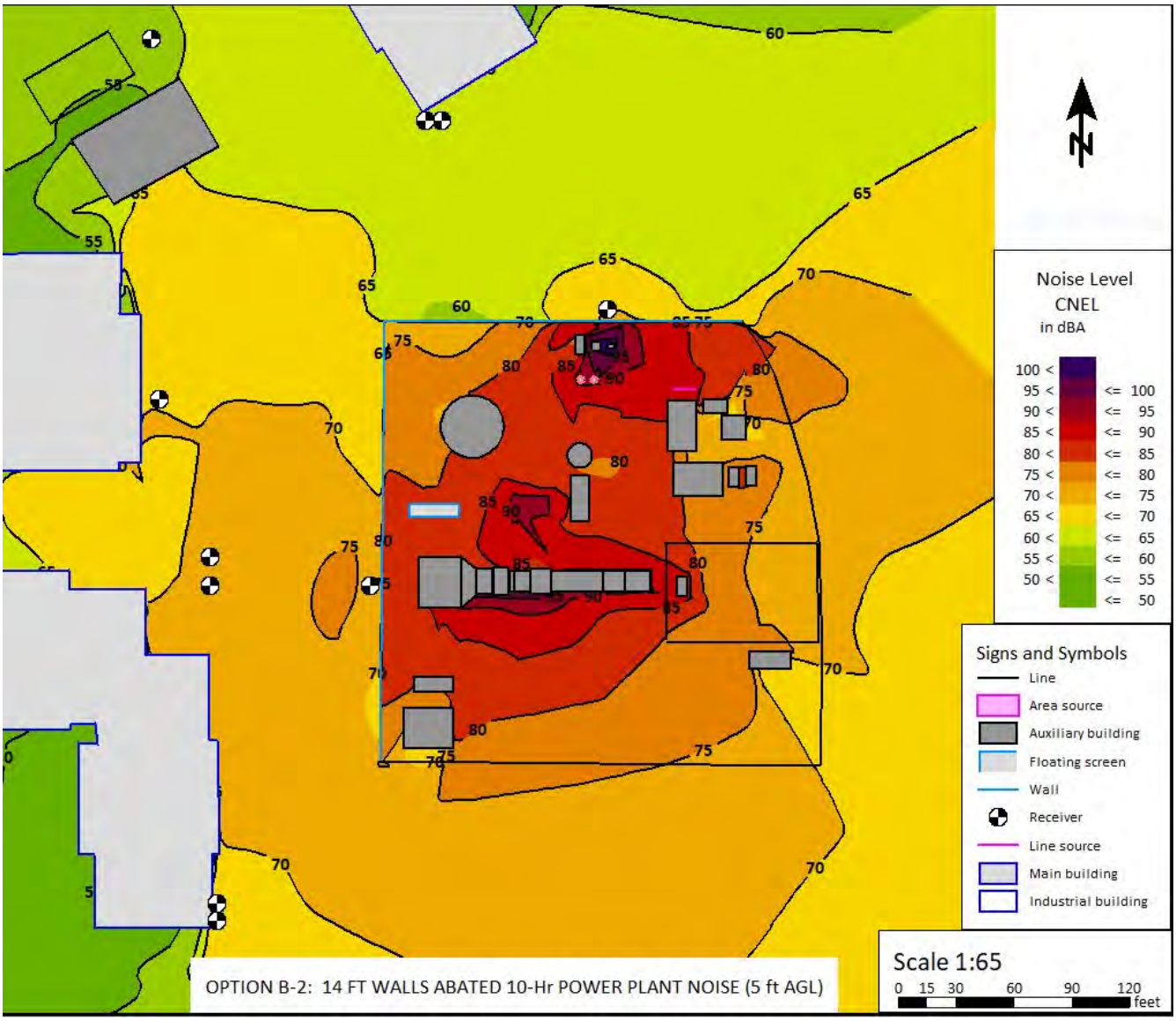

N
Noise Level
CNEL
in dBA
100 <
95 < <= 100
90 < <= 95
85 < <= 90
80 < <= 85
75 < <= 80
70 < <= 75
65 < <= 70
60 < <= 65
55 < <= 60
50 < <= 55
<= 50
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Industrial building
Scale 1:65
0 15 30 60 90 120
feet
OPTION B-2: UNABATED 4-Hr POWER PLANT CNEL CONTOURS (30 ft AGL)

