



**Project Title & No. Mittry Vesting Tentative Tract Map and Land Use Ordinance
 Amendment ED24-028 LRP2021-00006 /SUB2023-00013**

<p>ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.</p>		
<input type="checkbox"/> Aesthetics <input type="checkbox"/> Agriculture & Forestry Resources <input checked="" type="checkbox"/> Air Quality <input checked="" type="checkbox"/> Biological Resources <input type="checkbox"/> Cultural Resources <input type="checkbox"/> Energy <input checked="" type="checkbox"/> Geology & Soils	<input type="checkbox"/> Greenhouse Gas Emissions <input type="checkbox"/> Hazards & Hazardous Materials <input checked="" type="checkbox"/> Hydrology & Water Quality <input checked="" type="checkbox"/> Land Use & Planning <input type="checkbox"/> Mineral Resources <input checked="" type="checkbox"/> Noise <input type="checkbox"/> Population & Housing	<input type="checkbox"/> Public Services <input type="checkbox"/> Recreation <input type="checkbox"/> Transportation <input type="checkbox"/> Tribal Cultural Resources <input checked="" type="checkbox"/> Utilities & Service Systems <input type="checkbox"/> Wildfire <input checked="" type="checkbox"/> Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Coordinator finds that:

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Cassidy Bewley, SWCA Environmental Consultants		May 9, 2024
Prepared by (Print)	Signature	Date
Eric Hughes for Airlin M. Singewald		Environmental Coordinator
Reviewed by (Print)	Signature	Date

Initial Study – Environmental Checklist

Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The County Planning Department uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Planning Department, 976 Osos Street, Rm. 200, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

A. Project

DESCRIPTION: The proposed project is a request by Mittry Farms Trust (applicant) for a Land Use Ordinance Amendment (LRP2021-00006) to amend Planning Area Standards set forth in Land Use Ordinance (LUO) Section 22.94.080 and the Community Planning Standards set forth in County LUO Section 22.104.090.C.5 to include Residential Single-Family as an allowable principal use on a 10.02-acre parcel (Assessor's Parcel Number [APN] 040-201-033; herein referred to as project site). The proposed amendment would allow development of single-family dwellings on the project site through Conditional Use Permit approval. The project includes the concurrent processing of a Vesting Tentative Tract Map (VTTM) and CUP to subdivide the project site into 23 lots and facilitate the construction of 22 single-family residential units, accessory dwelling units (ADUs), and associated site improvements. The project would be located at 301 North Main Street in the unincorporated community of Templeton. The project site is located approximately 60 feet east of U.S. Highway 101 (US 101), within the Commercial Retail (CR) land use category within the Salinas River Sub-area of the North County Planning Area.

Expanded Project Description

The proposed project includes a Land Use Ordinance Amendment to amend Planning Area Standards in County LUO Section 22.94.080 and the Community Planning Standards in County LUO Section 22.104.090.C.5 to include Residential Single-Family as an allowable principal use on the project site as well as the concurrent processing of a VTTM and CUP to subdivide the project site into 23 lots to facilitate the construction of 22 single-family residential units, one junior ADU (JADU), one detached ADU, and associated site improvements on the 10.02-acre project site.

The project includes a request to add a specific land use category standard under the Salinas River Subarea Standards (County LUO Section 22.94.080) to include Residential Single-Family as an allowable principal use on the 10.02-acre project site. In addition, the proposed parcel is located within the Highway 101/North Main Street Interchange area subject to the Templeton Community Standards (County LUO Section 22.104.090.C.5), which identifies allowable uses as bars and nightclubs, restaurants, gas stations, offices, hotels, and motels.

Initial Study – Environmental Checklist

The project includes a proposed text amendment to expand the limitations on use for the subject parcel to include Residential Single-Family uses.

The proposed project includes the concurrent processing of a VTTM and CUP to subdivide the project site into 23 lots and allow for the development of 22 single-family residential units, one JADU, and one detached ADU on 5.45 acres of the project site and open space/common areas on 4.57 acres of the project site (Figure 2). The project would also allow for the construction of additional future JADUs or ADUs on the project site for a total of up to 22 JADUs and/or ADUs. The proposed residential lots would range in size from 10,349 square feet to 19,499 square feet in area, and the proposed single-family residential units would range in size from 1,800 square feet to 3,100 square feet (not including JADU square footage) with a maximum height of 35 feet (Figure 3). Table 1 identifies the applicable development standards for the CR land use category identified in the County Inland Land Use Ordinance, Templeton Community Standards, and Templeton Community Design Plan.

Table 1. Applicable Development Standards

Development Standard	County Standard
Minimum Parcel Size	6,000 square feet
Maximum Allowed Height	35 feet ¹
Minimum Front Setback	25 feet ²
Side Setbacks	10% of the lot width, to a maximum of 5 feet on sites less than 1 acre in net area, but not less than 3 feet, and a minimum of 30 feet on sites of 1 acre or larger in net area ³
Rear Setback	10 feet on sites of less than 1 acre, 30 feet on sites of 1 acre or larger in next area ⁴
Setbacks from US 101	Proposed development shall provide a minimum of 25-foot landscaped setback from the Highway 101 right-of-way and any adjacent residential category.
Percent of Building Footprint to Lot Size	Total square footage of a house and garage footprint should not exceed 35% of the total lot size.
Driveway Frontage and Garage Location	No more than a total of 25% of a lot's frontage may be utilized for a driveway opening ⁵ , and garages and carports should be located no closer to the street than the front of the residence.

¹ Height limitations for residential buildings may be adjusted to allow additional height to a maximum of 45 feet, provided that the required side, rear, and interior setbacks shall be increased 1 foot in width for each foot of height over 35 feet.

² Exceptions such as shallow lots (lots with an average depth of less than 90 feet), sloping lot adjustment, planned development or cluster division, lots with parkways, etc. as detailed in County LUO 22.10.140.

³ The side setback on the street side of a corner lot within urban and village areas and on sites of less than 1 acre shall be a minimum of 10 feet.

⁴ Exceptions include, but are not limited to, accessory buildings and structures, commercial and industrial land use categories, decks, porches, etc. as detailed in County LUO Section 22.10.140.

⁵ A 16-foot driveway width is acceptable for a two-car drive for any lot.

As defined in County LUO Section 22.30.470, an ADU is limited to a maximum square footage of 1,200 square feet and, when located within an urban or village reserve line, is required to be designed to maintain the character of a single-family dwelling and shall have independent exterior access separate from the primary dwelling. JADUs are ADUs created within the walls of a proposed or existing single-family residence and are

Initial Study – Environmental Checklist

limited to being no more than 500 square feet in area (California Department of Housing and Community Development 2024). Detached ADUs are required to comply with the same setback requirements pertaining to distance from property lines or alleys for residential accessory buildings and structures, however, minimum setback requirements for detached ADUs shall not exceed 4 feet from side or rear property lines. Attached ADUs (including JADUs) are required to comply with the setback requirements of the primary residential use (County Inland LUO Section 22.30.470.F4).

The proposed open space/common areas would be located on the western, southern, and eastern portions of the project site (see Figure 2). The open space/common area on the eastern portion of the project site would include two retention basins, the open space/common area on the southern portion of the project site would encompass an existing ephemeral drainage swale (which currently flows into Toad Creek), and the open space/common area on the western portion of the project site would consist of an open space buffer between US 101 and the proposed residential units. The proposed retention basins on the eastern portion of the project site have been designed to retain up to 2.737 acre-feet of stormwater flows, which would retain flows from a 2-year, 10-year, 50-year, or 100-year flood event (see Section X, *Hydrology and Water Quality*, for further details).

The proposed project site is currently located partially within the FEMA 100-year flood zone (i.e., an area with a 1% chance of annual flood) and County Flood Hazard combining designation, and entirely within the FEMA 500-year flood zone (i.e., an area with a 0.2% chance of annual flood) (see Figure 6). Based on the proposed preliminary grading and drainage plan prepared for the project, all proposed residential lots would be constructed above both the 500-year and 100-year flood elevations.

Based on the Acoustical Analysis prepared for the project (WJV Acoustics, Inc. [WJVA] 2022; Appendix F), a sound wall would be developed along a portion of the northern and southern lots (Figure 4). Along the northern lots, the sound wall would extend along Lots 1 through 4 and would range between 6 feet and 11 feet in height. Along the southern lots, the sound wall would extend along Lots 12, 13, 14, and 22 and would range between 6 and 8.5 feet in height (see Section XIII, *Noise*, for further details). A homeowner's association (HOA) would be formed to maintain the proposed open space/common areas and the sound walls.

The project site would be accessed via a proposed 967-foot-long and 38-foot-wide private road from North Main Street. The private road would terminate in a cul-de-sac with a 40-foot radius turnaround in the western portion of the project site. The project would include roadway improvements to extend an existing center turn lane of North Main Street south for northbound vehicle traffic turning into the proposed project site driveway. In accordance with County roadway standards, North Main Street would be widened and restriped at this location to accommodate two 12-foot-wide travel lanes (one in each direction), one 12-foot-wide turn lane, and two 6-foot-wide bike lanes. While the detailed plans of these roadway improvements have not been finalized at this time, for the purposes of this analysis, it is assumed that the roadway improvements would be limited to the west side of the roadway, improvements would not extend past the frontage of the project parcel, and that the west side of the existing culvert located under North Main Street along the project site frontage would need to be extended.

The project includes the installation of a gate at the eastern portion of the proposed access roadway off North Main Street to limit access to future project occupants. The proposed access gate would be located approximately 60 feet from the project site driveway apron to allow for queuing of vehicles as needed. The project would also include provision of a pedestrian-scale gate or door to provide pedestrian access to the project site.

Initial Study – Environmental Checklist

During operation, the proposed project would be estimated to generate approximately 251 average daily vehicle trips on weekdays, including 19 a.m. peak hour trips and 24 p.m. peak hour trips (Central Coast Transportation Consulting 2022; Appendix G). The proposed residential lots would be served by community water, community sewer, fire protection, and waste collection services by the Templeton Community Services District (TCSD). The project would include construction of off-site pipeline tie-ins to existing water and wastewater mains located along North Main Street within the roadway right-of-way. While the proposed project currently only includes construction of one ADU and one JADU on-site, the project would include installation of plumbing and utility connections for all residential lots to accommodate future ADU/JADU development. There is an existing well on the property that would be abandoned.

Construction of the proposed project would result in approximately 10.02 acres of ground disturbance, including approximately 20,000 cubic yards of cut and 45,000 cubic yards fill (net import of 25,000 cubic yards). The extent of proposed ground-disturbing activities would be necessary to level the project site and for excavation of the proposed retention basins. Ground-disturbing activities have been designed to retain a native valley oak (*Quercus lobata*) adjacent to proposed Lot 13. Initial site preparation activities, utility infrastructure installation, and roadway improvements are anticipated to occur over a 12-month period. Construction activities of residential units are anticipated to be developed in groups of three or four at a time, depending on market trends.

Baseline Conditions

The project site consists of a 10.02-acre parcel (APN 040-201-033) located in the unincorporated community of Templeton, east of US 101 and west of North Main Street. The project site is located within the CR land use category within the Salinas River Subarea of the Templeton Planning Area (Figure 5). The project site is also partially within the Flood Hazard Area and Renewable Energy Overlay Combining Designations. The project site is surrounded by US 101 to the west, the Templeton San Luis Obispo County Sheriff's Office and a planned co-located dispatch facility for operation by County Sheriff and County Fire/California Department of Forestry and Fire Protection (CAL FIRE) staff to the north, a single-family residential dwelling to the south, and North Main Street, commercial retail uses, and a single-family residential neighborhood to the east.

The project site was historically used for cattle grazing but is currently undeveloped and supports grassland habitat and a few scattered trees, including one large native valley oak. There is an existing unnamed drainage channel that flows into Toad Creek along the southern property boundary that supports riparian vegetation. According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) 06079C0604G and 06079C0612G (effective date 11/16/2012), a majority of the eastern and southern portion of the project site is in Zone AE, an area with 1%-annual-chance flood event (i.e., a 100-year flood zone) (FEMA 2024) (Figure 6).

ASSESSOR PARCEL NUMBER(S): 040-201-033

Latitude: 35° 33' 43.96" N **Longitude:** 120° 42' 09.19" W **SUPERVISORIAL DISTRICT #** 1

B. Existing Setting

Plan Area: Templeton **Sub:** Salinas River **Comm:** Templeton
Land Use Category: Commercial Retail
Combining Designation: Flood Hazard; Renewable Energy Overlay
Parcel Size: 10.02 acres

Initial Study – Environmental Checklist

Topography: Nearly level to gently sloping

Vegetation: Grasses, Scattered trees

Existing Uses: Undeveloped

Surrounding Land Use Categories and Uses:

North: Commercial Retail, Public Facilities;
single-family residence(s)
Future Co-Located Dispatch Center

East: Commercial Retail, Recreation;
single-family residence(s) retail commercial

South: Residential Suburban; single-family residence(s) **West:** Residential Rural; US 101;

C. Environmental Analysis

The Initial Study Checklist provides detailed information about the environmental impacts of the proposed project and mitigation measures to lessen the impacts.

Initial Study – Environmental Checklist



Figure 1. Project location map.

Initial Study – Environmental Checklist



Figure 2. Proposed subdivision map.

Initial Study - Environmental Checklist

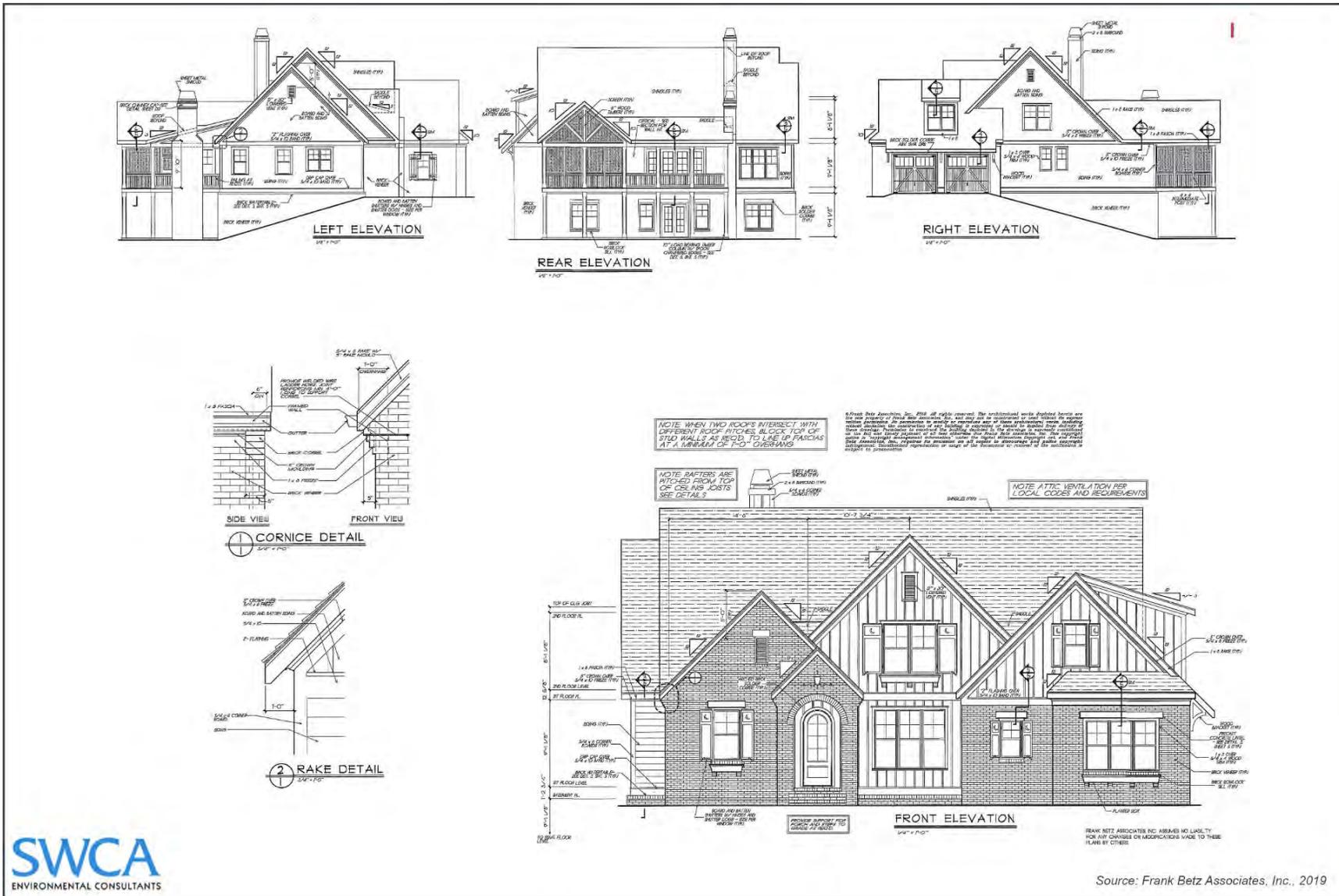


Figure 3. Conceptual Building Elevation.

Initial Study - Environmental Checklist

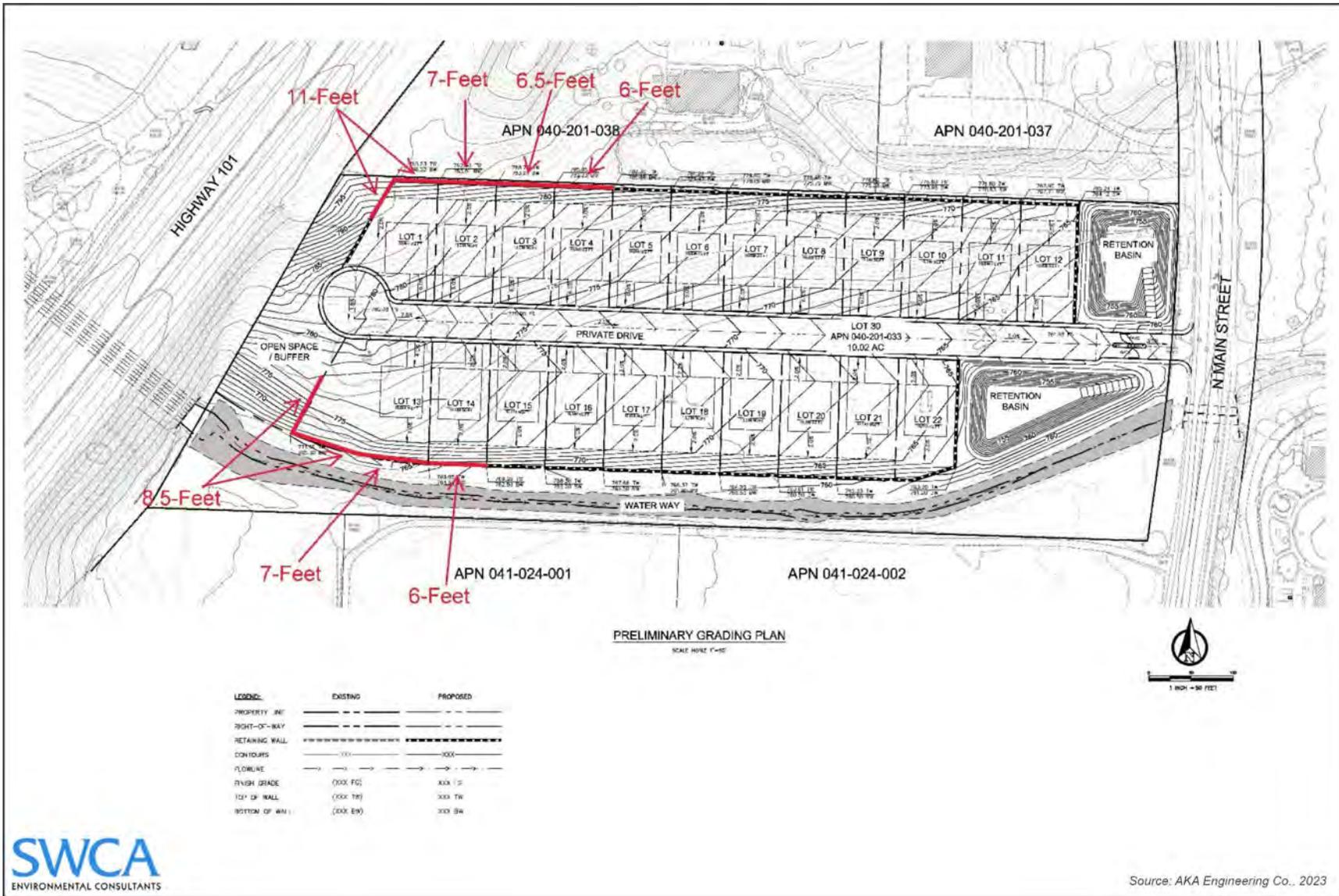


Figure 4. Proposed sound wall map.