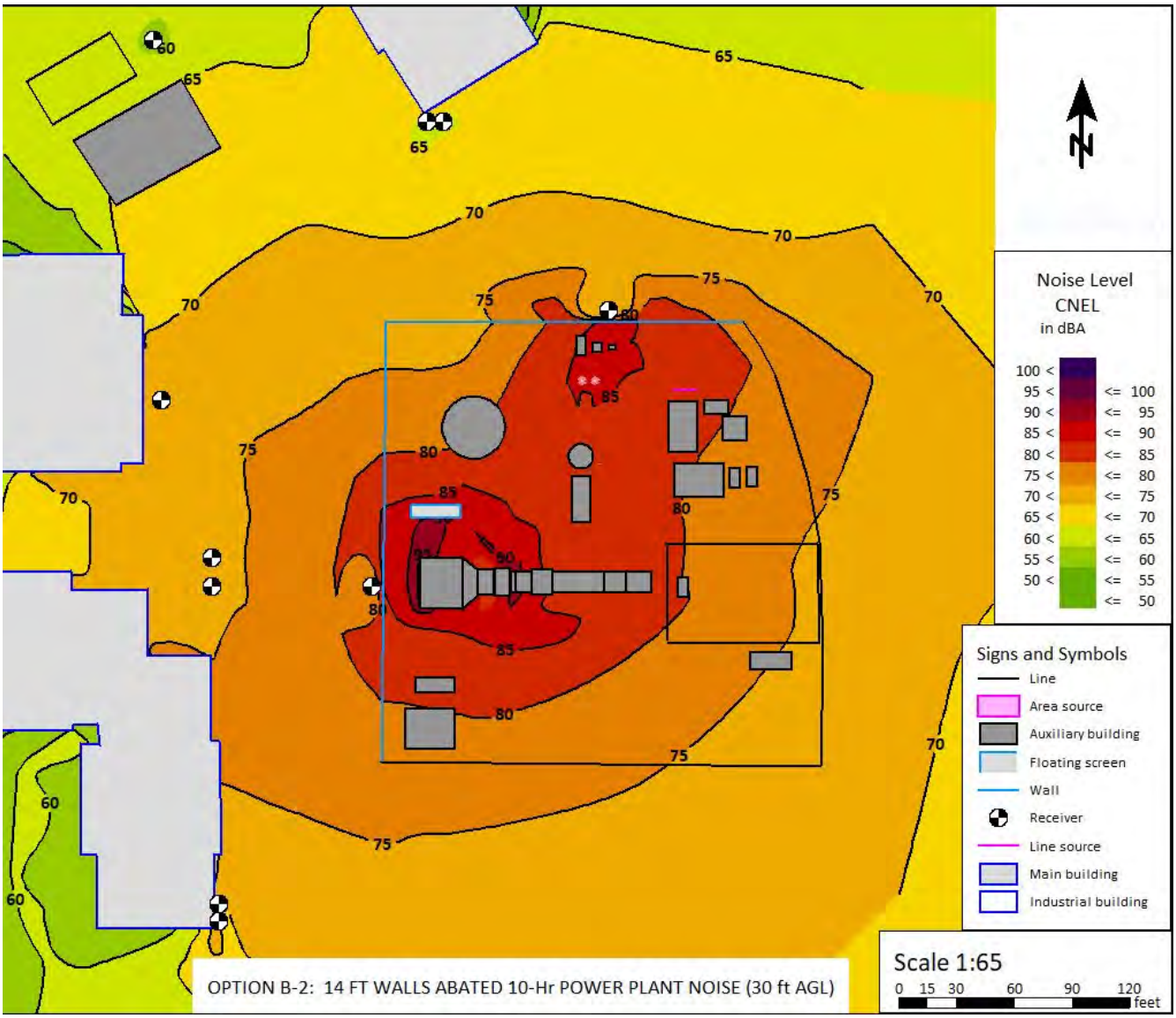

N
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
Signs and Symbols
Line
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Industrial building
Scale 1:65
0 15 30 60 90 120
feet
OPTION B-2: 14 FT WALLS ABATED 4-Hr POWER PLANT NOISE (5 ft AGL)


Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Industrial building
Wall
Scale 1:65
0 15 30 60 90 120
feet
OPTION B-2: 14-ft WALLS ABATED 4-Hr POWER PLANT CNEL CONTOURS (30 ft AGL)


Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Industrial building
Scale 1:65
0 15 30 60 90 120
feet
OPTION B-2: UNABATED 10-Hr POWER PLANT CNEL CONTOURS (5 ft AGL)


Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
Signs and Symbols
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Industrial building
Scale 1:65
0 15 30 60 90 120
feet
OPTION B-2: UNABATED 10-Hr POWER PLANT CNEL CONTOURS (30 ft AGL)


N
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 70
65 < <= 65
60 < <= 60
55 < <= 55
50 < <= 50
Signs and Symbols
Line
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Industrial building
Scale 1:65
0 15 30 60 90 120
feet
OPTION B-2: 14 FT WALLS ABATED 10-Hr POWER PLANT NOISE (5 ft AGL)


N
Noise Level
CNEL
in dBA
100 < <= 100
95 < <= 95
90 < <= 90
85 < <= 85
80 < <= 80
75 < <= 75
70 < <= 75
65 < <= 70
60 < <= 65
55 < <= 60
50 < <= 55
<= 50
Signs and Symbols
Line
Area source
Auxiliary building
Floating screen
Wall
Receiver
Line source
Main building
Industrial building
Scale 1:65
0 15 30 60 90 120
feet
OPTION B-2: 14 FT WALLS ABATED 10-Hr POWER PLANT NOISE (30 ft AGL)

APPENDIX H
TRAFFIC IMPACT ANALYSIS

KD Anderson & Associates, Inc.
Transportation Engineers

REVIEWER NOTE:

SINCE PREPARATION OF THIS STUDY, THE ANALYSIS OF POTENTIAL VMT MITIGATION MEASURES HAS BECOME OUTDATED AND IS NO LONGER CONSIDERED VALID. REPLACEMENT ANALYSIS OF VMT MITIGATION POTENTIAL IS PROVIDED IN CHAPTER 15.0 TRANSPORTATION OF THE EIR.

March 25, 2022

Mr. Charlie Simpson
BaseCamp Environmental, Inc.
802 West Lodi Avenue
Lodi, CA 95240

Subject: ***Lakehouse Project, Lodi, CA – Analysis of Residential Vehicle Miles Traveled***

Dear Mr. Simpson:

The proposed Lakehouse project is located in the northwest portion of the City of Lodi in San Joaquin County. The site is immediately north of Turner Road and east of Lower Sacramento Road, between Lower Sacramento Road and Mills Avenue. The proposed project includes the construction and operation of a hotel, apartment units, and commercial space on an approximately eight-acre existing undeveloped parcel. Additional project components include sidewalks, parking, landscaping, and utility improvements.

As noted above, the Lakehouse project includes a residential component and non-residential components. The residential component is composed of 150 multi-family apartment units. The purpose of this report is to present an analysis of the impacts of the residential component on vehicle miles traveled (VMT). Analysis of other transportation-related topics and other components of the project are addressed separately.

This report presents the following:

- background information,
- VMT significance threshold, and
- VMT analysis results.

Background Information

As noted in the California Governor's Office of Planning and Research (OPR) document *Technical Advisory on Evaluating Transportation Impacts in CEQA* (California Governor's Office of Planning and Research 2018),

> "Senate Bill 743 (Steinberg, 2013), which was codified in Public Resources Code section 21099, required changes to the guidelines implementing CEQA (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.) regarding the analysis of transportation impacts. . . OPR has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the CEQA Guidelines that identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by "level of service" and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3).)"

Vehicle Miles Traveled Significance Threshold

The OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* provides recommended thresholds for determining the significance of VMT impacts associated with land use development projects. Specific thresholds are provided for residential, office, and retail commercial types of development. The technical advisory generally recommends establishing a 15 percent reduction in VMT, compared to a baseline, as a significance threshold. That is, if a project would result in a reduction of at least 15 percent in VMT, compared to a baseline, the project can be considered to have a less than significant impact. The significance threshold may be thought of as 85 percent of baseline conditions (100 percent less 15 percent equals 85 percent). A project that would not result in a reduction of at least 15 percent is considered to have a significant impact. The technical advisory notes,

> "In summary, achieving 15 percent lower per capita (residential) or per employee (office) VMT than existing development is both generally achievable and is supported by evidence that connects this level of reduction to the State's emissions goals."

Consistent with the OPR technical advisory, the City of Lodi has established a series of thresholds for determining the significance of a project-related transportation impact under CEQA. These thresholds are presented in the *Lodi SB 743 Implementation Guidelines Report* (Gard pers. comm.). For residential land use types, the SB 743 guidelines notes,

> "The project would cause a significant transportation impact if it would generate an average VMT per dwelling unit that is greater than 85 percent of the city-wide average for that land use type."

KDA

The enclosed **Table 1** shows city-wide average VMT per land use quantity for residential land uses in the City of Lodi, and the values that are 85 percent of the city-wide average. The 85 percent values are applied in this report as significance thresholds for VMT. The values shown in **Table 1** for Multi-Family Units are applied in this report to the residential component of the Lakehouse project.

Analysis Results

As specified in the *Lodi SB 743 Implementation Guidelines Report*, the evaluation of the residential component of the Lakehouse project was conducted using the City of Lodi Travel Demand Model (Gard pers. comm.). The results of this evaluation are shown in the enclosed **Table 2**.

- The Lodi Travel Demand Model estimates that the residential portion of the Lakehouse project would generate 10,254.6 VMT per day.
- The residential portion of the Lakehouse project would include 150 multiple-family dwelling units.
- The residential portion of the Lakehouse project would generate 68.4 VMT per dwelling unit (10,254.6 ÷ 150 = 68.4).

As shown in **Table 2**, the residential component of the Lakehouse project would result in 68.4 VMT per dwelling unit. This amount would be greater than the multiple-family residential significance threshold of 45.4 VMT per dwelling unit shown in **Table 1**. As a result, the impact of the residential component of the Lakehouse project on VMT is considered significant.

The *Lodi SB 743 Implementation Guidelines Report* does not include VMT mitigation measures specific to Lodi projects. Potential mitigation measures for significant VMT impacts have been compiled by the California Air Pollution Control Officers Association (CAPCOA) in their publication *Quantifying Greenhouse Gas Mitigation Measures - A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* (California Air Pollution Control Officers Association 2010). The CAPCOA document describes potential mitigation measures that address a wide range of land development projects; mitigation measures that are potentially applicable to the proposed project are described below. The numbering of the individual measures is drawn from the CAPCOA document.

The following descriptions of potentially applicable mitigation measures include estimated ranges of effectiveness for each measure published in the Butte County Association of Governments document *BCAG SB 741 Implementation* (Butte County Association of Governments 2021.). It should be noted the ranges of estimated effectiveness are not project-specific and would require additional analysis and interpretation to be applied to specific projects, including the Lakehouse project. In some cases, the high end of the ranges of effectiveness applies to large projects, projects

in highly urban settings, and projects with substantial alternative transportation infrastructure, for example commute rail facilities.

LUT-3 Increase Diversity of Urban and Suburban Developments. Having different types of land uses near one another can decrease VMT since trips between land use types are shorter and may be accommodated by non-auto modes of transport. For example when residential areas are in the same neighborhood as retail and office buildings, a resident does not need to travel outside of the neighborhood to meet his/her trip needs. The range of effectiveness of this measure as described by BCAG is from 0 to 12%.

The Lakehouse project includes both residential and non-residential components on-site and therefore provides a mix of land uses. The Lakehouse project is also in close proximity to existing residential uses in the surrounding neighborhood, the non-residential components of the project may provide some services to off-site existing residential uses. In a larger context, the project adds proposed high-density residential, hotel and commercial uses to a neighborhood that includes a regional park, elementary school, industrial uses, the Woodlake commercial area and the Woodbridge community center.

LUT-9 Improve Design of Development. A project satisfying this mitigation will include improved design elements to enhance walkability and connectivity. Improved street network characteristics within a neighborhood include street accessibility, usually measured in terms of average block size, proportion of fourway intersections, or number of intersections per square mile. Design is also measured in terms of sidewalk coverage, building setbacks, street widths, pedestrian crossings, presence of street trees, and a host of other physical variables that differentiate pedestrian-oriented environments from auto-oriented environments. The range of effectiveness of this measure as described by BCAG is from 3 percent to 21.3 percent.

The Lakehouse project as proposed includes substantial features that enhance walkability and connectivity. Project features include perimeter and internal on-site pathways and shade trees, as well as connections to and landscaping of existing public sidewalks along the west and south project site frontage. Off-site features include existing pedestrian sidewalks that extend north into the Woodbridge and east to Lodi Lake park; existing pedestrian crosswalks are in place at the northwest and southwest corners of the project site.

SDT-2 Provide Traffic Calming Measures. Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift will result in a decrease in VMT. Project design will include pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction requirements. Roadways

will be designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips with traffic calming features. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others. The range of effectiveness of this measure as described by BCAG is from 0 percent to 1.7 percent.

Some of these potential measures are already in place along the existing arterial streets that border the project to the west and south. Class II bike lanes are currently present along both sides of Lower Sacramento Road adjacent to the project site. It is recommended that the applicant install Class II bike lanes along the north side of Turner Road adjacent to the project site. Pedestrian improvements discussed above would further promote non-auto transportation. Existing marked crosswalks contribute to traffic calming and could be improved with additional safety measures to improve safety at these existing facilities. Planned landscaping along the adjoining streets would also contribute to traffic calming.