Initial Study – Environmental Checklist

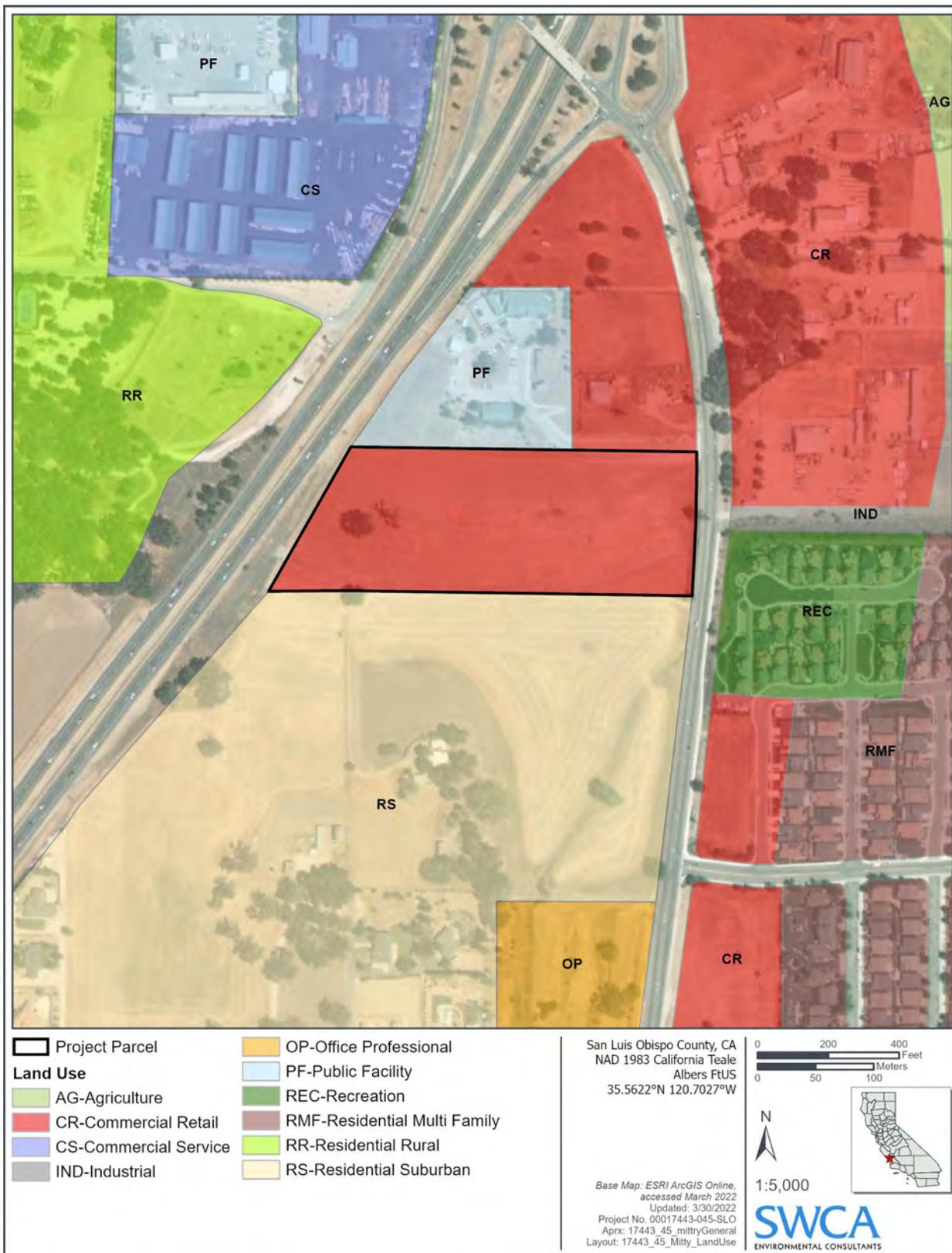


Figure 5. Land use map.

Initial Study – Environmental Checklist

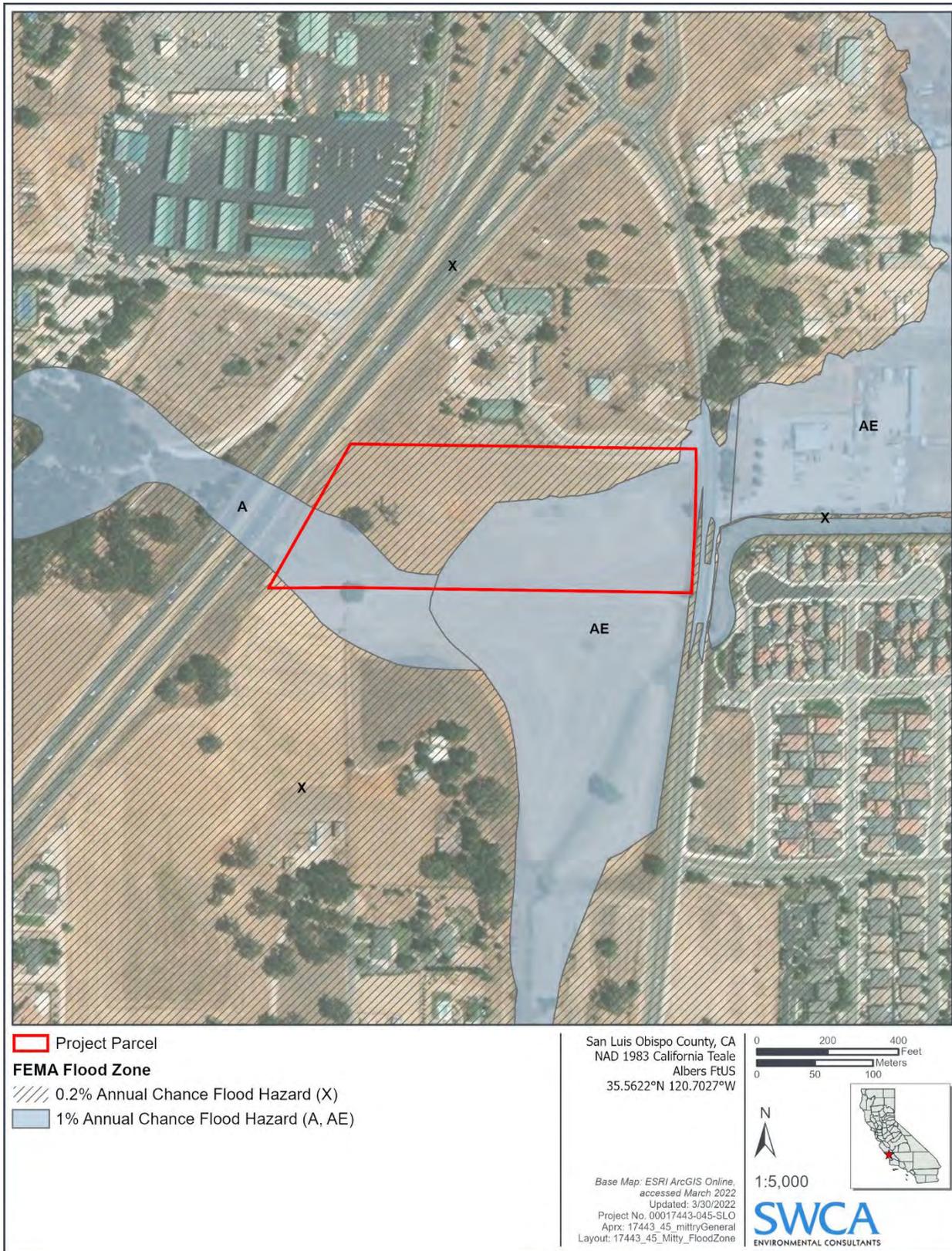


Figure 6. FEMA Flood Zone map.

Initial Study – Environmental Checklist

I. AESTHETICS

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

Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide people of the state “with . . . enjoyment of aesthetic, natural, scenic and historic environmental qualities” (California Public Resources Code [PRC] Section 21001(b)).

A scenic vista is generally defined as a high-quality view displaying good aesthetic and compositional values that can be seen from public viewpoints. Some scenic vistas are officially or informally designated by public agencies or other organizations. A substantial adverse effect on a scenic vista would occur if the project would significantly degrade the scenic landscape as viewed from public roads or other public areas. A proposed project’s potential effect on a scenic vista is largely dependent on the degree to which it would complement or contrast with the natural setting, the degree to which it would be noticeable in the existing environment, and whether it detracts from or complements the scenic vista.

California Scenic Highway Program

California’s Scenic Highway Program was created by the State Legislature in 1963 with the intention of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors. There are several officially designated state scenic highways and several eligible state scenic highways within the

Initial Study – Environmental Checklist

county. State Route (SR) 1 is an Officially Designated State Scenic Highway and All-American Road from the city of San Luis Obispo to the northern San Luis Obispo County boundary. A portion of Nacimiento Lake Drive is an Officially Designated County Scenic Highway. Portions of US 101, SR 46, SR 41, SR 166, and SR 33 are also classified as Eligible State Scenic Highways – Not Officially Designated. The project site is located approximately 60 feet east of US 101 and approximately 1.55 miles southeast of SR 46, which are both designated as Eligible State Scenic Highways at these locations (California Department of Transportation [Caltrans] 2021). An eligible State highway can become officially designated through a process in which the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a State Scenic Highway by the Caltrans Director (Caltrans 2023).

County of San Luis Obispo Conservation and Open Space Element

The *County of San Luis Obispo General Plan Conservation and Open Space Element* (COSE) identifies several goals for visual resources in rural parts of the county (County of San Luis Obispo 2010):

- **Goal VR 1:** The natural and agricultural landscape will continue to be the dominant view in rural parts of the county.
- **Goal VR 2:** The natural and historic character and identity of rural areas will be preserved.
- **Goal VR 3:** The visual identities of communities will be preserved by maintaining rural separation between them.
- **Goal VR 4:** Protect visual resource within visual sensitive resource areas (SRAs) for scenic corridors.
- **Goal VR 6:** A cohesive visual character will be maintained in urban areas.
- **Goal VR 7:** Views of the night sky and its constellations of stars will be maintained.

The County COSE includes a map of designated areas where specialized scenic protection policies apply, including the Sensitive Resource Area (SRA) combining designations, zoning overlays used to protect certain scenic areas, and areas subject to the County Highway Corridor Design Standards. The project site is not located in an area subject to any of these specialized scenic protection measures. However, the County COSE also includes a list of candidate roadways for potential future designation as scenic corridors, and US 101 is included in this list.

County of San Luis Obispo Land Use Ordinance

The County LUO defines an SRA as a combining designation that applies to areas having high environmental quality and special ecological or educational significance. These designated areas are considered visual resources by the County, and the County LUO establishes specific standards for projects located within these areas. These standards include, but are not limited to, setback distances from public viewpoints, prohibition of development that silhouettes against the sky, grading slope limitations, set back distances from significant rock outcrops, design standards including height limitations and color palette, and landscaping plan requirements. The subject property is not located within a County-designated SRA.

The County LUO establishes regulations for exterior lighting (Section 22.10.060), height limitations for each land use category (Section 22.10.090), setbacks (Section 22.10.140), and other visual resource protection policies. These regulations are intended to help the County achieve its Strategic Growth Principles of preserving scenic natural beauty and fostering distinctive, attractive communities with a strong sense of place as set forth in the *County of San Luis Obispo General Plan Land Use Element* (LUE).

Initial Study – Environmental Checklist

Templeton Community Design Plan

The *Templeton Community Design Plan* (Templeton CDP) is used to inform and guide property development in Templeton to ensure the character of the overall community is protected and enhanced. The plan was developed with a goal of helping to protect the community's historic character and maintain a sense of continuity between the newer, emerging west side and the established, historic west side of the community (County of San Luis Obispo 1990).

Guideline V.A.1 states that for single-family and suburban residential subdivisions and developments, each group of three adjacent houses should contain at least one house whose front yard setback differs from those of its neighbors by a minimum of 7 feet, and that minimum setbacks may not be reduced to accommodate this variation. The intent of this guideline is to create more variety, interest, and individuality in new residential development, and to avoid a uniform appearance along local streets (County of San Luis Obispo 1990).

The Templeton CDP does not identify a particular architectural style for single family or multi-family residential structures in Templeton. Instead, the CDP identifies a focus to construct a high quality residential environment through descriptions of appropriate and inappropriate materials and architectural expression. Guideline VI.D.1 states that residential developments shall avoid long uninterrupted exterior walls on all structures, which is intended to discourage stark, uninteresting residential structures in Templeton. Guideline VI.D.5 states that residential developments should have varied roof levels and ground planes to break up the mass and bulk of buildings. Guidelines VI.D. 8 and VI.E.1 provides architectural form and materials criteria to facilitate evaluation of whether a development meets the general architectural criteria of the Templeton CDP (County of San Luis Obispo 1990):

- Appropriate:
 - Articulation of wall planes
 - Projections and recesses to provide shadow and depth
 - Well defined entries
 - Pleasing architectural forms
 - Stucco, smooth, sand, or light lace finish
 - Wood or old brick, as a primary and accent material
 - Unglazed tile, as an accent material and roofing material
 - Composition shingle
 - Treated wood shake
- Inappropriate:
 - Un articulated, vast expanses of wall surface
 - “Box like” homes without horizontal and vertical wall articulation
 - Steeply pitched or flat roofs (more than 10:12 or less than 2:12)
 - Metal or aluminum siding
 - “Log cabin” look

Initial Study – Environmental Checklist

- Unfinished concrete block
- Painted or white brick

In addition, Guideline V.F.1 establishes lighting standards for the community of Templeton:

- All lighting shall be shielded so that neither the lamp nor the related reflector interior surface is visible from any location off site. All lighting, poles, fixtures, and hoods shall be dark colored. No exterior lighting shall be installed or operated in a manner that would throw light, either reflected or directly, in an upward direction except for flags or other objects as specified below. Lighting shall further be designed to meet the following specific criteria.
 - Light trespass at property line. Illumination from light fixtures on residential zoned property shall not exceed 0.1 foot candles, or on business and commercial property shall not exceed 0.5 foot candles.
 - Illuminated flags or other objects. Fixtures shall use a narrow cone beam of light that will not exceed 5.0 foot candles nor extend beyond the illuminated object.
 - Architectural and decorative lighting. Upward directed decorative lighting shall not be visible above the building roofline.
 - Externally illuminated building identification signs. Signs shall only use shielded light fixtures mounted on top of the sign structure and will not exceed 1 footcandle reflected at 10 feet.
 - Outdoor light fixtures. Shall be directed so that there will be no objectionable direct light emissions. Light fixtures near adjacent property may need shielding to prevent light trespass.

The Templeton CDP also includes guidelines for lot shape variety, percentage of the building footprint to lot size, driveway and garage locations, and street tree requirements for single-family and suburban residential subdivisions and developments.

Existing Conditions

The project site is located within the central area of the community of Templeton, accessed from North Main Street and located approximately 60 feet east of US 101. The project site is generally surrounded by commercial retail land uses and single-family residences with the San Luis Obispo County Sherriff's Office Templeton Facility, a planned co-located dispatch facility for operation by the County Sheriff and County Fire/CAL FIRE staff, and lumber company to the north; single-family residences to the south; a drilling company and single-family residences to the east; and US 101 to the west. Surrounding residential parcels generally range from 0.6 acre to 20 acres in size (Figure 7).

Initial Study – Environmental Checklist



Figure 7. Photograph taken from the northern side of the project site, facing southeast (February 26, 2024).

The project site topography is nearly level with a gentle upwards slope towards the northwest corner of the project site. Additionally, there is a low-lying ephemeral drainage swale along the southern portion of the project site flowing west to east. Existing vegetation on-site includes mostly non-native annual grassland and non-native forbs with one large valley oak in the western portion of the property.

Discussion

(a) *Have a substantial adverse effect on a scenic vista?*

A scenic vista is generally defined as a high-quality view displaying good aesthetic and compositional values that can be seen from public viewpoints and may be officially or informally designated by public agencies or other organizations. Vistas are inherently expansive views, usually from an open area or an elevated point. A substantial adverse effect on a scenic vista would occur if the project would significantly degrade the scenic landscape as viewed from public roads or other public areas. The project site is not designated as an SRA by the County LUO and is not located in the view of a scenic vista; therefore, *no impacts* would occur.

Initial Study – Environmental Checklist

- (b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The project site is located approximately 60 feet east of US 101 and 1.55 miles southeast of SR 46, which are designated as eligible scenic highways at these locations (Caltrans 2021). The project site is visible from US 101; however, it is not visible from SR 46 due to distance as well as intervening topography, vegetation, and existing development. Although the project site is currently highly visible from US 101, the project includes a landscaped buffer and sound wall on the western side of the property that would provide a visual buffer between the proposed residential development and viewers traveling along US 101. The proposed sound wall varies in height from 6 to 11 feet above grade (see Figure 4). Therefore, the proposed project would not damage resources within a designated state scenic highway, and *no impacts* would occur.

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

The project site is located in a semi-rural area in the community of Templeton approximately 3 miles south of the incorporated city of Paso Robles. Surrounding parcels consist of moderate-sized Commercial Retail and Residential Suburban lots as well as smaller residential single-family and multi-family lots. The surrounding visual character consists of commercial, industrial, and public facility buildings; undeveloped land; single-family residences; and agricultural land. The topography of the project site and surrounding area is characterized by gentle slopes and grassland, disturbed habitat, and scattered native oak and landscape trees. The surrounding built landscape in the project area consists of single-family residential, commercial, and industrial buildings constructed with neutral and earth-tone colors.

The entire project would be visible from North Main Street, which is a County-maintained public roadway. Additionally, the project site is highly visible from US 101; however, the project includes a landscaped buffer on the eastern and western side of the property and a sound wall on the western side that would provide a visual buffer between the proposed residential development and viewers traveling along North Main Street and US 101. The proposed sound wall varies in height from 6 to 11 feet above grade.

The proposed 22 single-family residential units and up to 22 ADU/JADUs would be arranged in two blocks, perpendicular to North Main Street, to the north and south of the proposed private drive (see Figure 2).

Residential uses on the project site would be designed with a Contemporary Agrarian architectural style (see Figure 3). Based on the submitted conceptual elevations and design plans for the proposed residential uses, this style includes 12:12 sloped rooflines, the use of composite shingle roofing, board and batten or stucco siding, and brick veneer and is consistent with the architectural styles of the adjacent single-family suburban developments as well as the general architectural form and materials criteria established in the Templeton CDP. The use of neutral and earth-tone colors and natural materials aid in blending development in with the surrounding natural landscape. The maximum height of the proposed residences would be limited to 35 feet, which is consistent with the heights of surrounding residential buildings. Additionally, the proposed residential uses would incorporate varying rooflines, which breaks up the visual appearance of a large block of buildings.

Initial Study – Environmental Checklist

The project includes landscaping along US 101, along North Main Street, and throughout the project site. Front yard landscaping of the residential units would utilize drought-tolerant plants. Landscaping along US 101 would soften the appearance of the proposed sound walls, and landscaped retention basins adjacent to the entrance of the project site would soften the views of the project site from public roads by visually blending the project site with the surrounding natural landscape. Based on visual consistency with surrounding buildings, implementation of landscaping, and use of earth-toned colors and natural materials, the project would not substantially degrade the existing visual character or quality of public views of the project site and its surroundings; therefore, impacts would be *less than significant*.

- (d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The project site is located in a rural area generally surrounded by low- to medium-density residential, commercial, and public facility uses. Additionally, the project site is adjacent to US 101, which generally supports a regular stream of vehicular headlights near the project site. While no specific lighting components are identified in the site plan, final site design plans are likely to include street lighting. Additionally, proposed residential uses would include limited exterior lighting at building entrances. All lighting for the proposed project would be required to comply with the County LUO regulations for exterior lighting (Section 22.10.060) and Templeton CDP Guideline V.F.1, which establishes lighting standards for Templeton. This standard requires all lighting to be shielded and for poles, fixtures, and hoods to be dark colored. Based on required compliance with the Templeton CDP, potential impacts would be *less than significant*.

Conclusion

The project site is not located within a scenic vista or within the viewshed of a designated State scenic highway. Based on the topography, existing vegetation, and surrounding residential land uses, implementation of the project would not be expected to result in an adverse change in the existing visual character of the project area or affect day or nighttime views. Therefore, potential impacts related to aesthetic resources would be less than significant and no mitigation measures would be necessary.

Mitigation

Mitigation is not necessary.

Initial Study – Environmental Checklist

II. AGRICULTURE AND FORESTRY RESOURCES

S	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	
<p><i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</i></p>					
(a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

San Luis Obispo County supports a unique, diverse, and valuable agricultural industry that can be attributed to its Mediterranean climate, fertile soils, and sufficient water supply. Wine grapes are regularly the top agricultural crop in the county, and fruits and nuts, vegetables, field crops, nursery products, and animals

Initial Study – Environmental Checklist

are top value agricultural products. The *County of San Luis Obispo General Plan Agriculture Element* includes policies, goals, objectives, and other requirements that apply to lands designated in the AG land use category. In addition to the County Agriculture Element, in accordance with Sections 2272 and 2279 of the California Food and Agriculture Code, the County Agricultural Commissioner releases an annual report on the condition, acreage, production, pest management, and value of agricultural products within the county. The most recent annual crop report can be found on the County's website (<https://www.slocounty.ca.gov/Departments/Agriculture-Weights-and-Measures/All-Forms-Documents/Information/Crop-Report.aspx>).

Farmland Designations

The California Department of Conservation (CDOC) Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and current land use. For environmental review purposes under CEQA, the FMMP categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land are considered "agricultural land." Other non-agricultural designations include Urban and Built-up Land, Other Land, and Water. Based on the FMMP, soils at the project site are designated as Farmland of Local Potential and Grazing Land (CDOC 2018).

Williamson Act

The Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agriculture or related open space use. In return, landowners receive property tax assessments that are much lower than normal because they are based on farming and open space uses as opposed to full market value. The property is not subject to a Williamson Act contract (County of San Luis Obispo 2023).

On-Site Soils

Based on the Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2023), on-site soils include:

- **Soil Unit 103: Arbuckle-Positas complex, 15 to 30 percent slopes.** The parent material of this soil type is alluvium from mixed rock sources, and it consists of Arbuckle and similar soils at 40%, Positas and similar soils at 30%, and minor components at 30%. The drainage class of this soil type is well drained, and it is composed primarily of fine sandy loam, coarse sandy loam, clay, and sandy clay loam. This soil type occurs on terraces, toe slopes, and tread at elevations between 600 and 1,500 feet (180 and 460 meters). This soil type is considered not Prime Farmland.
- **Soil Unit 157: Lockwood shaly loam, 0 to 2 percent slopes, Major Land Resource Area (MLRA) 14.** The parent material of this soil type is alluvium derived from acid shale and it consists of Lockwood and similar soils at 87%. The drainage class is well drained, and it is composed of mostly loam and clay loam. This soil type occurs on alluvial fans and terraces at elevations between 100 and 2,000 feet (30 and 610 meters). This soil type is considered Prime Farmland if irrigated.
- **Soil Unit 160: Lockwood-Conception complex, 9 to 15 percent slopes.** This soil unit consists of Lockwood and Conception soils at 40% and 30%, respectively. The drainage class of this soil type is well drained, and it is composed primarily of loam, clay loam, and sandy loam. This soil type occurs on terraces, toe slopes, and tread at elevations between 600 and 1,500 feet (180 and 460 meters). This soil type is not considered Prime Farmland.

Initial Study – Environmental Checklist

Forestland and Timberland

Forestland is defined in PRC Section 12220(g) as land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. The project site does not support enough native tree cover to meet the criteria to be defined as forestland per PRC Section 12220(g).

Timberland is defined in PRC Section 4526 as land, other than land owned by the federal government and land designated by the California State Board of Forestry and Fire Protection as experimental forestland, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. The project site does not meet the definition of timberland per PRC Section 4526.

Discussion

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

The project site is designated as Farmland of Local Potential and Grazing Land by the FMMP (CDOC 2018). As such, implementation of the project would not result in conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, and *no impacts* would occur.

- (b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

The project site is not located within the Agriculture land use category and is not subject to a Williamson Act contract. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and *no impacts* would occur.

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

The project site is not within the Agriculture land use category and does not include land use designations or zoning for forestland or timberland. Therefore, the project would not conflict with or cause rezoning of forestland or land for timber production, and *no impacts* would occur.

- (d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

The project site does not meet the criteria to be considered timberland as defined by PRC Section 4526. The western portion of the project site contains a single, mature valley oak, and the proposed project has been designed to retain the oak tree. The project would not result in the loss of forestland or convert forestland to non-forest use; therefore, *no impacts* would occur.

- (e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

The project site is located in a semi-rural area generally surrounded by low- to medium-density residential, commercial, and public facility uses. As noted above, there is no Prime Farmland on the

Initial Study – Environmental Checklist

project site and the project site is not located within the Agriculture land use category. Cattle grazing occurs on the project site; however, the loss of this grazing land would not create development pressure or otherwise have a significant effect on the region’s stock of agricultural grazing land due to the small size of the project parcel (10.02 acres) and the relatively large stock of agricultural grazing lands in the region. The proposed project would not result in any changes to the environment that could indirectly result in the conversion of farmland to non-agricultural use or forestland to non-forest use; therefore, *no impacts* would occur.

Conclusion

The proposed project would not directly or indirectly result in the conversion of farmland, forestland, or timberland to non-agricultural uses or non-forest uses and would not conflict with agricultural zoning or otherwise adversely affect agricultural resources or uses. No potentially significant impacts related to agricultural and forestry resources would occur and mitigation measures are not necessary.

Mitigation

Mitigation is not necessary.

III. AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</i>				
(a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

The project is located in the community of Templeton, which is located within the South Central Coast Air Basin (SCCAB) and within the jurisdiction of the San Luis Obispo County Air Pollution Control District (SLOAPCD).

Initial Study – Environmental Checklist

Criteria Air Pollutants

For the protection of public health and welfare, the federal Clean Air Act (CAA) required that the U.S. Environmental Protection Agency (USEPA) establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These pollutants are referred to as “criteria” pollutants because the USEPA publishes criteria documents to justify the choice of standards. These standards define the maximum amount of an air pollutant that can be present in ambient air without harm to the public’s health. An ambient air quality standard is generally specified as a concentration averaged over a specific time period, such as 1 hour, 8 hours, 24 hours, or 1 year. The different averaging times and concentrations are meant to protect against different exposure effects. The CAA allows states to adopt additional or more health-protective standards.

California Air Resources Board

The California Air Resources Board (CARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA) of 1988. Other CARB duties include monitoring air quality in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts; establishing California Ambient Air Quality Standards (CAAQS), which in many cases are more stringent than the NAAQS; and setting emissions standards for new motor vehicles.

County of San Luis Obispo Air Pollution Control District

The SLOAPCD is the agency primarily responsible for ensuring that the NAAQS and CAAQS are not exceeded and that air quality conditions within the region are maintained. Responsibilities of the SLOAPCD include, but are not limited to, preparing plans for the attainment of the NAAQS and CAAQS, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the CAA and the CCAA.

San Luis Obispo County Clean Air Plan

The *San Luis Obispo County 2001 Clean Air Plan* (2001 CAP) is a comprehensive planning document intended to evaluate long-term air pollutant emissions and cumulative effects and provide guidance to the SLOAPCD and other local agencies on how to attain and maintain the state standards for ozone and particulate matter 10 micrometers or less in diameter (PM₁₀). The 2001 CAP presents a detailed description of the sources and pollutants that impact the jurisdiction’s attainment of state standards, future air quality impacts to be expected under current growth trends, and an appropriate control strategy for reducing ozone precursor emissions, thereby improving air quality. In order to be considered consistent with the 2001 CAP, a project must be consistent with the land use planning and transportation control measures and strategies outlined in the CAP.

SLOAPCD Criteria Pollutant Thresholds

The SLOAPCD has developed and updated their *CEQA Air Quality Handbook* (SLOAPCD 2012; most recently updated through a 2023 Administrative Update Version [SLOAPCD 2023a]) to help local agencies evaluate project-specific impacts and determine if air quality mitigation measures are needed, or if potentially significant impacts could result. This handbook includes established thresholds for both short-term construction emissions and long-term operational emissions.

Initial Study – Environmental Checklist

Use of heavy equipment and earth-moving operations during project construction can generate fugitive dust and engine combustion emissions that may have substantial temporary impacts on local air quality and climate change. Combustion emissions, such as nitrogen oxides (NO_x), reactive organic gases (ROG), greenhouse gases (GHGs), and diesel particulate matter (diesel PM), are most significant when using large, diesel-fueled scrapers, loaders, bulldozers, haul trucks, compressors, generators, and other heavy equipment. The SLOAPCD has established thresholds of significance for each of these contaminants.

Operational impacts are focused primarily on the indirect emissions (i.e., motor vehicles) associated with residential, commercial, and industrial development. Certain types of projects can also include components that generate direct emissions, such as power plants, gasoline stations, dry cleaners, and refineries (referred to as stationary source emissions). Operational impacts associated with residential development consist primarily of indirect emissions (i.e., motor vehicles). Certain other types of projects can also include components that generate direct emissions, such as power plants, gasoline stations, dry cleaners, and refineries (referred to as stationary source emissions). The SLOAPCD has established several different methods for determining the significance of project operational air quality impacts:

1. Demonstrate consistency with the most recent CAP for San Luis Obispo County;
2. Demonstrate consistency with a plan for the reduction of GHG emissions that has been adopted by the jurisdiction in which the project is located that complies with State CEQA Guidelines Section 15183.5;
3. Compare predicted ambient criteria pollutant concentrations resulting from the project to federal and state health standards, when applicable;
4. Compare calculated project emissions to SLOAPCD emission thresholds; and
5. Evaluate special conditions that apply to certain projects.

In addition, many architectural coatings consist of oil-based paints. Solvents contained in these paints evaporate into the atmosphere as the paint dries, contributing to local ozone formation.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and activities involved. The CARB has identified the following groups who are most likely to be affected by air pollution (i.e., sensitive receptors): children under 14, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. The nearest off-site sensitive land use is a rural residence located approximately 400 feet south of the project site.

Naturally Occurring Asbestos

Naturally Occurring Asbestos (NOA) is identified as a toxic air contaminant by the CARB. Serpentine and other ultramafic rocks are fairly common throughout the county and may contain NOA. If these areas are disturbed during construction, NOA-containing particles can be released into the air and have an adverse impact on local air quality and human health. The project is not located in an area with known potential for NOA to occur (SLOAPCD 2024).

An Air Quality and Greenhouse Gas Assessment was prepared for the project to evaluate the project's potential impacts associated with air quality and GHG emissions (Wolf Environmental, Inc. [Wolf Environmental] 2023; Appendix B), and a Health Risk Assessment (HRA) was prepared for the project to evaluate the potential impacts of toxic air contaminants (TACs) at the project site (Kimley-Horn and Associates, Inc. [Kimley-Horn] 2022; Appendix C).

Initial Study – Environmental Checklist

Discussion

(a) *Conflict with or obstruct implementation of the applicable air quality plan?*

As part of the CCAA, the SLOAPCD is required to develop a plan to achieve and maintain the state ozone standard by the earliest practicable date. The 2001 CAP addresses the attainment and maintenance of the NAAQS and CAAQS.

In order to be considered consistent with the 2001 CAP, a project must be consistent with the land use planning and transportation control measures outlined in the CAP and be generally consistent with the population projections the plan was based on (SLOAPCD 2023a). Adopted land use planning strategies include, but are not limited to, planning compact communities with higher densities within the urban reserve lines of cities and unincorporated communities, providing for mixed land use, and balancing jobs and housing. In addition, regional vehicle miles traveled (VMT) estimates are relied upon for regional air quality planning purposes and are used to determine the strategies to be implemented to reach the emission reduction targets set by CARB through Senate Bill (SB) 375. Therefore, the project has been evaluated for consistency with regional VMT-reduction efforts as well.

Land Use Planning and Transportation Control Measures

The 2001 CAP includes multiple transportation and land use control measures intended to reduce emissions through reductions in VMT and the promotion of alternative forms of transportation. The measures applicable to the proposed project are summarized in Table 2. As noted, the proposed project would be consistent with these applicable measures.

Table 1. Project Consistency with SLOAPCD’s 2001 CAP Land Use Control Measures

Control Measures	Project Consistency
Land Use Planning Strategies	
<p>L-1 Planning Compact Communities. Within cities and unincorporated communities, sprawl has become a characteristic of growth. Development of lower density zones is discouraged. Within a medium density residential area, a high level of transit service is generally supportive for a density of 15 units per acre, or more.</p>	<p>Consistent. The project site is located in the Templeton Urban Reserve Line (URL). The proposed project would be located on an approximately 10.02-acre parcel and construct 22 single-family residences and up to 22 ADUs/JADUs on the parcel. This would result in an approximate density of 4.4 dwelling units per acre. Surrounding residential subdivisions in close proximity to the project site within the Templeton URL generally range between 1.6 and 12 dwelling units per acre. The project would develop residential uses within an existing unincorporated community and would result in residential density consistent with surrounding land uses.</p>

Initial Study – Environmental Checklist

Table 1. Project Consistency with SLOAPCD’s 2001 CAP Land Use Control Measures

Control Measures	Project Consistency
<p>L-3 Balancing Jobs and Housing. Travel from home to work accounts for about one-quarter of all private vehicle trips in a typical urban area; in rural areas this travel component is even higher. The length and location of these trips are important factors in determining the type of transportation alternatives available to the commuter and the quantity of air pollutants generated. If the average travel distance between the home and workplace is relatively long, emissions from private vehicles increase and non-motorized travel alternatives are less viable.</p>	<p>Consistent. The intent of this measure is to minimize commute distances in order to minimize associated vehicle air pollutants and GHG emissions. The proposed project includes the establishment of single-family residential land uses within the Templeton URL. According to the Transportation Impact Analysis prepared for the project (Central Coast Transportation Consulting [CCTC] 2022; Appendix G), the project would generate a daily total of 251 vehicle trips; however, the project site is located in an area identified by the County as being pre-screened for below-threshold VMT, indicating a less-than-significant impact on VMT (CCTC 2022). Accordingly, the project would be consistent with the intent of this land use strategy.</p>
<p>Transportation Control Measures</p>	
<p>T-3 Bicycling and Bikeway Enhancements. The goal of this measure is to encourage a modal shift to bicycles through implementation of infrastructure improvements and administrative actions that provide inexpensive commute options and increased safety and convenience for commuters.</p>	<p>Consistent. The project site is bound by US 101 to the west and North Main Street to the east. According to the County Bikeways Plan, there is an existing Class II bike lane along North Main Street that connects to existing Class III bike lanes to the north and south. The project includes the construction of frontage improvements along North Main Street and would maintain existing bike lanes along this roadway.</p>

Projected Vehicle Miles Traveled

The proposed project includes the establishment of single-family residential land uses. As noted in the Transportation Impact Analysis, the project would generate a daily total of 251 vehicle trips (Central Coast Transportation Consulting [CCTC] 2022; Appendix G). The project site is located in an area identified by the County as being pre-screened for below-threshold VMT, indicating a less-than-significant impact on VMT. Therefore, no further analysis is warranted, and the proposed project would result in a less-than-significant impact on VMT (CCTC 2022). Therefore, the project would not result in a conflict with regional VMT-reduction efforts or associated plans and policies.

Particulate Matter Report

In July 2005, SLOAPCD adopted the *Particulate Matter Report* (PM Report), which identifies various measures and strategies to reduce public exposure to PM emitted from a wide variety of sources, including emissions from permitted stationary sources and fugitive sources, such as construction activities. As discussed under Impact Discussion III(b), the project would not result in fugitive dust emissions in exceedance of SLOAPCD thresholds during construction or operation of the proposed project (Wolf Environmental 2023). Therefore, the project would not result in a substantial increase

Initial Study – Environmental Checklist

in localized fugitive dust emissions and would not have a potentially significant impact with regard to conflicting with the PM Report.

Conclusion

Based on the analysis provided above, the project would be consistent with applicable air quality plans; therefore, impacts would be *less than significant*.

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

San Luis Obispo County is currently designated as non-attainment for ozone and PM₁₀ under the CAAQS (CARB 2020).

Construction Emissions

Construction activities associated with the proposed access improvements and construction of the proposed residential uses and utility improvements on-site would result in the generation of criteria air pollutants, including ozone precursors (ROGs and NO_x) and fugitive dust (PM₁₀). Fugitive dust emissions would result from grading operations and ROG and NO_x emissions would result from the use of large diesel-fueled equipment, including scrapers, loaders, bulldozers, haul trucks, compressors, and generators.

Emissions associated with the construction of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod), version 2022.1.1.20 computer program. Table 3 presents a summary of the maximum daily and quarterly emissions associated with construction of the proposed project.

Table 2. Estimated Construction Emissions of Criteria Pollutants

Pollutant	Project Construction Emissions (lbs/day)	SLOAPCD Threshold (lbs/day)	Project Construction Emissions (tons/yr)	SLOAPCD Threshold (Quarterly Tier 1)	Meets or Exceeds Threshold?
ROG + NO _x (combined)	12.46	137	2.27	2.5 tons	No
Diesel PM	0.73	7	0.13	0.13 tons	Yes
PM ₁₀	--	N/A	0.14	2.5 tons	No

Source: Wolf Environmental (2023).

Note: lbs/day = pounds per day; tons/yr = tons per year

As shown in Table 3, the project would not exceed SLOAPCD thresholds for criteria pollutants during short-term construction activities; however, diesel PM emissions would equal the SLOAPCD threshold for quarterly emissions and would require mitigation (SLOAPCD 2023a). Mitigation Measure AQ-1 has been identified to reduce diesel PM emissions through the implementation of standard diesel idling restrictions.

Initial Study – Environmental Checklist

According to the SLOAPCD *CEQA Air Quality Handbook*, projects with a grading area that is greater than 4.0 acres would have the potential to exceed the 2.5-ton PM₁₀ quarterly threshold (SLOAPCD 2023a). The project would result in 10.02 acres of ground disturbance, which exceeds the SLOAPCD screening threshold of 4.0 acres. Mitigation Measure AQ-2 requires the implementation of the SLOAPCD's standard mitigation measures to reduce fugitive dust emissions. Implementation of dust control measures would reduce fugitive dust emissions by approximately 50%, or more.

Based on the analysis provided above, upon implementation of Mitigation Measures AQ-1 and AQ-2, short-term construction activities would not exceed SLOAPCD thresholds; therefore, short-term impacts would *be less than significant with mitigation*.

Operational Emissions

Long-term operational emissions associated with the proposed project would be predominantly associated with mobile sources (e.g., vehicle trips). To a lesser extent, emissions associated with area sources, such as landscape maintenance activities, as well as the use of electricity and natural gas would also contribute to increased operational emissions. CalEEMod, version 2022.1.1.20, was used to estimate the project's operational air pollutant emissions, as detailed in Table 4.

Table 3. Estimated Operational Emissions of Criteria Pollutants

Pollutant	Project Operational Emissions (lbs/day)	SLOAPCD Threshold (lbs/day)	Project Operational Emissions (tons/yr)	SLOAPCD Threshold (tons/year)	Meets or Exceeds Threshold?
ROG + NO _x (combined)	3.08	25	0.56	25	No
Diesel PM	0.06	1.25	--	N/A	No
PM ₁₀	0.58	25	0.11	25	No

Source: Wolf Environmental (2023).

Note: lbs/day = pounds per day; tons/yr = tons per year

Based on the estimated operational emissions shown in Table 4, the project would not result in combined ROG and NO_x or PM₁₀ emissions in excess of daily or annual thresholds set forth by the SLOAPCD, and operational emissions would be *less than significant*.

Based on the analysis provided above, upon implementation of Mitigation Measure AQ-1, the project would not have the potential to exceed air pollutant emissions thresholds of significance established by the SLOACPD during construction or operation. Therefore, potential impacts associated with a cumulatively considerable net increase of criteria pollutants for which the region is in nonattainment would be *less than significant with mitigation*.

(c) *Expose sensitive receptors to substantial pollutant concentrations?*

According to the SLOAPCD *CEQA Air Quality Handbook*, projects that occur within 1,000 feet of sensitive receptors have the potential to result in adverse impacts involving construction emissions

Initial Study – Environmental Checklist

(SLOAPCD 2023a). The nearest off-site sensitive receptor is a rural residence located approximately 400 feet south of the project site. Construction activities associated with the proposed project would result in the short-term generation of air pollutants that could cause adverse health impacts, including ozone precursors, fugitive dust, and particulate matter emitted by exhaust from diesel vehicles less than 2.5 micrometers in size or smaller (PM_{2.5}).

Based on the analysis provided under Impact Discussion III(b), the project would not exceed SLOAPCD's emissions thresholds for combined ROG and NO_x; however, the project would have the potential to exceed fugitive dust thresholds and short-term construction activities would result in diesel PM emissions that equal the SLOAPCD quarterly threshold. Mitigation Measures AQ-1 and AQ-2 have been identified in Impact Discussion III(b) to reduce ozone precursor emissions through the implementation of standard diesel idling restrictions and to require implementation of the SLOAPCD's standard mitigation measures to address fugitive dust. Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce construction-related emissions near sensitive receptor locations. Following construction, the project would include occupation of residential land uses and would not result in a new source of air pollutants that could expose sensitive receptors to substantial pollutant concentrations.

With implementation of Mitigation Measures AQ-1 and AQ-2, potential impacts to sensitive receptors associated with construction activities would be *less than significant with mitigation*.

It is important to note, however, that the proposed project is located adjacent to and east of US 101. As a result, future occupants of proposed residential dwelling units could be exposed to potentially harmful levels of pollutants associated with vehicle traffic on US 101, and project-generated vehicle traffic could contribute to an exacerbation of this potential health hazard. Of particular concern are diesel PM emissions. Although the analysis of localized impacts to future on-site residents is not required for CEQA purposes, an analysis of localized impacts has been conducted and is included in Appendix C for informational purposes.

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

Construction activities generally have the potential to emit odors from diesel equipment, paints, solvents, fugitive dust, and adhesives. Any odors generated by construction activities would be intermittent and temporary, and generally would not extend beyond the construction area. The project is not located in an area with known potential for NOA (SLOAPCD 2024). Therefore, construction activities would not have the potential to expose workers or surrounding land use occupants to harmful levels of NOA.

Future residential uses would not include any components or operational activities that would generate substantial long-term adverse odors. Therefore, odors generated by the project would be short-term, intermittent, and primarily undetectable.

Based on the analysis provided above, project impacts associated with other emissions, such as those leading to odors, adversely affecting a substantial number of people would be *less than significant*.

Initial Study – Environmental Checklist

Conclusion

Project impacts associated with consistency with an adopted CAP and other emissions would be less than significant. Project impacts associated with a cumulatively considerable net increase in a criteria pollutant for which the region is in nonattainment and exposure of sensitive receptors to substantial pollutant concentrations would be reduced to less-than-significant levels with implementation of Mitigation Measures AQ-1 and AQ-2. Further, implementation of Mitigation Measure AQ-2 would reduce the project's potential to expose sensitive receptors to substantial pollutant concentrations. Upon implementation of the identified mitigation measures, potential impacts related to air quality would be less than significant.