TRT-4 Implement Subsidized or Discounted Transit Program. A project satisfying this mitigation will provide subsidized/discounted daily or monthly public transit passes. The project may also provide free transfers between all shuttles and transit to participants. These passes can be partially or wholly subsidized by the employer, school, or development. Many entities use revenue from parking to offset the cost of such a project. The range of effectiveness of this measure as described by BCAG is from 0.1 percent to 16 percent.

The project site is served by Grapeline public transit. While Grapeline headways are not those of highly urbanized areas, project contributions to encourage the use of public transit would help mitigate VMT impacts of both the residential and non-residential components of the Lakehouse project.

Implementation of the mitigation measures listed above would reduce the significant of the residential component of the Lakehouse project impacts on VMT, but to an uncertain degree. Implementation of the measures would not be considered adequate to reduce the impact identified by the City's VMT model to a less-than-significant level. There are no other known mitigation for the project's VMT effects. Therefore, the impact of the residential component of the Lakehouse project on VMT is considered significant and unavoidable.

Closing

Thank you for the opportunity to present BaseCamp Environmental with this analysis of the VMT impacts of the residential components of the Lakehouse project. If you have any questions about this report, please contact me at wshijo@kdanderson.com, or at 916/205-7032.

Sincerely,

KD Anderson & Associates, Inc.



Wayne Shijo
Project Manager

enclosures

KDA

REFERENCES

DOCUMENTS CITED

Butte County Association of Governments. 2021. BCAG SB 741 Implementation. Chico, CA.

California Air Pollution Control Officers Association. 2010. Quantifying Greenhouse Gas Mitigation Measures - A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures. Sacramento, CA.

California Governor's Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. Sacramento, CA.

PERSONAL COMMUNICATIONS

Gard, John. P.E. Principal. Fehr & Peers. July 23, 2020 E-mail message to Charlie Simpson, BaseCamp Environmental.

Table 1. City of Lodi Average Vehicle Miles Traveled and Significance Thresholds for Residential Land Use Types

Type of Land Use	Unit of Measure	VMT per Unit of Measure	
		City-Wide Average	Significance Threshold
Single-Family Units	Dwelling Units	80.7	68.6
Multi-Family Unit	Dwelling Units	53.4	45.4
Senior Units	Dwelling Units	21.3	18.1

Notes: "VMT" = vehicle miles traveled.
All values are expressed in miles.
Significance threshold is 85 percent of city-wide average.

Table 2. Lakehouse Project
Vehicle Miles Traveled per Land Use Quantities -
Residential Component

Travel and Land Use Categories	Vehicle Miles Traveled and Land Use Quantities
Vehicle Miles Traveled for Residential Component	10,254.6
Project Multiple-Family Dwelling Units	150
Project-Related Residential Vehicle Miles Traveled per Dwelling Unit	68.4

Source: City of Lodi Travel Demand Model.

FEHR PEERS

TECHNICAL MEMORANDUM

Date: September 14, 2022

To: Dorothy Kam, City of Lodi

From: John Gard, Fehr & Peers

Subject: ***VMT Analysis for Commercial Component of Lakehouse Project***

RS22-4156

This technical memorandum presents our Vehicle Miles Traveled (VMT) analysis for the commercial component of the proposed Lakehouse Mixed-Use Development project in Lodi. This memorandum is organized into the following sections:

- Project Description
- Methodology and Thresholds of Significance
- Data Collection
- VMT Analysis
- Conclusions

PROJECT DESCRIPTION

The Lakehouse project site would be situated in the northeast quadrant of the Turner Road/Lower Sacramento Road intersection in the northern portion of the City of Lodi. According to the *Traffic Impact Study for the Lakehouse Project* (KD Anderson Transportation Engineers, March 25, 2022), the commercial component of Lakehouse project would consist of the following land uses:

- 92-room hotel
- 70-seat restaurant (within the hotel)
- 18,500 square feet of retail
- Banquet room with seating for approximately 200 guests

Although not part of this study, there is also a residential component to the project that consists of 183 multi-family dwelling units.

METHODOLOGY AND THRESHOLDS OF SIGNIFICANCE

Hotels are amongst the most challenging uses to analyze for potential VMT impacts given their differing clientele and purposes for overnight stays. Some hotels cater to business travelers, while others are situated along interstate freeways to attract long-distance travelers. Still others are destinations in and of themselves or provide access to recreational/entertainment sites nearby. The

Lakehouse hotel arguably fits best into the third category given its proposed on-site amenities and proximity to downtown Lodi and nearby wineries / vineyards.

The *SB 743 Implementation Guidelines for City of Lodi* (Fehr & Peers, July 2020) provides guidance for how VMT analysis should be performed for land development projects in the city. Page 14 of that report states the following with regarding to VMT threshold for unique or atypical projects:

> *Special consideration will be necessary to analyze VMT impacts for land uses that do not fit into any of the above eight categories. Common examples are: hotels, medical centers, wineries, churches, schools/colleges, specialty retail uses, etc. These uses should be analyzed on a case-by-case basis using available information and applying the general intent of the Technical Advisory.*

For purposes of VMT analysis of land use projects, the City of Lodi has chosen to utilize a threshold of significance (consistent with the California Office of Planning & Research recommendations) that is 15 percent below that of existing development in the city. In this instance, existing development represents other hotels within the City limits with similar amenities.

While a number of hotels exist within the City of Lodi, most are situated along the State Route 99 corridor and cater to highway or business travelers. The Wine and Roses Hotel, Restaurant, and Spa is situated at 2505 West Turner Road in Lodi, about ¼ mile to the west of the project site. Through discussions with the City and the environmental consultant (Base Camp) for this project, it was determined that the travel characteristics of the Wine and Roses Hotel, Restaurant, and Spa would be similar to that of the Lakehouse project, making it a good comparative site to study.

DATA COLLECTION

According to its website, the Wine and Roses Hotel, Restaurant, and Spa consists of the following major on-site amenities (not a comprehensive list of all amenities):

- 66 rooms
- Spa
- On-site restaurant
- 7,000 square-foot conference center

It is apparent that these two hotels are generally comparable in terms of their size and on-site amenities (e.g., both have a restaurant and space for public gatherings). However, the Wine and Roses Hotel features a full-service spa while the Lakehouse project would feature 18,500 square feet of retail. Additionally, the Lakehouse project includes a residential component, while Wine and Roses does not.