Mitigation

AQ-1

San Luis Obispo County Air Pollution Control District Limits on Idling During

Construction. At time of application for grading and construction permits, the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities when diesel-powered vehicles/equipment are in use:

1. State law prohibits idling diesel engines for more than 5 minutes. All projects with diesel-powered construction activity shall comply with Section 2485 of Title 13 of the California Code of Regulations and the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use Off-Road Diesel regulation to minimize toxic air pollution impacts from idling diesel engines. The specific requirements and exceptions for the on-road and off-road regulations can be reviewed at the following websites:
https://ww2.arb.ca.gov/sites/default/files/classic/msprog/truck-idling/13ccr2485_09022016.pdf and
<https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2007/ordiesl07/frooal.pdf>.
2. In addition, because this project is located within 1,000 feet of sensitive receptors, the project applicant shall comply with the following more restrictive requirements to minimize impacts to nearby sensitive receptors.
 - a. Staging and queuing areas shall be located at the greatest distance from sensitive receptor locations as feasible;
 - b. Diesel idling while equipment is not in use shall not be permitted;
 - c. Use of alternative fueled equipment is recommended; and
 - d. Signs must be posted and enforced at the project site that specify no idling areas.

AQ-2

San Luis Obispo County Air Pollution Control District Fugitive Dust Mitigation

Measures (Expanded List). At the time of application for grading and construction permits, the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities:

1. Reduce the amount of the disturbed area where possible;
2. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the project site and from exceeding the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any

Initial Study – Environmental Checklist

60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour. Reclaimed (non-potable) water shall be used whenever possible. When drought conditions exist and water use is a concern, the contractor or builder shall consider use of a dust suppressant that is effective for the specific site conditions to reduce the amount of water used for dust control. Please refer to the following link from the San Joaquin Valley Air District for a list of potential dust suppressants: <https://ww2.valleyair.org/compliance/dust-control/>;

3. All dirt stockpile areas shall be sprayed daily and covered with tarps or other dust barriers as needed;
4. All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible, and building pads shall be laid as soon as possible after grading unless seeding, soil binders, or other dust controls are used;
5. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) or otherwise comply with California Vehicle Code Section 23114;
6. "Track-Out" is defined as sand or soil that adheres to and/or agglomerates on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto any highway or street as described in California Vehicle Code Section 23113 and California Water Code 13304. To prevent track out, access points shall be designated and all employees, subcontractors, and others shall be required to use them. A "track-out prevention device" shall be installed and operated where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can be any device or combination of devices that are effective at preventing track out, located at the point of intersection of an unpaved area and a paved road. Rumble strips or steel plate devices need periodic cleaning to be effective. If paved roadways accumulate tracked out soils, the track-out prevention device may need to be modified;
7. All fugitive dust mitigation measures shall be shown on grading and building plans;
8. The contractor or builder shall designate a person or persons whose responsibility is to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to minimize dust complaints and reduce visible emissions below the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress (for example, wind-blown dust could be generated on an open dirt lot). The name and telephone number of such persons shall be provided to the San Luis Obispo County Air Pollution Control District Compliance Division prior to the start of any grading, earthwork, or demolition (Contact the Compliance Division at 805-781-5912);
9. Permanent dust control measures identified in the approved project revegetation and landscape plans shall be implemented as soon as possible, following completion of any soil-disturbing activities;

Initial Study – Environmental Checklist

10. Exposed ground areas that are planned to be reworked at dates greater than 1 month after initial grading shall be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
11. All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the San Luis Obispo County Air Pollution Control District;
12. Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site;
13. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers shall be used with reclaimed water where feasible. Roads shall be pre-wetted prior to sweeping when feasible; and
14. Take additional measures as needed to ensure dust from the project site is not impacting areas outside the project boundary.

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Initial Study – Environmental Checklist

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

Sensitive Resource Area Designations

The County LUO SRA combining designation applies to areas of the county with special environmental qualities, or areas containing unique or sensitive endangered vegetation or habitat resources. The combining designation standards established in the County LUO require that proposed uses be designed with consideration of the identified sensitive resources and the need for their protection. The project site is not located in an area with an SRA combining designation.

Federal and State Endangered Species Acts

The Federal Endangered Species Act (FESA) of 1973 provides legislation to protect federally listed plant and animal species. The California Endangered Species Act (CESA) of 1984 ensures legal protection for plants listed as rare or endangered, and wildlife species formally listed as endangered or threatened, and also maintains a list of California Species of Special Concern (SSC). SSC status is assigned to species that have limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under state law, the California Department of Fish and Wildlife (CDFW) has the authority to review projects for their potential to impact special-status species and their habitats. CDFW also maintains a Watch List (WL) for species that were previously SSC but no longer merit SSC status, or which do not meet SSC criteria but for which there is concern and a need for additional information to clarify status.

In addition, the California Native Plant Society (CNPS) maintains a list of plant species ranging from presumed extinct to limited distribution, based on the following:

- California Rare Plant Ranks (CRPR)
 - 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
 - 1B: Plants rare, threatened, or endangered in California and elsewhere

Initial Study – Environmental Checklist

- 2A: Plants presumed extirpated in California, but common elsewhere
- 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
- 4: Plants of limited distribution – a watch list
- California Rare Plant Threat Ranks
 - 0.1: Seriously threatened in California
 - 0.2: Moderately threatened in California
 - 0.3: Not very threatened in California

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 protects all migratory birds, including their eggs, nests, and feathers. The MBTA was originally drafted to put an end to the commercial trade in bird feathers, popular in the latter part of the 1800s. The MBTA is enforced by the U.S. Fish and Wildlife Service (USFWS), and potential impacts to species protected under the MBTA are evaluated by the USFWS in consultation with other federal agencies and are required to be evaluated under CEQA.

Oak Woodland Ordinance

The County of San Luis Obispo Oak Woodland Ordinance was adopted in April 2017 to regulate the clear-cutting of oak woodlands. This ordinance applies to sites located outside of Urban or Village areas within the inland portions of the county (not within the Coastal Zone). “Clear-cutting” is defined as the removal of 1 acre or more of contiguous trees within an oak woodland from a site or portion of a site for any reason, including harvesting of wood, or to enable the conversion of land to other land uses. “Oak woodland” includes the following oak species: blue (*Quercus douglasii*), coast live (*Quercus agrifolia*), interior live (*Quercus wislizeni*), valley (*Quercus lobata*), and California black (*Quercus kelloggii*). The ordinance applies to clear-cutting of oak woodland only and does not apply to the removal of other species of trees, individual oak trees (except for Heritage oaks), or the thinning, tree trimming, or removal of oak woodland trees that are diseased, dead, or creating a hazardous condition. Heritage oaks are any individual oak species, as defined in the Oak Woodland Ordinance, of 48 inches diameter at breast height (dbh) or greater, separated from all stands and oak woodlands by at least 500 feet. MUP approval is required to remove any Heritage oak. There are no Heritage oaks within the project area, but the project site supports one valley oak (43 inches dbh).

Clean Water Act and State Porter Cologne Water Quality Control Act

The U.S. Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the United States. These waters include wetland and non-wetland waterbodies that meet specific criteria. USACE jurisdiction regulates almost all work in, over, and under waters listed as “navigable waters of the United States” that results in a discharge of dredged or fill material within USACE regulatory jurisdiction, pursuant to Section 404 of the Clean Water Act (CWA). Under Section 404, the USACE regulates traditional navigable waters, wetlands adjacent to traditional navigable waters, relatively permanent non-navigable tributaries that have a continuous flow at least seasonally (typically 3 months), and wetlands that directly abut relatively permanent tributaries.

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) regulate the discharge of fill and dredged material in California, under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), through the State Water Quality Certification Program. State Water Quality Certification is necessary for all projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the state.

Initial Study – Environmental Checklist

County of San Luis Obispo General Plan Conservation and Open Space Element

The intent of the goals, policies, and implementation strategies in the County COSE is to identify and protect biological resources that are a critical component of the county's environmental, social, and economic well-being. Biological resources include major ecosystems; threatened, rare, and endangered species and their habitats; native trees and vegetation; creeks and riparian areas; wetlands; fisheries; and marine resources. Individual species, habitat areas, ecosystems, and migration patterns must be considered together in order to sustain biological resources. The County COSE identifies several key goals and policies pertaining to biological resources within San Luis Obispo County that are applicable to the project:

- **Goal BR 1:** Native habitat and biodiversity will be protected, restored, and enhanced.
- **Goal BR 2:** Threatened, rare, endangered, and sensitive species will be protected.
- **Goal BR 3:** Maintain the acreage of native woodlands, forests, and trees at 2008 levels.
- **Goal BR 4:** The natural structure and function of streams and riparian habitat will be protected and restored.
- **Goal BR 5:** Wetlands will be preserved, enhanced, and restored.
- **Goal BR 6:** The County's fisheries and aquatic habitats will be preserved and improved.
- **Goal BR 7:** Significant marine resources will be protected.

Biological Setting

This section is largely based on the Biological Resources Assessment prepared for the project to evaluate the biological resources present at the project site (Kevin Merk Associates, LLC [KMA] 2022; Appendix D).

The project site is currently undeveloped with no structures on-site and historically has been used for cattle grazing and staging for over two decades (Figure 8) and appears to have been farmed prior to or during that time based on time-series aerial photography. The property is located within the upper upland floodplain of the Salinas River at the base of the foothills that flank the Santa Lucia Mountain Range to the west. The surrounding natural landscape is low rolling grassland with scattered, stately valley oak trees and bands of riparian scrub along ephemeral drainages that empty into the river. The project site and surrounding area are characterized by mostly level to gently sloping topography and support oak savanna and woodland, riparian woodland, annual grassland, and non-native trees. There is one potentially jurisdictional hydrologic feature, an ephemeral unnamed drainage that flows into Toad Creek, that crosses the southern portion of the property (Figure 9). The Salinas River is approximately 0.50 mile east of the project site, and there are two unnamed drainages located approximately 0.05 mile south and 0.01 mile east of the project site (KMA 2022).

Initial Study – Environmental Checklist



Figure 8. Photograph of the project site from northern edge of the project site, facing west (February 26, 2024).

Initial Study – Environmental Checklist



Figure 9. Photograph of the southeastern portion of the project site from North Main Street, facing southwest (February 26, 2024).

Special-Status Plants

The Biological Resources Assessment included a desktop review of natural resources databases, maps, literature, and online sources, including the CDFW California Natural Diversity Database (CNDDDB) and the CNPS rare plant database, which revealed seven special-status plant species have been previously recorded within 5 miles of the project site. Following desktop review, two seasonal botanical surveys were conducted. Of the seven special-status species that have been previously documented in the project site region, one species was determined to have potentially suitable habitat on-site:

- San Luis Obispo owl's clover (*Castilleja densiflora* var. *obispoensis*) is a CRPR 1B.2 species. This species is an annual herb that is known to occur in coastal areas in San Luis Obispo County along the outer South Coast Ranges from just south of Ragged Point to Avila Beach, with several populations occurring in the Irish Hills. This species typically occurs in coastal grasslands at elevations below 1,312 feet (400 meters). The typical blooming period is from March to June. Documented threats to this species include development and grazing.

Initial Study – Environmental Checklist

During appropriately timed botanical surveys conducted in April and May 2022, no special-status botanical species were observed within the project site (KMA 2022).

Special-Status Wildlife

The Biological Resources Assessment included a desktop review of natural resources databases, maps, literature, and online sources, including the CNDDDB. Although no wildlife-focused surveys were conducted, wildlife seen incidentally during the seasonal botanical surveys were recorded. Based on a nine-quadrangle query of the CNDDDB, it was revealed that 48 special-status and sensitive wildlife species have recorded occurrences in the project site region. However, it was determined that suitable habitat for the following 27 special-status and sensitive wildlife species is present on the project site (KMA 2022):

- American peregrine falcon (*Falco peregrinus anatum*) is a CDFW Fully Protected species for nesting and a federal Bird of Conservation Concern. This species has been observed at numerous locations near the property. This species could forage on-site or occur as a transient while moving through the area, but there is no suitable habitat for nesting on or near the project site.
- Bald eagle (*Haliaeetus leucocephalus*) is a state Endangered species for nesting and wintering habitats, CDFW Fully Protected species, and a federal Bird of Conservation Concern. There are numerous observations of this species from the Salinas River valley close to and surrounding the project site. There is a chance that individuals may fly over the project site and could forage in the study area due to the open nature of the project site; however, this may be unlikely given the high level of human presence in the area. Still, bald eagles may fly over the project site and perch in the large oak trees. The proximity of the Salinas River increases the chance that they could occur at some point in time. Nesting is not expected due to the high degree of human activity from the highway and urban development.
- California horned lark (*Eremophila alpestris actia*) is a CDFW Watch List species. This species has been recorded from the Salinas River valley surrounding the project site. The grazed grassland habitat on-site is highly suitable for foraging, and to a lesser degree for nesting given the small size and intensive cattle use.
- Cooper's hawk (*Accipiter cooperii*) is on the CDFW Watch List for nesting. There are numerous observations of this species throughout the Salinas River valley and residential areas nearby. This species could forage on-site periodically and occur as a transient due to a more highly suitable habitat in the surrounding area, but woodland required for nesting does not occur on-site.
- Ferruginous hawk (*Buteo regalis*) is on the CDFW Watch List for wintering sites, and it occurs in this area during the winter. This species has been recorded wintering in the Salinas River valley and there are sightings from the surrounding area. There is a chance that they could forage on-site during the winter, but they do not nest in this area.
- Golden eagle (*Aquila chrysaetos*) is considered a CDFW Fully Protected species, CDFW Watch List species for nesting and wintering, and federal Bird of Conservation Concern. This species has been recorded throughout the Salinas River corridor and surrounding foothills. This species could forage on-site and roost or perch on the valley oak tree but are unlikely to nest due to the exposed nature of the project site.
- Grasshopper sparrow (*Ammodramus savannarum*) is a CDFW SSC for nesting, which is almost exclusively in grassland habitats. There are only a few observations from the Salinas River valley, and they are more common near the coast in this county. However, the grassland habitat on-site with

Initial Study – Environmental Checklist

patches of bare ground is highly suitable for foraging and nesting, and there is a chance that they could occur.

- Great blue heron (*Ardea herodias*) does not have a specific listing status but is considered a sensitive species by CDFW for nesting colonies, which are located in large trees among forests near waterbodies. There are numerous sightings from the general area surrounding the project site. Individuals could occur on-site periodically while foraging, but nesting colonies would not utilize the project site due to the absence of nesting habitat and the distance from any lakes, ponds, or wetlands.
- Lawrence's goldfinch (*Spinus lawrencei*) is a federal Bird of Conservation Concern, is considered a sensitive species for nesting, and may be a species of local concern but does not have specific listing status. There are numerous records from the surrounding area, particularly with developed lands. This species could forage on-site periodically while moving through the area but there is no dense vegetation for nesting.
- Lewis's woodpecker (*Melanerpes lewis*) is a federal Bird of Conservation Concern and is considered a sensitive species by CDFW for nesting. There are records of this species from throughout the Salinas River valley, including in developed areas. This species could occur on-site periodically as a transient during the fall and winter but do not nest in this area.
- Loggerhead shrike (*Lanius ludovicianus*) is a CDFW SSC for nesting. There are numerous observations of this species throughout the surrounding area. This species could forage on-site but there is no dense vegetation for nesting.
- Merlin (*Falco columbarius*) is on the CDFW Watch List for wintering. There are numerous records in the vicinity of the project site. This species could occur as a transient and forage on-site, but they do not nest in this region.
- Northern harrier (*Circus cyaneus*) is a CDFW SSC for nesting. There are numerous observations from the Salinas River valley surrounding the project site. This species could forage on the project site periodically and may perch on the oak tree on site. This species would not nest on-site due to lack of wetland habitat and human presence in surrounding area.
- Nuttall's woodpecker (*Picoides nuttallii*) is a federal Bird of Conservation Concern at the regional scale. There are numerous observations of this species from areas surrounding the project site. This species could forage on-site and there is a slight possibility that they could nest in the oak tree on site, but their preferred nesting habitat is riparian.
- Oak titmouse (*Baeolophus inornatus*) is a federal Bird of Conservation Concern and is considered sensitive by CDFW for nesting. This species is commonly reported throughout the surrounding area. Although the oak tree on-site does not constitute a woodland community, individuals could forage on-site periodically due to their abundance in the area and proximity to favored habitats, but they are unlikely to nest outside of woodland habitats.
- Prairie falcon (*Falco mexicanus*) is on the CDFW Watch List for nesting. There are several records from the Salinas River valley. Transient individuals could forage on-site but there is no suitable nesting habitat on or near the project site.
- Purple martin (*Progne subis*) is a CDFW SSC for nesting. There are numerous recent records from Atascadero, and a nesting colony has been documented in Atascadero Creek for at least the past

Initial Study – Environmental Checklist

20 years. Individuals could occur in the study area on a periodic basis while moving to and from nearby breeding sites and they may forage on-site. This species potentially could nest in the dead pine tree or valley oak, but observations are highly localized in Atascadero.

- Rufous hummingbird (*Selasphorus rufus*) is a federal Bird of Conservation Concern and is considered sensitive for nesting by CDFW. Individuals have been recorded near the property, particularly in developed areas. This species could forage periodically on-site during migration but do nest in this area.
- Sharp-shinned hawk (*Accipiter striatus*) is a CDFW Watch List species for nesting. There are numerous records surrounding the project site. This species may forage on-site during migration, but they do not nest in this area.
- Tricolored blackbird (*Agelaius tricolor*) is a state Threatened species and a CDFW SSC for nesting colonies. This species has been observed at several locations in the Salinas River valley. Individuals could forage or occur as transients in the grassland habitat on-site. However, there is no suitable marsh habitat for roosting or nesting on-site.
- White-tailed kite (*Elanus leucurus*) is a CDFW Fully Protected species for nesting sites. This species has been recorded at several locations in the vicinity of the property, including documented breeding in the Salinas Valley. The open grassland on-site is suitable for foraging, and they could nest or roost in the valley oak on-site.
- Yellow-billed magpie (*Pica nuttalli*) does not have a specific listing status but is a federal Bird of Conservation Concern and is considered sensitive by CDFW for nesting and communal roosts on the Special Animals List. This species has been recorded at numerous locations surrounding the study area. This species could forage, nest, or communal roost on-site in the valley oak tree.
- Hoary bat (*Lasiurus cinereus*) does not have a specific status but is recorded in the CNDDDB and is on the CDFW list of Special Animals, and therefore is considered sensitive. There were no records of this species in the CNDDDB in the vicinity, but the study area is within its year-round range. Unless roost sites are found, bat species require specialized survey techniques for their detection and may be more common in the area than indicated by available records. Individuals could forage over the project site and roost in the valley oak tree.
- Pallid bat (*Antrozous pallidus*) is a CDFW SSC. There are only a few records in the vicinity, but the entire state except the highest elevations in the Sierra Nevada are within the species' year-round range. Suitable foraging habitat is present on-site, and this species could roost in the valley oak tree if cavities are present.
- Townsend' big-eared bat (*Corynorhinus townsendii*) is a CDFW SSC. This species is widespread throughout California except for high elevations in the Sierra Nevada and occurs in the region in which the study area is located throughout the year. A solitary wintering individual was found on Santa Margarita Ranch. This species could forage over the project site and potentially could roost under the adjacent bridge for North Main Street.
- Western red bat (*Lasiurus blossevillii*) is a CDFW SSC. There were no records in the CNDDDB from the vicinity, but this species' year-round range includes all of San Luis Obispo County. This species may forage over the project site due to the proximity of the Salinas River, but they would not roost because riparian habitat does not occur on-site.

Initial Study – Environmental Checklist

- Yuma myotis (*Myotis yumanensis*) does not have a specific listing status but is considered sensitive by the CDFW. This species is common and widespread throughout all but the deserts of California and is known to occur year-round in the county. This species could forage on-site and night roost in the valley oak tree. Roosting could also occur under the adjacent bridge for North Main Street.
- Migratory and Nesting Bird Species: the grassland habitat on the project site may provide suitable foraging and nesting habitat for bird species protected under the MBTA, and the valley oak tree on-site could provide suitable nesting habitat for bird species. These species are expected to be on-site year-round, and the potential to encounter these species is highest during the nesting season (February 1–August 31).

No special-status wildlife species or their sign (i.e., scat, tracks, or nests) were observed on the property during the surveys conducted as a part of preparation of the Biological Resources Assessment (KMA 2022).

Discussion

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

The proposed project could have the potential to result in direct removal of special-status plant species if present within the project site during construction. In addition, proposed construction activities could have the potential to result in direct (i.e., take) or indirect (i.e., noise, dust, light pollution) disturbance to special-status wildlife species if present within the project area during project construction. Based on the findings presented in the Biological Resources Assessment, there is *potential* for one special-status plant species and 27 special-status wildlife species in addition to migratory and nesting birds to occur within the project area (KMA 2022). Potential impacts to special-status plant and wildlife species are described in detail, below.

Special-Status Plants

Based on the results of the seasonally timed botanical survey, no special-status plant species were observed within the project site (KMA 2022). Therefore, implementation of the project would not result in adverse impacts to special-status plant species.

Special-Status Wildlife

Based on existing site conditions, there is *potential* for American peregrine falcon, bald eagle, California horned lark, Cooper's hawk, ferruginous hawk, golden eagle, grasshopper sparrow, great blue heron, Lawrence's goldfinch, Lewis's woodpecker, loggerhead shrike, merlin, northern harrier, Nuttall's woodpecker, oak titmouse, prairie falcon, purple martin, rufous hummingbird, sharp-shinned hawk, tricolored blackbird, white-tailed kite, yellow-billed magpie, hoary bat, pallid bat, Townsend's big-eared bat, western red bat, and Yuma myotis to occur within the project impact area. As described above, the project site does not support suitable habitat for other special-status wildlife species that have been previously recorded in the vicinity of the project site based on the lack of suitable habitat in the project impact area (KMA 2022; Appendix D).

Initial Study – Environmental Checklist

Special-Status Birds

The proposed project would not remove the valley oak tree on the project site, which could provide nesting habitat migratory birds, including the special status birds listed above. Potentially suitable nesting habitat for bird species is present within the on-site valley oak, the large tree along the southern property line, within the riparian vegetation to the east of the project site across North Main Street, and within a cluster of oak trees approximately 300 feet southwest of the project site. Construction activities have the potential to disturb migratory and nesting bird species that are using these areas as nesting habitat. Mitigation Measure BIO-1 has been included to require environmental awareness training to construction personnel prior to the initiation of construction activities. Additionally, Mitigation Measure BIO-2 has been included to require construction best management practices to further minimize impacts to sensitive biological resources during construction. Mitigation Measure BIO-3 has been included to require a preconstruction survey for nesting birds to determine the presence and/or absence of nesting migratory birds on-site if construction activities are scheduled during the nesting bird season and includes the proper avoidance protocol to be implemented in the event special-status bird species or other migratory birds are found nesting in the project area.

Special-Status Bats

The proposed project site provides potentially suitable habitat for five special-status bat species, including hoary bat, pallid bat, Townsend's big-eared bat, western red bat, and Yuma myotis. Construction activities pose risks for direct and indirect impacts to these special-status bat species. Roosting bats have potential to occur in the valley oak tree on-site or under bridges adjacent to the project site. Noise associated with construction activities has the potential to cause bats to abandon their roosts during the day and become disoriented. With implementation of Mitigation Measure BIO-4, which requires a roosting bat survey, and BIO-5, which requires bat roost relocation if roosts are found during the survey, the proposed project would not result in disturbance to special-status bats.

Based on the analysis above, upon implementation of mitigation measures identified, the proposed project would not result in substantial adverse effects on special-status species, and impacts would be *less than significant with mitigation*.

- (b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

There are no riparian habitats or other sensitive natural communities that occur within or adjacent to the project site (KMA 2022). The project site includes one ephemeral drainage swale that crosses the southern portion of the project area. The project includes implementation of a 60-foot setback for all future development from the ephemeral drainage. Ground-disturbing and construction activities would be conducted near and potentially within the on-site ephemeral drainage swale, and uncontrolled stormwater runoff from the project site could potentially result in sediment and/or pollutants entering the swale and downstream reaches, which could degrade offsite wetland and riparian habitat, as well as water quality. Mitigation Measures BIO-2 and BIO-6 have been included to ensure impacts to the ephemeral drainage are avoided. Because no riparian habitat or other sensitive natural communities occur on or adjacent to the project site and based on implementation

Initial Study – Environmental Checklist

of the proposed setback and Mitigation Measures BIO-2 and BIO-6, the proposed project would not result in substantial adverse effects on riparian habitat or other sensitive natural communities. As such, potential impacts would be *less than significant with mitigation*.

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

According to the USFWS National Wetlands Inventory (NWI) Surface Waters and Wetlands Mapper, the on-site ephemeral drainage swale is mapped as a temporarily flooded streambed (USFWS 2024). Although the on-site drainage does not flow year-round and is non-navigable, it has a defined bed and bank and a hydrologic connection to the Salinas River, which is a traditionally navigable waterway and therefore may potentially be under the jurisdiction of the USACE as a non-wetland other waters of the United States pursuant to Section 404 of the federal Clean Water Act, the Central Coast Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the federal Clean Water Act and state Porter-Cologne Water Quality Act, and/or CDFW pursuant to California Fish and Game Code Section 1600 et seq. (KMA 2022).

While detailed plans of proposed roadway improvements of North Main Street have not been finalized at the time of preparation of this document, for the purposes of this analysis, it is assumed that the roadway improvements would be limited to the west side of the roadway, improvements would not extend past the frontage of the project parcel, and that the west side of the existing culvert located under North Main Street along the project site frontage would need to be extended. Depending on the final methods and techniques approved for road improvements, disturbance to the ephemeral drainage swale's bed and banks could occur. Therefore, the project road improvements to North Main Street could result in potentially significant impacts to a potentially jurisdictional water feature (KMA 2024).

Mitigation Measure BIO-7 has been identified to require preparation of a formal delineation of waters and wetlands under the jurisdiction of state and federal resource agencies and to quantify the total permanent and temporary areas of impact. This delineation would provide details regarding the waters and wetland habitat and may be used to support permit application(s) to the USACE, CDFW, and/or RWQCB, as applicable. Mitigation Measure BIO-8 would require the project applicant to prepare and implement a waters and wetlands compensatory mitigation and monitoring plan, with the requirement of restoring impacted habitat areas at a 3:1 ratio (e.g., if the project would result in 0.5 acre of impacted habitat area, a minimum of 1.5 acres of habitat shall be restored). With implementation of these measures, construction-related impacts on the ephemeral stream's surface area and stream habitat function and value would be reduced to a less than significant level (KMA 2024).

The project includes approximately 10.02 acres of ground-disturbing activities and would have the potential to result in sediment and/or pollutants entering the on-site drainage swale and downstream reaches, which could degrade off-site wetland and riparian habitat, as well as water quality. The project would be subject to County LUO Section 22.52.120, which requires the preparation of an Erosion and Sedimentation Control Plan (ESCP) for all construction and grading projects to minimize potential impacts related to erosion, sedimentation, and siltation. The plan would be prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts and would be subject to the review and approval of the County Department of Public Works. Additionally, the project would be subject to County COSE Implementation Strategy BR

Initial Study – Environmental Checklist

4.2.1, which designates a 50-foot setback from streams and riparian vegetation for all private development subject to discretionary review. Mitigation Measures BIO-2, BIO-6, and BIO-7 have been included to ensure proposed work does not occur within the top of bank of the ephemeral drainage swale, equipment refueling does not occur within 50 feet of the swale, and equipment staging does not occur within 100 feet of the swale.

Based on required compliance with County LUO Section 22.52.120 and County COSE Implementation Strategy 4.2.1, and implementation of Mitigation Measures BIO-2, BIO-6, and BIO-7, the project would not have a substantial adverse effect on any federally or state-protected wetlands; therefore, potential impacts would be *less than significant with mitigation*.

- (d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The project site is generally surrounded by commercial retail land uses and single-family residences, with a San Luis Obispo County Sheriff's Office and lumber company to the north, single-family residences to the south, a drilling company and single-family residences to the east, and US 101 to the west. In addition, North Main Street borders the eastern edge of the project site. Due to the surrounding developed areas and presence of major roadways, the project site does not provide a high level of connectivity to natural areas that could be used for terrestrial wildlife movement. Additionally, according to the CDFW Habitat Connectivity Viewer, the project site is located in an area with limited habitat connectivity (CDFW 2024).

The project may result in trimming or impacts within the critical root zone of the valley oak tree in the western portion of the property during grading or construction activities; however, the project does not include the removal of trees that could reduce the ability for migratory birds to use this site for nesting. The stream on-site does not frequently support pools of standing or flowing water, which reduces the likelihood for aquatic or semi-aquatic species to utilize this area for migration or breeding. Additionally, the project includes a 60-foot setback from the drainage and has been designed to avoid disturbance in these areas; therefore, there would be no interference with the movement of aquatic species. The development has been designed with open space buffers that would allow wildlife movement to pass around the project site, contiguous with a larger expanse of undeveloped land off-site (KMA 2022). Therefore, potential impacts would be *less than significant*.

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

County Inland LUO Chapter 22.58 establishes regulations for clear-cutting oak woodlands. There is one valley oak on the project site that will not be removed as a part of the project, and there is no oak woodland on the project site, so the project would not conflict with this ordinance. The County COSE establishes several policies to protect biological resources, including Policy BR 3.2, which requires proposed discretionary development to avoid damage to native trees and require mitigation measures when avoidance is not feasible. The project has the potential to impact the native valley oak tree on-site through construction activities that would occur in the critical root zone or through potential branch trimming. Mitigation Measures BIO-9 through BIO-12 have been included to reduce potential impacts to the valley oak by requiring protective fencing around the oak during construction, a monitor during ground-disturbing activities in the critical root zone of the oak,

Initial Study – Environmental Checklist

an arborist to be hired if oak tree trimming is required, and requirements for mitigation planting if trimming occurs. Therefore, impacts would be *less than significant with mitigation*.

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

The project site does not overlap with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other conservation plans. Therefore, the proposed project would not conflict with any approved local, regional, or state habitat conservation plans, and *no impacts* would occur.

Conclusion

Mitigation Measures BIO-1 through BIO-12 have been included to avoid and/or minimize potential impacts related to special-status wildlife species, nesting birds, the valley oak, and an ephemeral drainage on site. The proposed project would not result in disturbance to a migratory wildlife corridor. In addition, the proposed project would not conflict with a Habitat Conservation Plan or the County LUO for oak tree preservation. Upon implementation of the identified mitigation measures, potential impacts related to biological resources would be less than significant.

Mitigation

BIO-1 Environmental Awareness Training. Prior to mobilization of any equipment on the project site for initial site improvements and future residential development, a County of San Luis Obispo-qualified biologist shall conduct an environmental sensitivity training for all project personnel during the project kick-off meeting. The purpose of the training is to educate the personnel on the identification of special-status wildlife species that may occur within the project area and to provide an overview of the avoidance and minimization measures to be adhered to during the project. Specifically, the training will emphasize on all special-status wildlife species that would be expected to occur within the project limits, applicable regulatory policies and provisions regarding their protection, and a review of measures being implemented to avoid and/or minimize impacts to the species and their associated habitat. Furthermore, crew members will be briefed on the reporting process in the event that an inadvertent injury occurs to a special-status species during construction.

BIO-2 Best Management Practices. The following measures shall be printed on all construction plans prior to issuance of building permits, and shall be adhered to during construction activities:

1. The use of heavy equipment and vehicles shall be limited to the proposed project limits and defined staging areas/access points. The boundaries of each work area shall be clearly defined and marked with high visibility fencing. No work shall occur outside these limits.
2. No vehicles or equipment shall be refueled within 50 feet of drainage features unless a bermed and lined refueling area is constructed. No vehicles or construction equipment shall be stored overnight within 100 feet of these areas unless drip pans or ground covers are used. Construction staging areas shall attain zero discharge of stormwater runoff into these habitats.
3. Secondary containment, such as drip pans, shall be used to prevent leaks and spills of potential contaminants.

Initial Study – Environmental Checklist

4. Washing of concrete, paint, or equipment and refueling and maintenance of equipment shall occur only in designated staging areas. Sandbags and/or absorbent pads and spill control kits shall always be available on-site to clean up and contain fuel spills and other contaminants, and a Spill Response Plan shall be in place. Washing of equipment, tools, etc. shall not be allowed in any location where the tainted water could enter on-site drainages.
5. All project-related spills of hazardous materials within or adjacent to the project site shall be cleaned up immediately.
6. Construction equipment shall be inspected by the operator daily to ensure that equipment is in good working order and no fuel or lubricant leaks are present.
7. The use of pesticides (including rodenticides) and herbicides on the property shall be in compliance with all federal, state, and local regulations to avoid primary and secondary poisoning of sensitive species that may be using the project site.
8. Plastic monofilament netting (erosion control matting) or similar material will not be used on-site due to the potential to entangle special-status wildlife. Acceptable substitutes are coconut coir matting, biodegradable fiber rolls, or tackified hydroseeding compounds.
9. A Sediment and Erosion Control Plan may be required by the County of San Luis Obispo and shall be prepared by a qualified engineer. The use of silt fence, straw wattles, erosion control blankets, straw bales, sandbags, fiber rolls, and other appropriate techniques shall be employed to protect the drainage features on and off the property. Biotechnical approaches using native vegetation shall be used as feasible. All areas with soil disturbance shall have appropriate erosion controls and other stormwater protection best management practices installed to prevent erosion potential. All sediment and erosion control measures shall be installed per the engineer's requirements, and in place prior to October 15. These measures shall be maintained in good operating condition throughout the construction period. Methods that are not biodegradable shall be removed after vegetation has become established and following the end of the rainy season (late-spring or summer).
10. Areas with temporarily disturbed soils shall be restored under the direction of the project engineer in consultation with a qualified biologist as needed. Methods may include recontouring graded areas to blend in with existing natural contours, covering the areas with salvaged topsoil containing native seedbank from the project site, and/or applying the native seed mix shown on the project plans supplemented with species in the table below. Native seed mix shall be applied to the temporarily disturbed areas outside future development through either direct hand seeding or hydroseeding methods. Seeding with the erosion control native seed mix shall be provided on all disturbed soil areas prior to the onset of the rainy season (by October 15).
11. The revegetated areas shall be inspected by the qualified restoration ecologist and Stormwater Pollution Protection Plan (SWPPP) monitor to ensure that disturbed soils have successfully been stabilized in the short- and long-term. The monitoring visit

Initial Study – Environmental Checklist

shall include the removal of non-native species that favor disturbed conditions and outcompete native species.

Erosion Control Native Seed Mix

Species	Application Rate (lbs/acre)
<i>Bromus carinatus</i> (California brome)	10
<i>Stipa pulchra</i> (purple needlegrass)	5
<i>Trifolium wildenovii</i> (tomcat clover)	5
<i>Vulpia microstachys</i> (six weeks fescue)	5
Total	25

BIO-3

Nesting Bird Surveys. For any construction scheduled to start between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey for nesting birds within and adjacent to the property. The survey shall be conducted within 7 days before the initiation of construction within the nesting season. During this survey, the qualified biologist shall search for birds exhibiting nesting behavior and inspect all potential nest substrates (including grassland habitat) in the impact area. Any nests identified will be monitored to determine if they are active. If no active nests are found, construction may proceed. If an active nest is found within 50 feet (250 feet for raptors) of the construction area, the biologist, in consultation with the County of San Luis Obispo, shall determine the extent of a buffer to be established around the nest. The buffer shall be delineated with flagging, and no work shall take place within the buffer area until the young have left the nest, as determined by the qualified biologist. Once nesting has ceased and the young are no longer reliant on the nest, project activities can commence in the buffer zone.

Prior to construction of any phase of the project, at any time of year, a qualified biologist shall survey the project site plus a buffer of 250 feet for communal roosts of the yellow-billed magpie. If any are found and individuals may be affected by tree removal or construction disturbance, the biologist shall consult with County of San Luis Obispo and develop appropriate measures to avoid adverse impacts.

BIO-4

Roosting Bat Surveys. During the period from April to October, prior to construction, a preconstruction survey for roosting bats shall be conducted. Bat surveys shall be timed to their activity period in this region, which is generally April to October. A qualified biologist shall survey the trees to be removed during the day for sign of roosting bats such as guano or prey remains. The biologist shall assess the suitability of potential roost sites and utilize the following to determine if additional surveys are warranted:

1. No roost suitability: no further surveys needed.
2. Low roost suitability: one exit survey at dusk.
3. Moderate roost suitability: two surveys, preferably one exit or emergence survey at sunset and one re-entry survey at dawn, separated by at least 2 weeks

Initial Study – Environmental Checklist

4. High roost suitability: three surveys, with two exit surveys and at least one re-entry survey, separated by at least 1 week.

The biologist shall determine the most likely locations for bat roosts, and utilizing an appropriate number of surveyors assigned to each potential roost site, conduct emergence/re-entry surveys, as follows:

5. Bat emergence surveys shall be conducted when air temperature is above 50 degrees Fahrenheit, wind is less than 10 miles per hour, and there is no precipitation or dense fog.
6. Emergence surveys shall begin 30 minutes before sunset and continue until at least 1 hour after sunset.
7. Re-entry surveys can be conducted at dawn as bats return to the roost. Re-entry surveys shall be from 1 hour before sunrise to 15 minutes after sunrise.
8. Surveyors shall be positioned so that emerging bats will be silhouetted against the sky as they exit or enter the roost. Surveyors shall be close enough to observe all bats but not too close to influence their behavior.
9. Lights shall not be shown on roosts. Use of infra-red, night vision, or thermal-imaging video camera or spotted scope is recommended but not required.
10. All bats leaving/entering the roost shall be counted.

The qualified biologist shall determine whether a maternity roost is present by carefully observing individuals on the roost. If young are present, construction shall be delayed until they have matured and can fly on their own. If no evidence of roosting bats is found during the surveys, work may proceed.

If any evidence of individual roosting bats is found (i.e., no maternity roosts), the biologist shall develop appropriate exclusion techniques and coordinate with the County of San Luis Obispo and California Department of Fish and Wildlife, as described in Mitigation Measure BIO-5.

BIO-5

Bat Roost Relocation. Bat roost site exclusion and relocation shall be conducted for sites that cannot be avoided. If bat roosts are found during the preconstruction survey, the qualified biologist shall work with the County of San Luis Obispo, and California Department of Fish and Wildlife as appropriate, to exclude the bat from using the cavity with netting or another approved method. Temporary roost structures may be erected for displaced bats, and these structures may need to be specific for the species of bat using the roost. Identification of species would require the use of an acoustic monitoring bat detector and analysis software to be performed by a qualified biologist. Replacement roost structures shall be installed prior to bat exclusion activities. When it has been determined that no young are present, the biologist shall monitor the roost in the evening when the bats leave to forage and then install bat exclusion netting or another approved medium to prevent bats from re-entering the roost site. The netting shall be inspected the following morning to ensure that no bats have become entangled in the netting and that none remain in the structure. The netting shall remain in place until the construction activities have been completed.

Initial Study – Environmental Checklist

- BIO-6** **Ephemeral Stream Protection.** Ground disturbance shall be avoided below the top of bank of the ephemeral stream, if possible. Prior to construction, a County-qualified biologist shall review project plans to ensure the limits of the stream course are adequately avoided to the greatest extent feasible. The biologist shall work with project engineers and surveyors to delineate and mark the top of bank on the north side of the ephemeral stream in proximity to grading and development. Orange protective fencing in combination with silt fence is the recommended method for clearly marking the area to be avoided during construction.
- BIO-7** **Wetland Delineation.** The project, as proposed, avoids and protects the ephemeral stream onsite, but road improvements at Main Street may require culvert extension and modification of the stream channel. At the time of application for a grading permit, the project applicant shall retain a County-qualified biologist to prepare and submit a Preliminary Delineation of Wetlands and Other Waters (wetland delineation) to the County of San Luis Obispo Planning and Building Department for review. This report shall include a formal delineation of waters and wetlands under the jurisdiction of state and federal resource agencies using current USACE and state guidance concerning waters and wetlands delineations and quantification of the total permanent and temporary areas of impact. This report shall provide details regarding the waters and wetland habitat and may be used to support permit application(s) to the USACE, CDFW, and/or RWQCB, as applicable.
- BIO-8** **Waters and Wetlands Compensatory Mitigation and Monitoring Plan.** At the time of application for a grading permit, the project applicant shall retain a County-qualified biologist to prepare and submit a Waters and Wetlands Compensatory Mitigation and Monitoring Plan (CMMP) to the County of San Luis Obispo Planning and Building Department for review. The total area of habitat restoration and enhancement shall be established at a minimum 3:1 ratio (e.g., if the project would result in 0.5 acre of impacted habitat area, a minimum of 1.5 acres of habitat shall be restored). If permits are required from other jurisdictions such as the USACE, RWQCB and/or CDFW as part of the permitting process, additional requirements identified by permitting agencies shall be incorporated into the final CMMP accordingly. The CMMP will at a minimum include the following components:
1. Description of restoration site, including its location, size, current environmental conditions, ownership, and measures to ensure its long-term protection.
 2. Overall goals and measurable objectives to create a self-sustaining stream habitat that requires minimal maintenance. A description of how habitat enhancement work in the creek corridor and buffer area will promote the ecological integrity of the restoration site and compensate for the loss of onsite stream channel from road improvements.
 3. An implementation plan, including schedule, site preparation (including non-native invasive species removal), planting plan (species and number of each, propagule type, seeding/planting density), and responsible party.
- A maintenance plan detailing activities to be conducted during the establishment period (irrigation, non-native species removal) and schedule for implementation. The maintenance plan shall also address the long-term guidelines and constraints to maintaining the vegetation in the mitigation area. No pesticides, herbicides or fertilizers shall be used in a manner in which these substances can affect the creek

Initial Study – Environmental Checklist

habitat and biota. Guidelines shall be provided for the maintenance of planted trees, such as trimming or replacement.

4. A monitoring plan, including data collection methodology, how success criteria will be measured, and monitoring schedule for a period of at least five years. Monitoring will include establishing photo points that will aid in tracking the success of the planted propagules during each annual monitoring period. The vegetation density, cover and species richness of the mitigation site shall be assessed during the spring and fall throughout the monitoring period.
5. Final success criteria based on the goals and measurable objectives to ensure that a viable native plant community is established consistent with the requirements established by the County and other involved regulatory agencies, if applicable.
6. Contingency measures, such as supplemental planting, seeding or herbivore control, if success criteria are not being met.
7. Reporting requirements and notification of completion to the County and other regulatory agencies, if applicable.

BIO-9 Protective Oak Tree Fencing. Protective fencing shall be installed around the critical root zone of the valley oak tree to be retained or line of encroachment and disturbance shall be avoided during construction. Within 2 weeks prior to the initiation of ground disturbance, protective fencing shall be installed around the outer critical root zone of the oak tree to be retained, or if project activities will encroach into the root zone, the fencing shall delineate the line of allowable encroachment. Effort shall be made to maximize the distance from the protected tree. Tree buffer areas shall be shown on all construction plans. The protective fencing shall be orange plastic construction fencing or similar material and staked into the ground delineating the tree's protective buffer zone. The fencing shall be maintained throughout construction and removed only after there is no potential for construction-related impacts to trees. Trenching or placement of fill or structures shall not be located within the critical root zone. Any trenching within the critical root zone of protected trees shall be hand dug where practicable and major roots avoided. For any construction activity that cannot be repositioned outside the critical root zone, Mitigation Measures BIO-11 and BIO-12 are required.