StreetLight Data, Inc. is a company that obtains anonymous traveler information from mobile apps on cell phones. A mobile device dataset was purchased from this company for trips that started or ended at the Wine and Roses Hotel. This data represented travel that occurred on mid-weekdays (i.e., Tuesday, Wednesday or Thursday) in September/October 2019 (i.e., pre-COVID conditions). Note that the dataset represents a sample of travel behavior and not all trips made. A total of 2,000 individual trips were obtained from this dataset, which is adequate to derive findings related to travel behavior.

Trips were mapped to develop a spatial distribution of inbound and outbound trips (see Appendix A). Key findings from these plots are:

- A significant percentage generated by the Wine and Roses hotel started or ended within Lodi.
- Of those trips that had origins/destinations beyond Lodi, many were in Stockton or various locations to the east and west of Lodi (where a variety of wineries exist).
- Some trips originated from or had destinations in more remote locations such as the Bay Area, the foothills, and Stanislaus County.

Chart 1 show the distribution of trip lengths for Wine & Roses Hotel trips. As shown, one-quarter of all trips were 3 miles or less (i.e., typically remained within Lodi). Another one-quarter were 3-7 miles in length. Nearly 30% of trips were at least 20 miles of longer. Of the 10% of trips that were at least 60 miles in length, they averaged 95 miles.

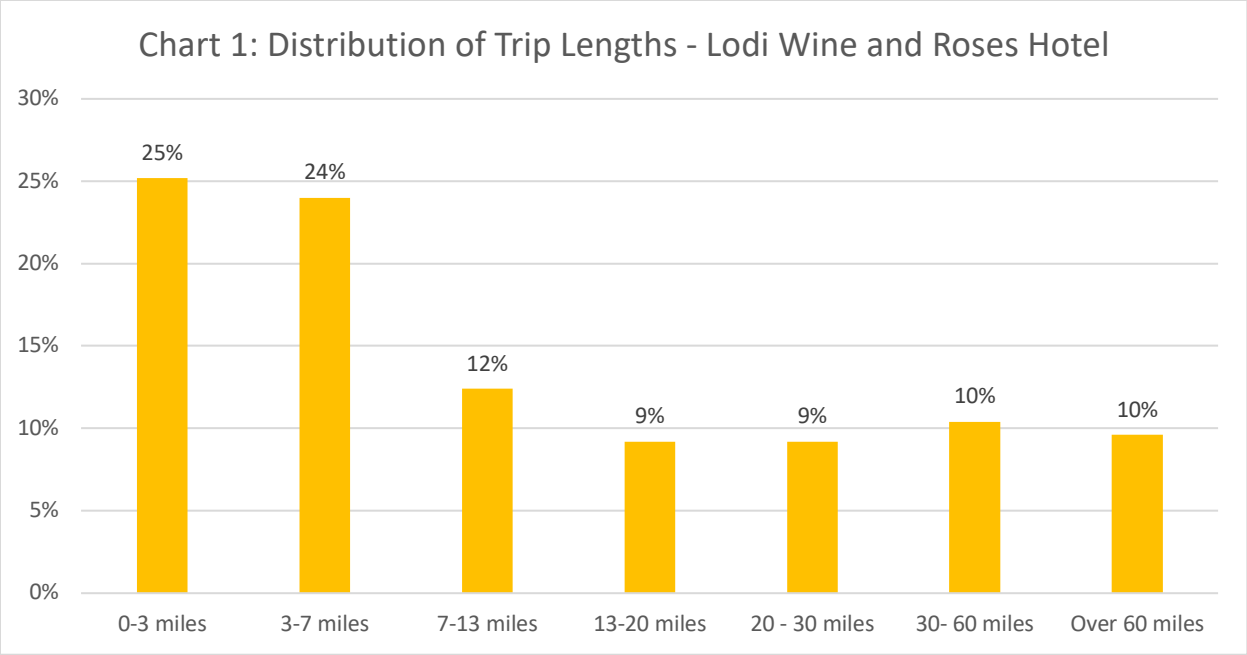


Chart 2 shows the estimated number of trips made by employees versus guests at the Wine & Roses Hotel. As shown, the overwhelming majority (91%) of trips are made by guests.