BIO-10 Earthwork Monitoring. Earth work shall be monitored in the critical root zone and remedial measures shall be conducted to minimize damage to critical roots. A qualified arborist shall monitor excavation and grading activities within the critical root zone of the one valley oak to be retained. If large (>1 inch in diameter) roots are encountered during grading near the oak tree, the arborist shall cleanly cut the root following standard arboricultural techniques to maintain the health of the specimen. Soils within the critical root zone that have been compacted by construction activities shall be carefully scarified and aerated as soon as possible. Methods may include water jetting, adding a 4- to 6-inch layer of chip mulch, and boring small holes with an auger. The arborist shall advise the appropriate methods for soil aeration and whether fertilizer or other amendments need to be applied.

BIO-11 Arborist Requirement for Oak Trimming. A certified arborist shall be employed for oak tree trimming. The applicant shall employ the services of a certified arborist to trim the oak tree to be retained, as necessary for clearance. The arborist shall determine whether

Initial Study – Environmental Checklist

"extensive trimming" (i.e., over 25% of the canopy) is required, and if so, the tree would be considered "impacted" and subject to mitigation as described in Mitigation Measure BIO-12. The arborist shall also be utilized to monitor grading or excavation that may be required in the critical root zone, and properly prune all significant roots that may be encountered.

BIO-12 Oak Tree Planting Mitigation. On-site oak tree mitigation shall be implemented to compensate for project impacts on valley oak trees. The impacted tree shall be mitigated at a 2:1 ratio. Replacement trees shall be the same as the species impacted, of local origin, and at least 1 gallon in size. The trees shall be planted in areas of the property that will not be affected by future development or other site uses (i.e., the open space buffer). A maintenance and monitoring plan shall be prepared that includes details on how container plants will be installed, maintenance techniques, and methods to monitor their establishment. An As-Built Planting Plan shall be prepared to track the replacement trees. Annual reports detailing monitoring of the mitigation effort shall be prepared by a qualified botanist and submitted to the County of San Luis Obispo by December 31st of each year following planting. All replacement trees shall be maintained and monitored for a minimum of 7 years, or as determined by the County of San Luis Obispo, to ensure successful establishment. If replacement trees die or do not successfully establish, then additional trees shall be installed and monitored accordingly to meet the plan's success criteria.

V. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

The project site is located in an area historically occupied by two Native American tribes—the northernmost subdivision of the Chumash, the Obispeño (after Mission San Luis Obispo de Tolosa), and the Salinan. However, the precise location of the boundary between the Chumashan-speaking Obispeño Chumash and their northern neighbors, the Hokan-speaking Playanos Salinan, is currently the subject of debate, as those boundaries may have changed over time.

Initial Study – Environmental Checklist

San Luis Obispo County possesses a rich and diverse cultural heritage and therefore has a wealth of historic and prehistoric resources, including sites and buildings associated with Native American habitation, Spanish missionaries, immigrant settlers, and military branches of the United States.

As defined by CEQA, a historical resource includes:

1. A resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR).
2. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant. The architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural records of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence.

Pursuant to CEQA, a resource included in a local register of historic resources or identified as significant in a historical resource survey shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

A Phase I Archaeological Resources Report was prepared for the proposed project to determine the presence and the likelihood of presence of cultural resources within the project area (Stone Archaeological Consulting 2022). The Phase I Archaeological Resources Report included the results and findings of a background review and pedestrian survey of the project area. A records search was conducted at the Central Coast Information Center (CCIC) located at the Santa Barbara Museum of Natural History to identify any previously recorded cultural resources within the project site and a 0.25-mile radius of the project site. The records search did not reveal any previously recorded resources within the project site or within a 0.25-mile radius of the project site. A pedestrian field survey of the project site was conducted, and no cultural resources or evidence of cultural resources was observed (Stone Archaeological Consulting 2022).

Discussion

- (a) *Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?*

The project site is currently undeveloped and does not consist of any residences, buildings, or other structures that could be eligible for listing as historical resources in the CRHR. Further, the records search did not reveal any previously documented historic resources within the project area (Stone Archaeological Consulting 2022). Because there are no historical resources within or directly adjacent to the project site, implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource; therefore, *no impacts* would occur.

- (b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

A CCIC records search was conducted to determine whether any previously recorded cultural or archaeological resources occur within the project area. The records search did not identify any known previously recorded archaeological resources within the project area. A field survey of the project site was conducted, and no visible surface archaeological resources were found. Based on the results of the Phase I Archaeological Resources Report, there are no known cultural

Initial Study – Environmental Checklist

archaeological resources within the project area and the project site has a low archaeological sensitivity (Stone Archaeological Consulting 2022).

Construction activities for the proposed project would require ground-disturbing activities on the entirety of the 10.02-acre project site. Because there are no known archaeological resources within the project area, proposed construction and ground-disturbing activities would not result in adverse changes to known archaeological resources. However, there is still some potential for inadvertent discovery of unknown cultural resources if present within the proposed work area during proposed construction activities. The project would be required to comply with County LUO Section 22.10.040 to address inadvertent discovery of unknown cultural resources. Per County LUO Section 22.10.040, in the event an unknown cultural resource site is encountered, all work within the vicinity of the find must be halted until a qualified archaeologist is retained to evaluate the nature, integrity, and significance of the find. Based on required compliance with the County LUO, proposed construction activities would not result in adverse impacts to known or unknown cultural archaeological resources; therefore, impacts would be *less than significant*.

(c) *Disturb any human remains, including those interred outside of dedicated cemeteries?*

The Phase I Archaeological Resources Report did not identify any previously discovered or signs of human remains within the project site, and the project site is considered to have low sensitivity for the presence of unidentified human resources (Stone Archaeological Consulting 2022). Further, the project would be required to comply with California Health and Safety Code Section 7050.5 and County LUO Section 22.10.040, which outlines the protocol for inadvertent discovery of human remains. California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the coroner will notify the California Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the project site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Based on required compliance with California Health and Safety Code Section 7050.5 and the County LUO, impacts related to disturbance of human remains would be *less than significant*.

Conclusion

No archaeological or historical resources are known or expected to occur within or adjacent to the project site. In the event unanticipated archaeological resources or human remains are discovered during future construction activities, adherence with County LUO Section 22.10.040 and California Health and Safety Code Section 7050.5 procedures would reduce potential impacts to less than significant; therefore, potential impacts to cultural resources would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

Initial Study – Environmental Checklist

VI. ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Local Utilities

Pacific Gas & Electric Company (PG&E) is the primary electricity provider for urban and rural communities within San Luis Obispo County. PG&E utilizes clean energy sources, including 38% from renewable energy sources and 57% from GHG-free energy sources (PG&E 2022).

On March 21, 2023, the County Board of Supervisors voted to enroll the county in Central Coast Community Energy (3CE), a Community Choice Aggregator (CCA), which is a locally controlled public agency supplying clean and renewable electricity for residents and businesses in Santa Cruz, San Benito, Monterey, and Santa Barbara Counties, as well as multiple incorporated cities within these counties. 3CE is based on a CCA model, which means that 3CE partners with the local utility (i.e., PG&E), which continues to provide consolidated billing, electricity transmission and distribution, customer service, and grid maintenance services. 3CE provides customers with a choice for clean and renewable energy and community reinvestment through rate benefits and local GHG-reducing energy programs for residential, commercial, and agricultural customers. 3CE is currently on a pathway to achieving 60% clean and renewable energy by 2025 and 100% clean and renewable energy by 2030, which is 15 years ahead of California’s mandate for zero emissions. Participation in 3CE as an electricity provider is voluntary; however, customers are automatically opted in to 3CE but can voluntarily opt out and continue service solely with PG&E if desired. 3CE services are anticipated to begin for unincorporated San Luis Obispo County in January 2025 (3CE 2023).

The Southern California Gas Company (SoCalGas) is the primary provider of natural gas for urban and rural communities within San Luis Obispo County. SoCalGas has begun purchasing 100% renewable power from the grid under the Southern California Edison (SCE) Green Rate Program everywhere the gas utility is eligible for service by SCE. Under this new arrangement, SoCalGas estimates that it will purchase nearly 53.7 million kilowatt hours of power from 100% renewable sources each year, reducing GHG emissions by 38,000 metric tons annually, the equivalent of taking more than 8,000 gasoline-powered cars off the road each year. SoCalGas aims to achieve a net zero emissions in operations and delivery of energy by 2045 (SoCalGas 2021).

Initial Study – Environmental Checklist

Local Energy Plans and Policies

The County COSE establishes goals and policies that aim to reduce VMT, conserve water, increase energy efficiency and the use of renewable energy, and reduce associated GHG emissions. The County COSE provides the basis and direction for the development of the *County of San Luis Obispo EnergyWise Plan* (County EWP), which outlines in greater detail the County's strategy to reduce government and community-wide GHG emissions through a number of goals, measures, and actions, including energy efficiency and development and use of renewable energy resources. The County EWP established the goal to reduce community-wide GHG emissions to 15% below 2006 baseline levels by 2020. In addition, the County has published the EnergyWise Plan 2016 Update to summarize progress toward implementing measures established in the County EWP and outline overall trends in energy use and emissions since the baseline year of the County EWP inventory—2006. While the timeline for the goals in this plan has since passed, the County EWP still provides helpful context for evaluating projects' consistency with the County's goals related to energy efficiency, energy conservation, and renewable energy.

The County LUO includes a Renewable Energy Overlay combining designation to encourage and support the development of local renewable energy resources, conserving energy resources and decreasing reliance on environmentally costly energy sources. This designation is intended to identify areas of the county where renewable energy production is favorable and establish procedures to streamline the environmental review and processing of land use permits for solar electric facilities. The County LUO establishes criteria for project eligibility, required application content for solar electric facilities proposed within this designation, permit requirements, and development standards (County LUO Section 22.14.100). The project site is located within the Renewable Energy Overlay combining designation.

State Building Code Requirements

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC includes mandatory green building standards for residential and nonresidential structures, the most recent version of which is referred to as the 2022 Building Energy Efficiency Standards (also referred to as the California Green Building Standards Code [CALGreen]). These standards focus on four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements.

Vehicle Fuel Economy Standards

In October 2012, the USEPA and National Highway Traffic Safety Administration (NHTSA), on behalf of the U.S. Department of Transportation (USDOT), issued final rules to further reduce GHG emissions and improve corporate average fuel economy (CAFE) standards for light-duty vehicles for model years 2017 and beyond. NHTSA's CAFE standards have been enacted under the Energy Policy and Conservation Act since 1978. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program would increase fuel economy to the equivalent of 54.5 miles per gallon (mpg) limiting vehicle emissions to 163 grams of carbon dioxide (CO₂) per mile for the fleet of cars and light-duty trucks by the model year 2025.

In January 2017, USEPA Administrator Gina McCarthy signed a Final Determination to maintain the current GHG emissions standards for the model year 2022–2025 vehicles. However, on March 15, 2017, USEPA

Initial Study – Environmental Checklist

Administrator Scott Pruitt and USDOT Secretary Elaine Chao announced that the USEPA intends to reconsider the Final Determination. On April 2, 2018, USEPA Administrator Pruitt officially withdrew the January 2017 Final Determination, citing information that suggests that these current standards may be too stringent due to changes in key assumptions since the January 2017 Determination. According to the USEPA, these key assumptions include gasoline prices and overly optimistic consumer acceptance of advanced technology vehicles. The April 2, 2018, notice is not USEPA's final agency action, and the USEPA intends to initiate rulemaking to adopt new standards. Until that rulemaking has been completed, the current standards remain in effect.

As part of California's overall approach to reducing pollution from all vehicles, the CARB has established standards for clean gasoline and diesel fuels and fuel economies of new vehicles. The CARB has also put in place innovative programs to drive the development of low-carbon, renewable, and alternative fuels, such as their Low Carbon Fuel Standard (LCFS) Program pursuant to California Assembly Bill (AB) 32 and the Governor's Executive Order S-01-07.

In January 2012, the CARB approved the Advanced Clean Cars Program, which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The Advanced Clean Cars II regulations were later adopted in 2022, imposing the next level of low-emission and zero-emission vehicle standards for model years 2016 to 2035 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality targets. By 2035, all new passenger cars, trucks, and SUVs sold in California will be zero-emissions. The Advanced Clean Cars II regulations take the state's already growing zero-emission vehicle market and robust motor vehicle emission control rules and augments them to meet more aggressive tailpipe emissions standards and ramp up to 100% zero-emission vehicles (CARB 2024).

All self-propelled off-road diesel vehicles 25 horsepower (hp) or greater used in California and most two-engine vehicles (except on-road two-engine sweepers) are subject to the CARB's Regulation for In-Use Off-Road Diesel Fueled Fleets (Off-Road regulation). This includes vehicles that are rented or leased (rental or leased fleets). The overall purpose of the Off-Road regulation is to reduce emissions of NO_x and particulate matter from off-road diesel vehicles operating within California through the implementation of standards, including, but not limited to, limits on idling, reporting and labeling of off-road vehicles, limitations on use of old engines, and performance requirements.

Discussion

- (a) *Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

The project would require the use of fossil fuels, electricity, and natural gas for construction vehicles and equipment during future construction of new residential and accessory uses. Proposed energy use during construction would be short term and limited in scale and would not result in unnecessary, wasteful, or inefficient energy consumption; therefore, energy consumed during construction would be temporary and would not represent a significant or wasteful demand on available resources. Further, although not necessary to reduce already less-than-significant impacts, implementation of Mitigation Measure AQ-1 as identified in Section III, *Air Quality*, would further reduce short-term energy use by limiting diesel idling.

Implementation of the project would result in the operation of 22 new single-family residences and 22 ADUs (including detached ADUs and JADUs). The project is estimated to result in an electricity

Initial Study – Environmental Checklist

demand of 180,164 kilo-watt hours per year (KWh/yr) and 612,479 kilo-British Thermal Units per year (kBtu/yr) (Wolf Environmental 2023). The project's operational electricity needs would be supplied by 3CE, which is currently on a pathway to achieving 60% clean and renewable energy by 2025 and 100% clean and renewable energy by 2030, which is 15 years ahead of California's mandate for zero emissions. Additionally, natural gas service would be provided by SoCalGas, which has begun purchasing 100% renewable power to serve its customers (SoCalGas 2021).

Proposed residential building design would be required to adhere to Title 24 of the California Energy Code (CEC) and the most recent CBC Building Energy Efficiency Standards to further reduce operational energy use through implementation of green building and energy-efficient building design features. Based on the use of clean energy source mixes and required compliance with the CEC and CBC, operation of the proposed residential uses would not result in potentially significant environmental impacts due to wasteful, unnecessary, or inefficient use of energy resources during operation and impacts would be *less than significant*.

(b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

As previously evaluated, proposed construction activities would require the use of energy in the form of diesel fuel and gasoline for worker and construction vehicles and equipment. The energy consumed during construction would be temporary and would not represent a significant or wasteful demand on available resources, which would be consistent with applicable renewable energy plans.

In order to be compliant with the policies set forth in the County COSE, the project would be required to reduce GHG emissions where feasible in energy consumption. Future residential uses would be provided electricity by 3CE, which is currently on a pathway to achieving 60% clean and renewable energy by 2025 and 100% clean and renewable energy by 2030, which is 15 years ahead of California's mandate for zero emissions. By utilizing PG&E for electricity, 95% of the project's electricity demand would be sourced from renewable or GHG-free energy sources, which is consistent with the County COSE. Further, the project would be provided natural gas service by SoCalGas, which has begun purchasing 100% renewable power to serve its customers (SoCalGas 2021). Future residential uses would be required to comply with Title 24 of the CEC and the most recent CBC Building Energy Efficiency Standards to ensure compliance with energy-efficient building design to reduce operational energy use.

The project site is located within the Renewable Energy Overlay (RE) combining designation. The project does not include the construction of solar electric facilities or other renewable energy facilities that would be applicable to permit streamlining or development standards included in County LUO Section 22.14.100. The RE combining designation does not include development standards that would limit development within this designation to only renewable energy facilities, but rather identifies areas within the county where renewable energy production may be favorable.

Based on required compliance with the CEC and CBC and the use of electricity and natural gas from clean energy sources, the project would comply with applicable energy efficiency plans, and impacts would be *less than significant*.

Conclusion

The project would not result in unnecessary, wasteful, or inefficient energy use during short-term construction or long-term operations and would not conflict with state or local renewable energy or energy

Initial Study – Environmental Checklist

efficiency plans. Therefore, potential impacts related to energy would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

VII. GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Initial Study – Environmental Checklist

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Earthquake Fault Zones

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) is a California state law that was developed to regulate development near active faults and mitigate the surface fault rupture potential and other hazards. The Alquist-Priolo Act identifies active earthquake fault zones and restricts the construction of habitable structures over known active or potentially active faults. San Luis Obispo County is in a geologically complex and seismically active region. The *County of San Luis Obispo General Plan Safety Element* identifies three active faults that traverse through the county and are currently zoned under the Alquist-Priolo Act: San Andreas, Hosgri-San Simeon, and Los Osos (County of San Luis Obispo 1999).

Seismic and Other Geologic Hazards

Ground shaking refers to the motion that occurs in response to regional and local earthquakes. Seismic ground shaking is influenced by the proximity of the project site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. Ground shaking can endanger life and safety due to damage or collapse of structures or lifeline facilities. The CBC includes requirements that structures be designed to resist a certain minimum seismic force resulting from ground motion.

Liquefaction is the sudden loss of soil strength due to a rapid increase in soil pore water pressures resulting from ground shaking during an earthquake. Liquefaction potential increases with earthquake magnitude and ground shaking duration. Low-lying areas adjacent to creeks, rivers, beaches, and estuaries underlain by unconsolidated alluvial soil are most likely to be vulnerable to liquefaction. The CBC requires the assessment of liquefaction in the design of all structures. Based on the County Safety Element Liquefaction Hazards Map, the project site is located in an area with moderate potential for liquefaction (County of San Luis Obispo 1999).

Landslides and slope instability can occur as a result of wet weather, weak soils, improper grading, improper drainage, steep slopes, adverse geologic structure, earthquakes, or a combination of these factors. Despite current codes and policies that discourage development in areas of known landslide activity or high risk of landslide, there is a considerable amount of development that is impacted by landslide activity in the County each year. The County Safety Element identifies several policies to reduce risk from landslides and slope instability. These policies include the requirement for slope stability evaluations for development in areas of moderate or high landslide risk and restrictions on new development in areas of known landslide activity

Initial Study – Environmental Checklist

unless development plans indicate that the hazard can be reduced to a less-than-significant level prior to beginning development.

According to the County Safety Element Maps, the project site is primarily located in an area with low potential for landslide (County of San Luis Obispo 1999). Shrink/swell potential is the extent to which the soil shrinks as it dries out or swells when it gets wet. Extent of shrinking and swelling is influenced by the amount and kind of clay in the soil. Shrinking and swelling of soils can cause damage to building foundations, roads, and other structures. A high shrink/swell potential indicates a hazard to maintenance of structures built in, on, or with material having this rating. Moderate and low ratings lessen the hazard accordingly. Soils at the project site contain clay materials and would have some potential for expansion to occur (NRCS 2023).

Local Regulations

Chapter 22.52 of the County LUO includes specific regulations pertaining to grading and drainage within the county. The purpose of Chapter 22.52 is to establish standards to safeguard public health, safety, and general welfare; minimize erosion and sedimentation; minimize fugitive dust emissions; prevent the loss of agricultural soils; reduce the harmful effects of stormwater runoff; encourage groundwater recharge; protect fish and wildlife; reduce hazards to life and property; reduce drainage problems from new development; enhance slope stability; protect natural, scenic, and cultural resources; prevent environmental damage to public and private property; and to otherwise protect the natural environment.

The County LUO identifies a Geologic Study Area (GSA) combining designation for areas where geologic and soil conditions could present new developments and/or their occupants with potential hazards to life and property. All land use permit applicants located within a GSA are required to include a report prepared by a certified engineering geologist and/or registered civil/soils engineer, as appropriate, with the exception of construction of one single-story single-family residence, agricultural uses not involving a building, agricultural accessory structures, and alterations or additions to any structure that does not exceed 50% of the assessed value of the structure. In addition, all uses within a GSA are subject to special standards regarding grading and distance from an active fault within an Earthquake Fault Zone (County LUO Section 22.14.070). The project site is not located within a GSA (County of San Luis Obispo 2023).

The County Safety Element has two basic principles: to be ready for disaster and to manage development to reduce risk. The County Safety Element provides goals, policies, and programs to reduce the risk of loss due to potential natural hazards, including seismic hazards, within the county, with the purpose of providing standards for reducing the risk of exposure to hazards.

The County COSE identifies a policy for the protection of paleontological resources from the effects of development by avoiding disturbance where feasible. Where substantial subsurface disturbance is proposed in paleontologically sensitive units, Implementation Strategy CR 4.5.1 (Paleontological Studies) requires a paleontological resource assessment and mitigation plan be prepared to identify the extent and potential significance of resources that may exist within the proposed development and provide mitigation measures to reduce potential impacts to paleontological resources.

Paleontological Setting

Paleontological resources are fossilized remains of ancient environments, including fossilized bone, shell, and plant parts; impressions of plant, insect, or animal parts preserved in stone; and preserved tracks of insects and animals. Paleontological resources are considered nonrenewable resources under federal and state law. Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically

Initial Study – Environmental Checklist

significant fossils, as determined by rock type, history of the rock unit in producing fossil materials, and fossil sites that have been recorded in the unit. Paleontological resources are generally found below ground surface in sedimentary rock units. The boundaries of the sedimentary rock unit are used to define the limits of paleontological sensitivity in a given region.

Discussion

(a) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

(a-i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

The project site is located greater than 15 miles from any mapped Alquist-Priolo Act fault zones within the county (CDOC 2021). Additionally, the nearest mapped potentially active fault is located approximately 0.6 mile northeast of the project site (CDOC 2015). Therefore, the project would not result in risk of loss, injury, or death related to rupture of a known Alquist-Priolo Act fault zone or other known active fault and *no impacts* would occur.

(a-ii) *Strong seismic ground shaking?*

San Luis Obispo County is located in a seismically active region and there is potential for seismic ground shaking to occur on the project site. The project site is located 0.63 mile southwest of an unnamed potentially active quaternary fault associated with the Rinconada fault zone (CDOC 2015). Future residential development and associated structures would be required to comply with seismic design criteria included in the most recent CBC and other applicable engineering and design standards to ensure the effects of a potential seismic event would be minimized through compliance with current engineering practices and techniques. The project does not include unique components that would be particularly sensitive to seismic ground shaking or result in an increased risk of injury or damage as a result of ground shaking. Implementation of the project would not expose people or structures to significant increased risks associated with seismic ground shaking; therefore, impacts would be *less than significant*.

(a-iii) *Seismic-related ground failure, including liquefaction?*

Based on the County Safety Element Liquefaction Hazards Map, the project site is located in an area with moderate potential for liquefaction. Future development would be required to comply with seismic design criteria included in the most recent CBC and other engineering standards to adequately withstand earthquake loads and associated risk, including liquefaction. Adherence to the CBC and other applicable engineering standards would reduce and minimize the risk of loss, injury, or death associated with liquefaction; therefore, impacts would be *less than significant*.

(a-iv) *Landslides?*

According to the County Safety Element Maps, the project site is primarily located in an area with low potential for landslide. The project site is located on gently sloping land, and the proposed project would require approximately 10.02 acres of ground disturbance, including 20,000 cubic yards of cut and 45,000 cubic yards of fill with a net import of 25,000 cubic yards. The amount of earthwork proposed for the project is required to make the project site level enough to allow for the

Initial Study – Environmental Checklist

construction of residential units, given the existing topography of the project site. Further, the single-family residences and ADU/JADUs would be constructed in accordance with the most recent CBC standards to minimize risk associated with landslides. The proposed project would include development of retaining walls along the property line/perimeter of residential lots that would be constructed in accordance with Section 18 of the CBC to ensure stability against landslides and other ground failures in the project area. Based on existing site conditions and required compliance with the CBC, new development would not result in the risk of loss, injury, or death associated with landslides; therefore, impacts would be *less than significant*.

(b) *Result in substantial soil erosion or the loss of topsoil?*

The proposed project would require approximately 10.02 acres of ground disturbance, including 20,000 cubic yards of cut and 45,000 cubic yards of fill with a net import of 25,000 cubic yards. Proposed ground disturbance has the potential to increase erosion and loss of topsoil at the project site that could run off into the on-site drainage and surrounding areas. Per County LUO Section 22.52.120, an ESCP is required for all construction and grading projects to minimize potential short- and long-term impacts related to erosion and sedimentation, and includes requirements for specific erosion control materials, setbacks from creeks, and siltation prevention. The plan would be prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. The proposed project would disturb more than 1 acre of soils and would be required to comply with SWRCB General Construction Permit requirements, including preparation and implementation of a Stormwater Pollution Protection Plan (SWPPP) with Best Management Practices (BMPs) to further reduce the potential for erosive runoff during project construction. In addition, Mitigation Measures BIO-2, BIO-6, and BIO-7 have been identified in Section IV, *Biological Resources*, to reduce potential impacts related to an increase in erosion at the project site and runoff into the on-site drainage through the implementation of construction BMPs and drainage protection measures during construction activities. With compliance with applicable policies and implementation of identified mitigation measures, impacts associated with soil erosion and loss of topsoil during construction activities would be reduced to less than significant.

Following construction, the project site would be developed with 22 single-family residential units, up to 22 ADUs/JADUs, a paved private driveway, two retention basins, and a landscaped open space buffer, which would reduce the potential for long-term erosion on-site. The proposed project would not include expansion of additional cropland or other activities that could increase the potential for long-term loss of topsoil at the project site. Based on required compliance with the RWQCB and County LUO Section 22.52.120, potential impacts related to soil erosion and loss of topsoil would be *less than significant*.

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

Based on County Safety Element maps, the project site is located in an area with low potential for landslide and moderate potential for liquefaction to occur. Additionally, the project site is not located in an area with known land subsidence (U.S. Geological Survey [USGS] 2022). Future residences and occupiable structures would be required to be constructed in accordance with the most recent CBC to adequately withstand and minimize risk associated with potential ground-failure events; therefore, potential impacts related to ground failure would be *less than significant*.

Initial Study – Environmental Checklist

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

Soils at the project site contain clay components and have potential for soil expansion to occur. Proposed single-family residences and ADU/JADUs would be required to comply with Section 18 of the most recent CBC, which requires geotechnical investigations to be conducted by a qualified engineer prior to development to determine soil conditions at the project site and provide design recommendations to be implemented in final design and construction plans. Based on required compliance with the CBC, new development would not result in the risk to life or property as a result of development on expansive soils; therefore, impacts would be *less than significant*.

- (e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The project would not include use or construction of on-site septic tanks. New and existing sewer lines would be used to collect, transport, and treat wastewater generated by the proposed project. The proposed project does not include the installation of an on-site septic system or alternative wastewater disposal; therefore, *no impacts* would occur.

- (f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The project site is underlain by Surficial Sediments (Qa), which consists of Holocene-age alluvial gravel, sand, and clay (USGS 2004). This paleontological unit is from the late Holocene epoch and is considered too young to preserve paleontological resources; therefore, it is determined to have low paleontological sensitivity (Society of Vertebrate Paleontology [SVP] 2010). In addition, no known paleontological resources are known to exist in the project area, and the project site does not contain any unique geologic features. Based on the low paleontological sensitivity of the project site and lack of unique geologic features, impacts would be *less than significant*.

Conclusion

The project site is not within the GSA combining designation or an area of high risk of landslide, liquefaction, subsidence, or other unstable geologic conditions. Future development would be required to comply with the most recent CBC, standard engineering practices, and standard County LUO requirements to properly safeguard against seismic and geologic hazards. Based on required compliance with existing County and RWQCB regulations, implementation of the project would not result in a substantial increase in erosion or loss of topsoil. Therefore, potential impacts related to geology and soils would be less than significant with the implementation of mitigation measures identified throughout this document.

Mitigation

Implement Mitigation Measures BIO-2, BIO-6, and BIO-7.

Initial Study – Environmental Checklist

VIII. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

GHGs are any gases that absorb infrared radiation in the atmosphere. The primary GHGs that are emitted into the atmosphere as a result of human activities are CO₂, methane (CH₄), NO_x, and fluorinated gases. These are most commonly emitted through the burning of fossil fuels (oil, natural gas, and coal), agricultural practices, decay of organic waste in landfills, and a variety of other chemical reactions and industrial processes (e.g., the manufacturing of cement). CO₂ is the most abundant GHG and is estimated to represent approximately 80% to 90% of the principal GHGs that are currently affecting the earth’s climate.

In 2021 GHG emissions within California totaled 381.3 million metric tons of carbon dioxide equivalent (MTCO₂e). Within California, the transportation sector is the largest contributor, accounting for approximately 39% of the total state-wide GHG emissions. Emissions associated with industrial uses are the second largest contributor, totaling roughly 22%. Electricity generation totaled roughly 16% (CARB 2023).

State Regulatory Setting

In October 2008, the CARB published the Climate Change Proposed Scoping Plan (2008 Scoping Plan), which is the state’s plan to achieve GHG reductions in California required by AB 32. The 2008 Scoping Plan included CARB-recommended GHG reductions for each emissions sector of the state’s GHG inventory. The largest proposed GHG reduction recommendations were associated with improving emissions standards for light-duty vehicles, implementing the Low Carbon Fuel Standard program, implementation of energy efficiency measures in buildings and appliances, the widespread development of combined heat and power systems, and developing a renewable portfolio standard for electricity production.

SB 32 and Executive Order (EO) S-3-05 extended the state’s GHG reduction goals and require the CARB to regulate sources of GHGs to meet the following goals:

- Reduce GHG emissions to 1990 levels by 2020;
- Reduce GHG emissions to 40% below 1990 levels by 2030; and
- Reduce GHG emissions to 80% below 1990 levels by 2050.

Initial Study – Environmental Checklist

AB 1279 (the California Climate Crisis Act) was signed into law in September 2022. This law established the revised GHG reduction goals, including the following (California Legislative Information 2022):

- Achieve net zero GHG emissions as soon as possible, but no later than 2045;
- Maintain net negative GHG emissions thereafter (following 2045); and
- Reduce statewide anthropogenic GHG to at least 85% below 1990 levels by 2045.

The 2008 Scoping Plan was first approved by the CARB on December 11, 2008, and is updated every 5 years. The first update of the Scoping Plan was approved by the CARB on May 22, 2014, which looked past 2020 to set mid-term goals (2030–2035) toward reaching the 2050 goals. The most recent update released by the CARB is the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which was finalized and adopted in December 2022. The 2022 Scoping Plan lays out the strategies for achieving carbon neutrality and reducing anthropogenic (i.e., human caused) GHG emissions by 85% below 1990 levels no later than 2045, as directed by AB 1279 (CARB 2022).

Regional Regulatory Setting

SLOAPCD is a local public agency with the primary mission of realizing and preserving clean air for all county residents and businesses. Responsibilities of the SLOAPCD include but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by federal and State regulatory requirements.

As a Commenting Agency under CEQA, the SLOAPCD has developed the CEQA Air Quality Handbook to assist lead agencies, planning consultants, and project proponents in assessing the potential air quality and GHG impacts from residential, commercial, and industrial development. SLOAPCD recently developed and published the 2023 Administrative Update Version of the CEQA Air Quality Handbook, which included updated thresholds of significance for GHG emissions. These thresholds have been established through the year 2045, the last year specified in AB 1279 and the CARB 2022 Scoping Plan Update for California to achieve its net zero GHG emissions target (SLOAPCD 2023b).

For projects with an initial operational year of 2030 or earlier, if emissions are at or below an applicable threshold for that operational year, then the project is considered to be doing its fair share toward the state's SB 32 GHG reduction target. For operational year 2023, the SLOAPCD has established that the GHG efficiency threshold for new development is 2.9 MTCO_{2e} per service population per year (SLOAPCD 2023a).

An Air Quality and Greenhouse Gas Assessment was prepared for the project to evaluate the project's potential impacts related to GHG emissions (Wolf Environmental 2023; see Appendix B).

Discussion

- (a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

When assessing the significance of potential impacts for CEQA compliance, an individual project's GHG emissions will generally not result in direct significant impacts because the climate change issue is global in nature. However, an individual project could be found to contribute to a potentially significant cumulative impact. Projects that have GHG emissions above applicable GHG significance

Initial Study – Environmental Checklist

thresholds may be considered cumulatively considerable and require mitigation. Development of the project would result in increases of CO₂ from mobile sources. To a lesser extent, other GHG pollutants, such as CH₄ and nitrous oxide (N₂O), would also be generated. Short- and long-term GHG emissions associated with the development of the project are evaluated below.

Short-Term Construction Emissions

GHG emissions associated with the construction of the proposed project were calculated using the CalEEMod, version 2022.1.1.2, computer program. Based on the modeling conducted, construction-related GHG emissions would total approximately 990.72 MTCO₂e (Wolf Environmental 2023). Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted. When evaluated over an approximate 30-year life of the project, amortized construction-generated emissions would total approximately 33 MTCO₂e per year. It is also important to note, however, that implementation of Mitigation Measure AQ-1 identified in Section III, *Air Quality*, includes measures that would reduce emissions from diesel-fueled equipment and vehicles. Amortized construction generated GHG emissions have been included with operational GHG emissions in the impact discussion below.

Long-Term Operational GHG Emissions

GHG emissions associated with the long-term operation of the proposed project were calculated using the CalEEMod, version 2022.1.1.2. Based on the modeling conducted, operational GHG emissions for the year 2026 would total approximately 216.04 MTCO₂e per year (Wolf Environmental 2023). A majority of the operational GHG emissions would be associated with energy use and the operation of motor vehicles. To a lesser extent, GHG emissions would also be generated by solid waste generation and water use. With the inclusion of amortized construction-generated GHG emissions, GHG emissions would total 249.06 MTCO₂e per year (Wolf Environmental 2023). GHG emissions associated with the project for operational year 2030 are summarized in Table 5.

Table 4. Estimated Project Operational GHG Emissions without Mitigation

Source	Year 2030 GHG Emissions (MTCO ₂ e/Year)
Total Operational Emissions	216.04
Amortized Construction Emissions	33
Total Operational + Amortized Construction Emissions	249.06
Project Service Population (SP) ¹	79
Project MTCO ₂ e/SP	3.2
SLOAPCD GHG Efficiency Significance Threshold	3.8
Exceeds Threshold?	No

Source: Wolf Environmental (2023)

¹ Based on the estimated number of residents served by the proposed project provided by the project proponent.

Based on the modeling conducted and assuming a total service population (SP) of 79 residents, the calculated GHG efficiency for the proposed project would be 3.2 MTCO₂e/SP/year for year 2026,

Initial Study – Environmental Checklist

which would not exceed the SLOAPCD GHG significance threshold of 3.8 MTCO₂e/SP/year for year 2026. The project would not exceed the SLOAPCD threshold for GHG emissions and would therefore not generate GHG that would have a significant impact on the environment; therefore, impacts would be *less than significant*.

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

As described under Impact Discussion VIII(a), the project would result in a small quantity of annual GHG emissions over the life of the project and would not exceed the SLOAPCD GHG emissions significance threshold. Residential development associated with the project would also be required to be constructed in accordance with Title 24 of the CEC and CBC 2019 Building Energy Efficiency Standards to reduce operational energy use, which would minimize operational GHG emissions from building energy use. Overall project consistency with the County EWP and the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by the San Luis Obispo Council of Governments (SLOCOG) is evaluated below.

EnergyWise Plan Consistency

As described in Section VI, *Energy*, while the timeline for the goals in the County EWP has since passed, the EWP still provides helpful context for evaluating projects' consistency with the County's goals related to energy efficiency, energy conservation, and renewable energy.

The County EWP is a long-range plan to reduce GHG emissions from County government operations and community activities within the County. The County EWP includes numerous measures to reduce GHG emissions associated with energy use, motor vehicle use, water use, waste generation, and construction. It is important to note, however, that the County EWP is based on year 2020 GHG-reduction targets and has not yet been updated to reflect year 2030 GHG-reduction targets, per SB 32. While County decision-makers have the ultimate authority to determine project consistency with County General Plan goals and policies, a preliminary analysis of the project's consistency with the measures identified in the County EWP is provided in Table 6.

Table 5. Project Consistency with the County of San Luis Obispo EnergyWise Plan

Communitywide GHG Reduction Measure	Project Consistency
<p>Measure 7. Energy-efficient New Development. Encourage and incentivize new development projects to exceed minimum Cal Green requirements.</p>	<p>Consistent. Proposed residential building design would be required to adhere to Title 24 of the CEC and the most recent CBC Building Energy Efficiency Standards to further reduce operational energy use through implementation of green building and energy-efficient building design features.</p>
<p>Measure 18. Strategic Growth. Continue to implement strategic growth strategies that direct the county's future growth into existing communities and to provide complete services to meet local needs.</p>	<p>Consistent. The project site is located in the Templeton URL and the TCSD service area. Proposed residential uses water demand and wastewater services would be serviced by the TCSD.</p>

Initial Study – Environmental Checklist

Table 5. Project Consistency with the County of San Luis Obispo EnergyWise Plan

Communitywide GHG Reduction Measure	Project Consistency
<p>Measure 20. Affordable Housing. Continue to increase the amount of affordable housing provided in San Luis Obispo County. Affordable and below-market-rate housing provides greater opportunity for lower-income families to live closer to job and activity centers, providing residents with greater access to transit and alternative modes.</p>	<p>Consistent. The project includes the development of 22 single-family residences as well as the development of up to 22 ADUs/JADUs. The proposed ADUs and JADUs would serve as affordable housing within the community of Templeton.</p>

As shown in Table 6, the project would not conflict with applicable County EWP GHG reduction measures.

2023 Regional Transportation Plan/Sustainable Communities Strategy

SLOCOG's 2023 RTP serves as the blueprint for regional land use and transportation development patterns. It includes visions, goals, and policies relevant to the proposed project. These include support for a mix of housing options in new residential developments, support for affordable housing, support for housing options for people of all ages and incomes, and support for infill development near existing transit services and activity centers. It also includes the region's SCS, which outlines how the region will meet or exceed its GHG reduction targets. The project does not include development of retail, business, or commercial uses that would be open to the public; therefore, land use planning strategies, such as mixed-use development and planning compact communities, are generally not applicable. The project would result in the establishment of activities that are residential in nature and would not result in employment opportunities or a substantial population increase in the project area. The proposed project would be consistent with RTP policies encouraging infill development, and proposed ADU/JADU development would be consistent with RTP policies related to providing a range of housing types for people of all ages and incomes. In addition, as discussed in Section XVII, *Transportation*, the project is not expected to exceed existing VMT thresholds during construction or operation, which is consistent with the 2023 RTP goals and policies related to VMT.

Based on the analysis provided above, the project would be consistent with applicable state and local policies and programs intended to reduce GHG emissions, and potential impacts would be *less than significant*.

Conclusion

The project would not generate significant GHG emissions above existing levels and would not exceed any applicable GHG thresholds, contribute considerably to cumulatively significant GHG emissions, or conflict with plans adopted to reduce GHG emissions. Therefore, potential impacts related to GHG emissions would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

Initial Study – Environmental Checklist

IX. HAZARDS AND HAZARDOUS MATERIALS

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

Initial Study – Environmental Checklist

Setting

The Hazardous Waste and Substances Site (Cortese) List is a planning document used by the state, local agencies, and developers to comply with CEQA requirements related to the disclosure of information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Cortese List. Various state and local government agencies are required to track and document hazardous material release information for the Cortese List. The California Department of Toxic Substance Control (DTSC) maintains the EnviroStor database, which tracks DTSC cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination, such as federal superfund sites, state response sites, voluntary cleanup sites, school cleanup sites, school investigation sites, and military evaluation sites. The SWRCB maintains the GeoTracker database, which contains records for sites that impact, or have the potential to impact, water in California, such as Leaking Underground Storage Tank (LUST) sites, Department of Defense sites, and Cleanup Program sites. The remaining data regarding facilities or sites identified as meeting the Cortese List requirements can be located on the CalEPA website: <https://calepa.ca.gov/sitecleanup/corteselist/>. Based on a query of the DTSC EnviroStor and SWRCB GeoTracker databases, there are no previously recorded hazardous materials or LUST sites located within or adjacent to the project site (DTSC 2024; SWRCB 2024).

The California Health and Safety Code provides regulations pertaining to the abatement of fire-related hazards and requires that local jurisdictions enforce the CBC, which provides standards for fire-resistive building and roofing materials and other fire-related construction methods. The County Safety Element provides a Fire Hazard Zones Map that indicates unincorporated areas in the county within moderate, high, and very high fire hazard severity zones (FHSZs). The project site is primarily located in an area without an FHSZ designation in a Local Responsibility Area (LRA) (California Department of Forestry and Fire Protection [CAL FIRE] 2022). According to the County's Land Use View, the project site has an estimated response time of approximately 0 to 5 minutes. For more information about fire-related hazards and risk assessment, see Section XX, *Wildfire*.

The County also has adopted general emergency plans for multiple potential natural disasters, including the Local Hazard Mitigation Plan, Emergency Operations Plan (County EOP), Earthquake Emergency Response Plan, Dam and Levee Failure Plan, Hazardous Materials Response Plan, County Recovery Plan, and Tsunami Response Plan.

The project site is not located within an airport review area and the nearest airport is Oak Country Ranch Airport, a private airport, located approximately 5.20 miles west of the project site. The nearest school is Templeton Hills Adventist School, located approximately 1.01 mile southwest of the project site.

Discussion

- (a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

During construction, the proposed project is anticipated to require limited quantities of hazardous substances, including gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc., which has the potential to result in an accidental spill or release. Construction contractors would be required to comply with applicable federal and state environmental and workplace safety laws for the handling, transport, and storage of hazardous materials, including 22 California Code of Regulations (CCR) Division 4.5 to minimize the potential for accidental spill or release.

Initial Study – Environmental Checklist

Operation of the proposed project may require the use of hazardous substances such as paints, oils, cleaners, and fertilizers and would be required to comply with existing state and local regulations to minimize the risk of accidental release during transport, use, and disposal. Based on required compliance with CCR, RWQCB, and state and local health department requirements to minimize risk associated with the temporary use of construction-related hazardous substances, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, potential impacts would be *less than significant*.