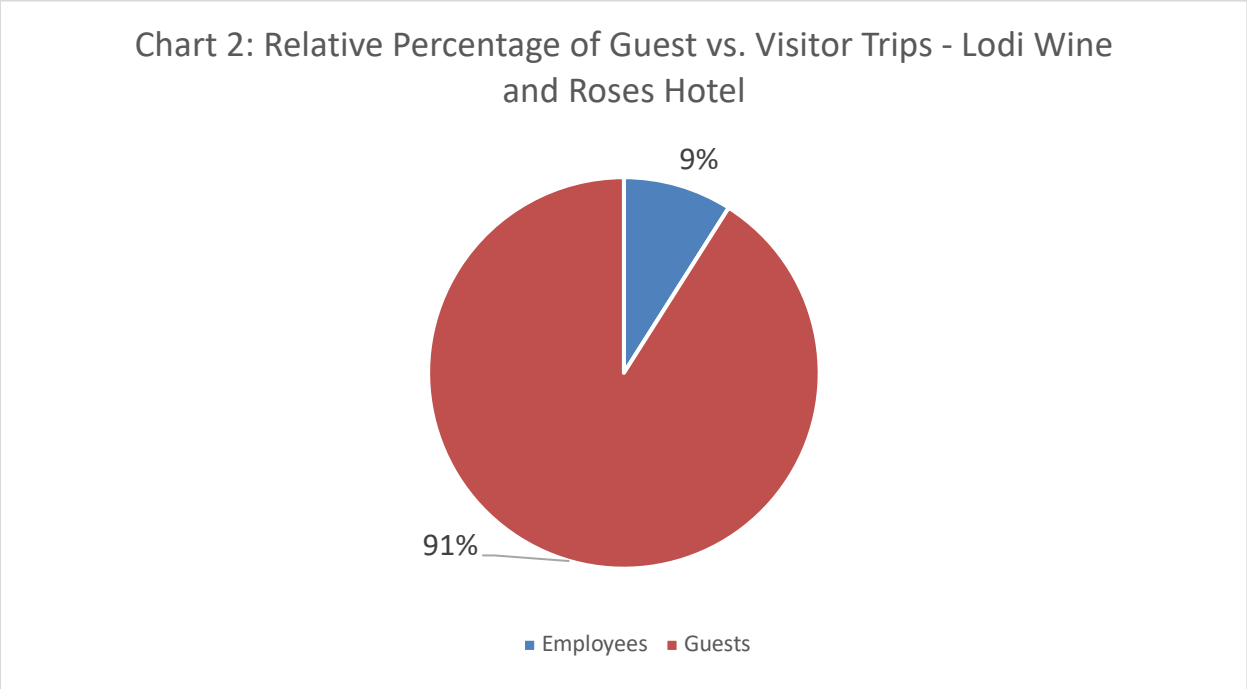


Table 1 shows the median (i.e., 50th percentile) and average length of trips generated by the Wine & Roses Hotel. As shown, the average trip length (19.6 miles) is much longer than the median trip length. This is caused by the considerable length of the longest 10% of trips, which drives up the average. This is a common phenomenon when reviewing trip length distribution data.

Table 1: Median and Average Trip Lengths for Lodi Wine & Roses Hotel	
Measure	**Distance**
Median Trip Length	7.9 miles
Average Trip Length	19.6 miles
Source: *Fehr & Peers, 2022 based on StreetLight Data, Inc. collected during September/October 2019.*	

VMT ANALYSIS

The *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, 2021) describes the Hotel (Land Use Category 310) as "a place of lodging that provides sleeping accommodations and supporting facilities such as a full-service restaurant, cocktail lounge, meeting rooms, banquet room, and convention facilities." Accordingly, the dataset from which trip generation rates are derived presumably includes restaurant and banquet room space similar to what is proposed for the Lakehouse project. **Table 2** shows the Lakehouse Hotel's estimated daily trip generation (inclusive of trips generated by the on-site restaurant and banquet space).

Table 2: Lakehouse Hotel Daily Trip Generation

Land Use	Number of Rooms	Trip Rate [1]	Daily Trips
Lakehouse Hotel	92	7.99 trips per room	735

Note:
[1] Source: *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, 2021).
Source: *Fehr & Peers, 2022*.

A land use project's VMT is simply the number of daily trips it generates multiplied by the average length of those trips. This calculation is shown in **Table 3** for the Lakehouse Hotel. As shown, prior to any other adjustments, the Lakehouse Hotel VMT would be 14,406 miles per day[1]. With adjustments made for internal trips between the hotel and the retail and residential, VMT would be reduced to 14,296, a 1% decrease.

Table 3: Lakehouse Hotel VMT Estimate

Land Use	Daily Trips [1]	Average Trip Length [2]	VMT
Lakehouse Hotel	735	19.6 miles	14,406
		Adjustments for internal trips [3]	-110
		Adjusted Total	14,296

Note:
[1] Source: *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, 2021).
[2] Average trip length based on observations from nearby Lodi Wine and Roses Hotel.
[3] According to the *Traffic Impact Study for the Lakehouse Project*, 10% of daily project trips would remain internal to the project site. Internalized trips will primarily replace otherwise shorter external trips (and not long distance trips). VMT reduction calculated as follows: 735 daily trips * 10% internal * 50% for hotel-only trip end * 3 miles = 110 miles.
Source: *Fehr & Peers, 2022 based on StreetLight Data, Inc. collected during September/October 2019.*

[1] This VMT estimate is inclusive of the project's hotel rooms, on-site restaurant, and banquet space. VMT associated with the project's retail component is discussed later.

Prior to any adjustments, VMT generation rates (on a per hotel room basis, for instance) are expected to be identical for the Lakehouse Hotel and Wine and Roses Hotel given their similar locations, on-site amenities, and expected clientele. The resulting VMT ratio is 156.6 miles of travel per day per room[2]. The Lakehouse Hotel's VMT impact would be considered less than significant if it generated 15% below that average, which would be 133 VMT per room or less.

VMT Reduction Strategies

Various Transportation Demand Management (TDM) strategies would be necessary to reduce the project's VMT below current levels. Feasible TDM strategies were identified from the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA 2021). These strategies (and their range of effectiveness) are listed below:

1. Implement a voluntary Commute Trip Reduction (CTR) program (Individual effectiveness = 0% to 4%).
2. Implement an employee parking cash-out program (Individual effectiveness = 0% to 12%).
3. Construct or improve bike facility (Individual effectiveness = 0% to 0.8%).
4. Extend transit network hours (Individual effectiveness = 0% to 4.6%)
5. Increase transit service frequency (Individual effectiveness = 0% to 11.3%)
6. Reduce transit fares (Individual effectiveness = 0% to 1.2%)
7. Implement transit-supportive roadway treatments (Individual effectiveness = 0% to 1%).

Voluntary commute trip reduction (CTR) programs discourage single occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT. Voluntary CTR programs include the following elements: employer-provided services, infrastructure, and incentives for alternative modes such as ridesharing, discounted transit, bicycling, vanpool, guaranteed ride home, and information and marketing of those services. The effectiveness of a voluntary CTR is somewhat limited because employers are not mandated to participate, and monitoring/compliance is not required.

Table 4 displays the effectiveness of the above 7 TDM strategies if applied to the Lakehouse Hotel project. Many of the strategies are intended for employees. However, as shown in Chart 2, employees comprise only about 9% of daily trips. And when considering their much shorter lengths, they represent only 1.4% of total project VMT. This table indicates that the net effect of the 7 identified TDM strategies would be a 1.2% decrease in the hotel's total VMT.

[2] Calculated as follows: 14,406 VMT / 92 rooms = 156.6 VMT per room.

Table 4: TDM Strategy Effectiveness to Reduce Lakehouse Hotel VMT		
TDM Strategy [1]	**VMT Reduction [1]**	**Notes**
Voluntary commute trip reduction program	0.03%	Employee VMT is 1.4% of total VMT; assumes 50% of employees participate.
Employee parking cash-out program	0.1%	Employee VMT is 1.4% of total VMT; assumes 50% of employees participate.
Improve bike facility	0.1%	Employee VMT is 1.4% of total VMT; Class II bike lanes added to Turner Road along frontage
Extend transit network hours	0.05%	Assumes existing bus mode split is 2%.
Extend transit service frequency	0.6%	Assumes bus mode split is 2% and headways reduced from 60 to 30 minutes.
Reduce transit fares	0.04%	Assumes bus mode split is 2%, one-way fares decrease from $1,25 to $-0.75, and change only applies to Route 1.
Implement transit-supportive roadway treatments	0.01%	Assumes bus mode split is 2%, transit treatments are applied only on Route 1, and a 10% bus travel time savings achieved.
Overall Reduction	1.2%	Applies multiplicative dampening [2]

Note:
[1] Source: *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA 2021*) with specific inputs to Lodi (see notes).
[2] This accounts for diminishing overall effects when similar measures are simultaneously implemented.
Source: *Fehr & Peers, 2022.*

The following TDM strategies that could potentially be applicable to hotels were also considered, but rejected for specific reasons stated below:

- Pricing off-street parking is not considered feasible because it would put the project at an economic disadvantage and may hinder employee hiring (i.e., Lodi Wine and Roses Hotel offers free parking).
- Implement priced public on-street parking (i.e., on-street parking along project frontages is either prohibited via signage or infeasible due to on-street Class II bike lane).
- Improve street connectivity and community-based travel planning (i.e., are broader implementation strategies beyond an individual project).

A 1.2% VMT reduction translates into 173 fewer miles of travel per day. When added to the VMT savings (from Table 3) associated with internal trips, the total reduction in 283, or about 2% of the project's total. Thus, it is apparent that the effects of both internal trips and TDM strategies would not reduce the project's VMT to at least 15% below that of existing similar hotels in Lodi.

To achieve a greater reduction, a robust program that addresses longer-distance guest trips would need to be developed. This could potentially involve a variety of alternative mode options, such as:

- A shuttle that operates between the project site and Altamont Commuter Express (ACE) commuter rail station in Stockton, coupled with incentives to encourage travel to the hotel by ACE Train. In the longer term, a shuttle that would operate between the site and the downtown Lodi train station, which is a planned stop along the Valley Rail line (see https://sjjpa.com/wp-content/uploads/SJJPA_Valley-Rail_TIRCP-Fact-Sheet_RevC.pdf).
- Recreational shuttles that transport guests to various wineries in the area.
- Reducing the hotel component's parking supply and/or restricting the number of guest vehicles provided that parking management practices can assure the practice that only affects the hotel and not the retail or residential.

A more rigorous analysis would be required to attempt to quantify the VMT reduction effects of the above potential strategies.

VMT Analysis for Retail

The OPR Technical Advisory (2018)

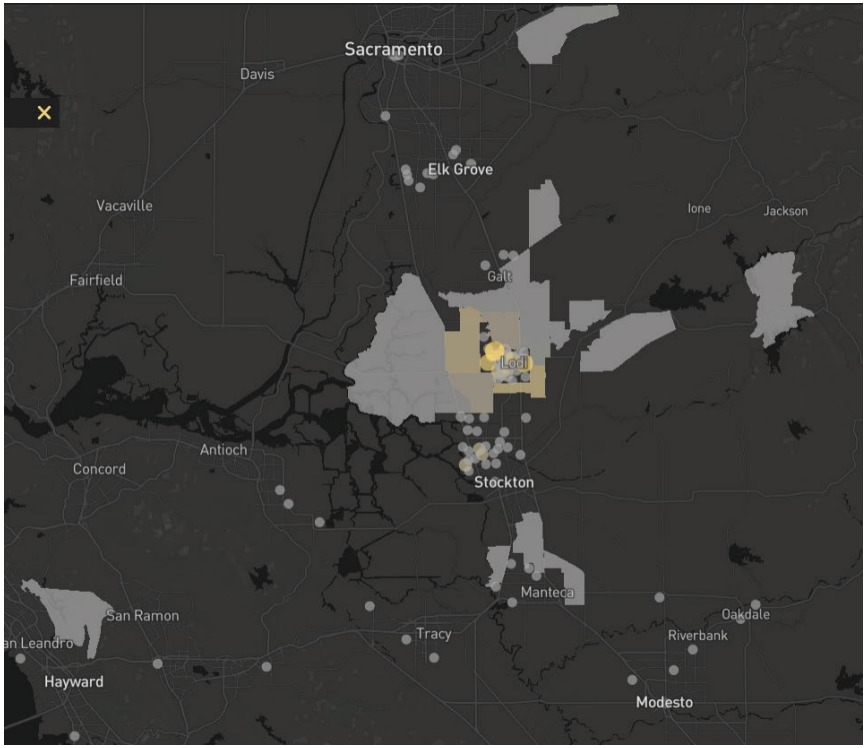
It is appropriate to consider the 18,500 square feet of retail as "locally serving for several reasons. First, it is well below the OPR threshold of 50,000 square feet of space as local retail. Second it is situated in an established area of the City where there are many residents, but not all that many small retail shops. Third, it may cater to residents and overnight guests at the sight, which is further evidence of serving the local population. For these reasons, VMT impacts associated with the retail use should be considered less than significant.

CONCLUSIONS

Even with feasible mitigation measures imposed, the Lakehouse Hotel's VMT would not be reduced to at least 15% below that of similar uses (i.e., other Lodi hotels with similar amenities). Therefore, VMT impacts associated with the hotel would be significant and unavoidable.

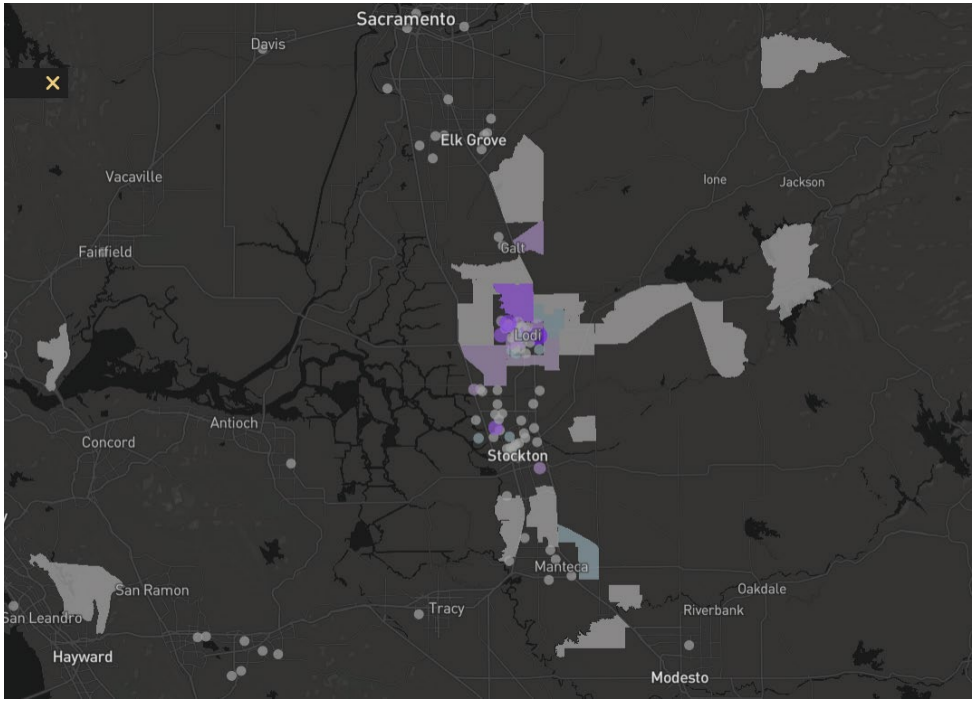
The VMT impacts of the retail uses would be less than significant.

Appendix A: StreetLight, Inc. Data Plots



Destinations of trips generated by Wine and Roses Hotel

Notes: Yellow circles/zones represent larger numbers of trips than grey circles/zones.



Origin of trips to Wine and Roses Hotel

Notes: Purple circles/zones represent larger numbers of trips than grey circles/zones.

APPENDIX I
COMMUNITY SUPPORT LETTERS

LODI
CALIFORNIA
behind the wine

February 15, 2023

John Della Monica
Community Development Director
City of Lodi
221 W. Pine St.
Lodi, CA 95240

Re: Lakehouse Project

Dear John:

Visit Lodi is happy to support the Lodi Lakehouse project. As the destination marketing organization for the City of Lodi, we are acutely aware of the need for a variety of lodging property types to accommodate our growing visitation numbers. Lodi's lodging inventory currently consists of two extended-stay properties, mid-scale franchises, independently owned motels, and vacation home rentals. However, we have only one resort property that offers a restaurant and full-service amenities. Having another upscale property will give our resort-seeking visitors a choice in accommodations.

In a recent survey of our business community, good quality (non-franchise) restaurants were identified as needed to enhance the Lodi visitor landscape. Additionally, in recent years we have seen significant growth in Lodi as a wedding destination, making banquet space a sought-after commodity. The Lakehouse restaurant and banquet space will also be a welcome addition for our citizens.

I am excited to see the Lakehouse project moving forward. I am confident that it will be a great addition to Lodi's tourism product and our community.

Please let me know if Visit Lodi can be of any assistance as this project moves forward.

Regards,

Nancy Beckman
President and CEO

City Hall
Community Development Department
221 W. Pine Street
Lodi, CA 95240
(209) 333-6714 Building
(209) 333-6711 Planning & Neighborhood Services
(209) 333-6823 Community Improvement
Fax (209) 333-6842
Lodi.gov/169/Community-Development

MEMORANDUM

John Della Monica, Community Development Director

February 21, 2023

RE: Lakehouse Hospitality
2201 West Turner Road, Lodi, CA

Long before the incorporation of the City of Lodi, the area had been recognized for its rich soil and ideal climate needed to support a growing, robust agricultural industry. First known as the water melon capital of the world, crops diversified as a different group of farmers who were more familiar with vineyards then row crops began to migrate to the area. This multi-generational, agricultural transition, laid the foundation for what is now one of the finest wine producing regions in the State.

More than a century later, the City of Lodi finds itself in the center of more than 25,000 acres* of thriving vineyards. Our officially recognized terroir is ranked as a premiere wine region not only in the State of California, but across the nation and Europe.

This industry's growth, particularly over the last three decades, has led to the creation of more than eighty independent wineries and affiliated tasting rooms, yielding an expansion of tourism never before realized in the history of the community. One sector responding to this growth is hospitality, which saw the development of six new facilities with varying in levels of service and accommodation to meet the growing tourism needs. In addition, Wine & Roses, the City's first luxury class hotel and spa, completed its last phase of expansion approximately five years ago and remains the only facility of this caliber within the region.

At this time, the proposed Lakehouse Hotel project would become the second luxury hospitality venue within city limits, to address the unmet need. As a multifaceted luxury development, the Lakehouse Hotel would not only add accommodations to the City's needed inventory, but also provide fine dining, quality retail and full service banquet/conference facilities.

The General Plan states: '*To support the increased hotel needs, the General Plan accommodates 350 new hotel rooms, bringing the total number of rooms in the city to approximately 975 (approved/under construction)***. By tying to this implementation component of the General Plan, Lakehouse Hotel aligns with the City Council's desire to support our tourism industry goals and bring residual economic benefit to the broader community.

In coordination with the City's General Plan policies, we look forward to the addition of this luxury class hospitality facility, which will further nurture the City's reputation as a premier wine region and strengthen our City's rich history.

*2010 General Plan, Chapter 7, Conservation, Table 7.2
** 2010 General Plan, Chapter 2.4 Economic Development, Tourism