- (b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The proposed project does not include the handling or use of hazardous materials or volatile substances that would result in a significant risk of upset or accidental release conditions. As previously evaluated, construction of the proposed project is anticipated to require use of limited quantities of hazardous substances and construction contractors would be required to comply with applicable state and local regulations, such as 22 CCR Division 4.5, to reduce the potential for accidental hazardous material release during construction. In addition, the use of hazardous substances during operation of the proposed project (e.g., paints, oils, cleaners, fertilizers, etc.) would be required to comply with state and local regulations to minimize the risk of accidental release.

Proposed grading would be implemented across the project site and would not require soil disturbance within 30 feet of existing major roadways (i.e., US 101) that could release aerially deposited lead (ADL) if present within the soil. Additionally, the project site is not located in an area with potential for NOA to occur and the proposed project would not require demolition of any buildings, roadways, or other structures that could release asbestos-containing material (ACM) or lead-based paint (SLOAPCD 2024). The proposed project would not release hazardous air contaminants, including ADL, NOA, or ACM. Based on required compliance with 22 CCR Division 4.5 to minimize the risk associated with the use of hazardous substances and required compliance with RWQCB and state and local health department requirements, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. Therefore, potential impacts would be *less than significant*.

- (c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

The nearest school is Templeton Hills Adventist School, located approximately 1.01 miles southwest of the project site. Therefore, the proposed project would not emit hazardous emissions or handle acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school, and *no impacts* would occur.

- (d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Based on a query of the DTSC EnviroStor and SWRCB GeoTracker databases, there are no previously recorded hazardous materials or LUST sites located within or adjacent to the project site (DTSC

Initial Study – Environmental Checklist

2024; SWRCB 2024). Therefore, the proposed project would not create a significant hazard to the public or the environment related to disturbance of a hazardous materials site and *no impacts* would occur.

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

The project site is not located within an airport review area and the nearest airport is a private airport located approximately 5.3 miles west of the project site. Therefore, implementation of the proposed project would not result in a safety hazard or excessive noise for people residing and working in the project area, and *no impacts* would occur.

- (f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project is not anticipated to require any permanent road closures or traffic controls that could result in notable impacts to emergency response or evacuation efforts in the project area. The project site is currently accessed from North Main Street, and the project proposes construction of a gated private drive to provide access to proposed development. The proposed access driveway would terminate in a cul-de-sac with a 40-foot radius turnaround for firetrucks, and the gate would be located 50 feet from North Main Street to allow for vehicle queuing. Proposed roadway construction would be required to comply with County Public Works Department and TCSD standards to ensure adequate emergency access and public ingress and egress at the project site. The project site has been designed to allow for adequate emergency vehicle accessibility, address long-term circulation patterns on-site, and avoid vehicle queues outside of the project site that could interfere with emergency access and/or public ingress and egress to the project site. The proposed project would not result in a substantial number of new vehicle trips to the project site that could otherwise impede emergency response or evacuation efforts in the area through a substantial increase in vehicle traffic. Therefore, the proposed project would not interfere with an emergency response or evacuation plan, and impacts would be *less than significant*.

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

The proposed project would result in the construction of occupiable structures outside of the State Responsibility Area. Proposed occupiable buildings would be constructed in accordance with California Fire Code (CFC) and CBC requirements to reduce risk associated with fire ignition and exposure of people and structures in the project area to wildfire risk. The proposed driveway and utility infrastructure would be required to comply with TCSD and County Public Works Department requirements to ensure adequate emergency access to the project site and proper utility installation to reduce risk associated with wildfire ignition. A defensible space buffer would be required around occupiable structures and the proposed driveway to reduce wildfire risk near occupiable buildings and to ensure safe ingress and egress from the project site. Based on required compliance with existing state and local regulations, the proposed project would not result in the risk of loss, injury, or death as a result of wildfire; therefore, impacts would be *less than significant*.

Initial Study – Environmental Checklist

Conclusion

Based on required compliance with 22 CCR Division 4.5, RWQCB, and state and local health department requirements, the proposed project would not result in significant hazards related to the routine transport, use, or disposal of hazardous materials. The project site is not located within 0.25 mile of a school or within or adjacent to a previously recorded hazardous materials site. Implementation of the proposed project would not result in airport-related hazards to people residing or working in the project area. Based on required compliance with CFC, CBC, TCSD, and County Public Works Department requirements, the proposed project would not impede emergency access or evacuation efforts and would not result in risk associated with wildfire. Therefore, potential impacts related to hazards and hazardous materials would be less than significant.

Mitigation

Mitigation is not necessary.

X. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Initial Study – Environmental Checklist

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting

The Central Coast RWQCB has established Total Maximum Daily Load (TMDL) thresholds for waterbodies within the county. A TMDL establishes the allowable amount of a particular pollutant a waterbody can receive on a regular basis and still remain at levels that protect beneficial uses designated for that waterbody. A TMDL also establishes proportional responsibility for controlling the pollutant, numeric indicators of water quality, and measures to achieve the allowable amount of pollutant loading. Section 303(d) of the CWA requires states to maintain a list of waterbodies that are designated as “impaired.” A waterbody is considered impaired when a particular water quality objective or standard is not being met.

The RWQCB’s *Water Quality Control Plan for the Central Coast Basin* (Basin Plan; RWQCB 2019) describes how the quality of surface water and groundwater in the Central Coast Region should be managed to provide the highest water quality reasonably possible. The Basin Plan outlines the beneficial uses of streams, lakes, and other waterbodies for humans and other life. There are 24 categories of beneficial uses, including, but not limited to, municipal water supply, water contact recreation, non-water contact recreation, and cold freshwater habitat. Water quality objectives are then established to protect the beneficial uses of those water resources. The RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements to individuals, communities, or businesses whose discharges can affect water quality.

The USACE, through Section 404 of the CWA, regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States are typically identified by the presence of an ordinary high water mark (OHWM) and connectivity to traditional navigable waters or other jurisdictional features. The SWRCB and nine RWQCBs regulate discharge of fill and dredged material in California, under Section 401 of the CWA and the Porter-Cologne Act, through the State Water Quality Certification Program. State Water Quality Certification is necessary for all projects that require a USACE permit, fall under other federal jurisdiction, or have the potential to impact waters of the state. Waters of

Initial Study – Environmental Checklist

the state are defined by the Porter-Cologne Act as any surface water or groundwater, including saline waters, within the boundaries of the state.

The County LUO dictates which projects are required to prepare a drainage plan, including any project that would, for example, change the runoff volume or velocity leaving any point of the project site, result in an impervious surface of more than 20,000 square feet, or involve hillside development on slopes steeper than 10%. Preparation of a drainage plan is not required where grading is exclusively for an exempt agricultural structure, crop production, or grazing.

The County LUO also dictates that an ESCP is required year-round for all construction and grading permit projects and site disturbance activities of 0.5 acre or more in geologically unstable areas, on slopes steeper than 30%, on highly erodible soils, or within 100 feet of any watercourse.

Per the County's Stormwater Program, the County Public Works Department is responsible for ensuring that new construction sites implement BMPs during construction, and that site plans incorporate appropriate post-construction stormwater runoff controls. Construction sites that disturb 1 acre or more must obtain coverage under the SWRCB's Construction General Permit. The Construction General Permit requires the preparation of a SWPPP to minimize on-site sedimentation and erosion. There are several types of projects that are exempt from preparing a SWPPP, including routine maintenance to existing developments, emergency construction activities, and projects exempted by the SWRCB or RWQCB. Projects that disturb less than 1 acre must implement all required elements within the project site's ESCP as required by the County LUO.

For planning purposes, the flood event most often used to delineate areas subject to flooding is the 100-year flood, which is defined as an area with 1% chance for annual flooding. The County Safety Element establishes policies to reduce flood hazards and flood damage, including, but not limited to, prohibition of development in areas of high flood hazard potential, discouragement of single road access into remote areas that could be closed during floods, and review of plans for construction in low-lying areas. All development located in a 100-year flood zone is subject to FEMA regulations.

The County LUO designates a Flood Hazard (FH) combining designation for areas of the county that could be subject to inundation by a 100-year flood or within coastal high hazard areas. Development projects within this combining designation are subject to FH permit and processing requirements, including, but not limited to, the preparation of a drainage plan, requirements pertaining to the construction of drainage systems, implementation of additional construction standards, and implementation of additional materials storage and processing requirements for substances that could be injurious to human, animal, or plant life in the event of flooding. These standards aim to minimize the harmful effects of storm water runoff and to protect neighboring and downstream properties from drainage problems resulting from new development. Conditions of development in flood hazard areas must, at a minimum, enforce the current Federal flood plain management regulations set forth in the National Flood Insurance Program (San Luis Obispo County Flood Control and Water Conservation District 2014).

The County provides maintenance of existing drainage facilities within the County right-of-way as well as some limited drainage improvements as a function of the Public Works Department Road Maintenance Division. As a function of the operating road system, the drainage issues related to the road system are addressed when such drainage work protects the County maintained road system in a cost beneficial way, or is directly related to County road improvement projects and is necessary to prevent property damage, including directing flow of streams across roadways through culverts and bridges (San Luis Obispo County Flood Control and Water Conservation District 2014).

Initial Study – Environmental Checklist

A portion of the project site is located within an FH combining designation. According to FEMA FIRMs 06079C0604G and 06079C0612G (effective date 11/16/2012), a majority of the eastern and southern portion of the project site is in Zone AE, an area with 1%-annual-chance flood event (i.e., a 100-year flood zone) and remaining portions of the property are located within Zone X, an area with a 0.2%-annual-chance flood event (see Figure 6; FEMA 2024).

Discussion

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

There is an existing unnamed ephemeral drainage channel that is a tributary to Toad Creek located along the southern property boundary within the southern portion of the project site that would be preserved in a proposed open space easement; therefore, the project would not result in any direct impacts to the drainage channel. Proposed construction and ground-disturbing activities have the potential to increase erosion and other pollutants at the project site that could run off into the on-site drainage channel and surrounding areas. The project would result in more than 1 acre of ground disturbance and would be required to prepare and implement a SWPPP with BMPs in accordance with the SWRCB General Construction Permit requirements to address erosion and other pollutant releases during construction activities. The project would also be required to comply with County LUO Section 22.52.120, which requires the preparation and approval of an ESCP to address both temporary and long-term sedimentation and erosion impacts. Further, the project site is located in a Municipal Separate Storm Sewer System (MS4) stormwater management area and would be subject to implementation of a Stormwater Control Plan (SWCP) in accordance with County regulations or RWQCB Post-Construction Requirements (PCRs) for long-term stormwater control measures at the project site. In addition, Mitigation Measures BIO-2, and BIO-6 have been identified in Section IV, *Biological Resources*, to reduce potential impacts related to an increase in erosive and other polluted runoff at the project site through the implementation of construction BMPs and drainage protection measures during construction activities. Based on implementation of Mitigation Measures BIO-2 and BIO-6 and required compliance with SWRCB and County requirements to reduce short- and long-term pollutant release at the project site, the project would not violate any water quality standards or waste discharge requirements; therefore, impacts would be *less than significant with mitigation*.

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

The project would result in the construction of 22 single-family residences, up to 22 ADUs/JADUs, and associated site improvements on a 10.02-acre project site, which would increase the amount of impervious surface area within the project area. The project has been designed to retain approximately 4.56 acres of natural areas to allow for continued groundwater recharge at the project site. The project includes the construction of retention basins in the eastern portion of the project site, which would further facilitate groundwater recharge at the project site. The project's residential water demand would be serviced by the TCSD, which has an existing water supply volume of 2,111 acre-feet per year, which is comprised of groundwater, purchased water, and treated recycled water (TCSD 2013). The TCSD has provided a conditional will-serve letter to provide water to the project site; therefore, there would be adequate water supply to serve the project.

Initial Study – Environmental Checklist

Implementation of the proposed project would not substantially decrease groundwater supplies or interfere with groundwater recharge, and impacts would be *less than significant*.

(c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

(c-i) *Result in substantial erosion or siltation on- or off-site?*

There is an existing unnamed ephemeral drainage channel that is a tributary to Toad Creek located along the southern property boundary in the southern portion of the project site that would be preserved in a proposed open space easement; therefore, the project would not result in any direct impacts to the drainage channel. Proposed construction and ground-disturbing activities have the potential to increase erosion at the project site that could runoff into the on-site drainage and surrounding areas. The project would disturb more than 1 acre of soil and a SWPPP with BMPs would be required to be prepared and implemented in accordance with the SWRCB General Construction Permit requirements to reduce the potential for erosion and other pollutant release from the project site. The project would also be required to comply with County LUO Section 22.52.120, which requires the preparation and approval of an ESCP to minimize potential impacts related to erosion, sedimentation, and siltation. The plan would be prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. In addition, Mitigation Measures BIO-2 and BIO-6 have been identified in Section IV, *Biological Resources*, to reduce potential impacts related to an increase in erosive runoff at the project site through the implementation of construction BMPs and drainage protection measures during construction activities.

Following construction activities, the project site would support residential development and associated hardscapes. The project site includes construction of two retention basins to capture and retain stormwater flows, preventing off-site stormwater flows and related erosion hazards. Based on implementation of Mitigation Measures BIO-2 and BIO-6 and required compliance with existing County and SWRCB regulations, implementation of the project would not result in a substantial increase in erosion or loss of topsoil; therefore, impacts would be *less than significant with mitigation*.

(c-ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

The project includes the construction of 22 single-family residences, up to 22 future ADUs/JADUs, and associated site improvements, which would increase the amount of impervious surface area on the 10.02-acre project site. According to FEMA FIRMs 06079C0604G and 06079C0612G (effective date 11/16/2012), a majority of the eastern and southern portion of the project site is in Zone AE, an area with 1%-annual-chance flood event (i.e., a 100-year flood zone) and remaining portions of the property are located within Zone X, an area with a 0.2%-annual-chance flood event (see Figure 6; FEMA 2024).

The project site is located within an MS4 stormwater management area and would be subject to implementation of an SWCP in accordance with County regulations or RWQCB PCRs for long-term stormwater control measures at the project site. The project includes the construction of two stormwater retention basins in the eastern portion of the project site to contain flows at the project site. Runoff from the proposed developed areas of the project site would be directed into one of the two proposed retention basins to avoid on- or off-site flooding.

Initial Study – Environmental Checklist

San Luis Obispo County Standards require that retention basins be designed to store the runoff from a 50-year design storm with a 10-hour duration and 10-hour intensity. Based on the Preliminary Drainage Memorandum prepared for the project site (AKA Engineering Company 2022; Appendix E), the proposed retention basins would be 2.737 acre-feet in size, which would be adequate to retain flows from a 2-year, 10-year, 50-year, and 100-year flood that could occur at the project site (see Table 7; AKA Engineering Company 2023).

Table 7. Required Basin Sizing for Storm Events

Design Storm	Basin Capacity needed to retain 100% of stormwater flows on the project site	Notes
2-year Design Storm	0.92 acre-feet	
10-year Design Storm	1.59 acre-feet	
50-year Design Storm	2.43 acre-feet	Required per SLO County public improvement standards
100-year Design Storm	2.60 acre-feet	
Proposed Retention Basin Capacity per Preliminary Plans	2.737 acre-feet	

Source: AKA Engineering Company 2023, Appendix E

The retention basins constructed on-site would be designed in accordance with the *Templeton Drainage and Flood Control Study* and County Public Improvement Standards to ensure adequate measures are implemented to retain on-site flows. Runoff from the proposed open space area in the southern portion of the project site (approximately 2.38 acres in area) would be minimal and consistent with existing conditions and would be directed into the on-site ephemeral drainage. Therefore, the post-development peak runoff would not exceed the pre-development peak runoff with the 2-year, 10-year, 50-year, or 100-year design storm events (AKA Engineering Company 2023).

Proposed stormwater control measures would be subject to County approval prior to implementation on-site. Based on required installation of County-approved stormwater control measures and capacity of proposed retention basins, implementation of the project is not anticipated to increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; therefore, impacts would be *less than significant*.

- (c-iii) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

As previously evaluated, future development would result in an increase in impervious surface area that could marginally increase runoff from the project site. The project site is located in an MS4 stormwater management area and would be subject to implementation of an SWCP in accordance with County regulations or RWQCB PCRs for long-term stormwater control measures at the project site. Further, the project includes the construction of two stormwater retention basins on the eastern portion of the project site to contain flows at the project site that would be subject to County approval prior to implementation on-site. Mitigation Measures BIO-2 and BIO-6 have been identified

Initial Study – Environmental Checklist

in Section IV, *Biological Resources*, to reduce potential impacts related to an increase in erosive and other polluted runoff at the project site through the implementation of construction BMPs and drainage protection measures during construction activities. The project would also be required to comply with SWRCB requirements and County LUO Section 22.52.120 to address short- and long-term erosion and other pollutant control at the project site. Based on implementation of Mitigation Measures BIO-2 and BIO-6 and required compliance with RWQCB, SWRCB, and County LUO Section 22.52.120 requirements, implementation of the project would not contribute polluted runoff water that could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; therefore, impacts would be *less than significant with mitigation*.

(c-iv) *Impede or redirect flood flows?*

According to FEMA FIRMs 06079C0604G and 06079C0612G (effective date 11/16/2012), a majority of the eastern and southern portion of the project site is in Zone AE, and area with 1%-annual-chance flood event (i.e., a 100-year flood zone). The project includes the construction of 22 single-family residences, up to 22 ADUs/JADUs, and associated site improvements, which would have the potential to impede flood flows. The project would be required to comply with County LUO Section 22.14.060.D to ensure structures would be designed to be constructed above the base flood elevation, which would avoid impediment or redirection of flood flows.

The project would be subject to implementation of an SWCP in accordance with County regulations or RWQCB PCR for long-term stormwater control measures at the project site. The project includes the construction of two stormwater retention basins in the eastern portion of the project site to contain flows at the project site. Runoff from the proposed developed areas of the project site would be directed into one of the two proposed retention basins. Based on the Preliminary Drainage Memorandum prepared for the project site (AKA Engineering Company 2022; Appendix E), the proposed retention basins would be 2.737 acre-feet in size, which would retain flows from a 2-year, 10-year, 50-year, and 100-year flood that could occur at the project site. The retention basins would be designed in accordance with the *Templeton Drainage and Flood Control Study* and County Public Improvement Standards to ensure adequate design measures are implemented to retain on-site flows. Runoff from the proposed open space area in the southern portion of the project site would be minimal and would be directed into the on-site drainage, which has adequate capacity to convey this level of flow. Therefore, the post-development peak runoff would not exceed the pre-development runoff with the 2-year, 10-year, 50-year, or 100-year design storm events. Further, the proposed retention basins and other stormwater control measures would be subject to County approval prior to implementation on-site. Based on implementation of the proposed retention basins and required compliance with RWQCB and County LUO requirements, implementation of the project would not impede or redirect flood flows; therefore, impacts would be *less than significant*.

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

Based on the San Luis Obispo County Tsunami Inundation Maps, the project site is not located in an area with potential for inundation by a tsunami (CDOC 2020). The project site is not located within close proximity to a standing waterbody with the potential for a seiche to occur. As evaluated in Impact Discussion X(c), the project site is located within a 100-year flood zone and would be required to comply with County LUO Section 22.14.060.D to ensure construction above the base flood elevation, which would avoid impediment or redirection of flood flows. Further, the project

Initial Study – Environmental Checklist

would be subject to implementation of an SWCP in accordance with County regulations or RWQCB PCRs for long-term stormwater control measures at the project site.

The project also includes the construction of two stormwater retention basins in the eastern portion of the project site that have been designed in accordance with on-site drainage conditions and the *Templeton Drainage and Flood Control Study* and County Public Improvement Standards to contain flows from a 2-year, 10-year, 50-year, and 100-year flood at the project site that would be subject to County approval prior to implementation on-site. The project would be required to comply with SWRCB requirements and County LUO Section 22.52.120 to address short- and long-term erosion and other pollutant control at the project site. Based on implementation of the proposed retention basins and required compliance with RWQCB, SWRCB, and County LUO requirements, the project would not risk release of substantial pollutant concentrations due to inundation; therefore, impacts would be *less than significant*.

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

The project is not located within a groundwater basin designated as Level of Severity III per the County's Resource Management System or in severe decline by the Sustainable Groundwater Management Act (SGMA). The project would not substantially increase water demand, deplete groundwater supplies, or interfere substantially with groundwater recharge. The project site is under the jurisdiction of the Central Coast RWQCB and would be subject to the Basin Plan, which sets water quality objectives and criteria to protect water quality in the Central Coast region (RWQCB 2019). Mitigation Measures BIO-2 and BIO-6 have been identified in Section IV, *Biological Resources*, to reduce potential impacts related to an increase in erosive and other polluted runoff at the project site through the implementation of construction BMPs and drainage protection measures during construction activities. The project would also be required to comply with County LUO Section 22.52.120 and SWRCB requirements to reduce the potential for polluted runoff from the project site. Based on implementation of Mitigation Measures BIO-2 and BIO-6 and required compliance with SWRCB and County regulations, the project would not conflict with the Basin Plan, the SGMA, or other local or regional plans or policies intended to manage water quality or groundwater supplies; therefore, impacts would be *less than significant with mitigation*.

Conclusion

Based on implementation of Mitigation Measures BIO-2 and BIO-6 and required compliance with the SWRCB, RWQCB, and County LUO requirements, the project would not result in adverse impacts related to water quality, groundwater quality, or stormwater runoff and would not risk release of pollutants due to project inundation. The project is not within a tsunami or seiche zone. The project would be consistent with the RWQCB Basin Plan. Therefore, upon implementation of the identified mitigation measures, impacts related to hydrology and water quality would be less than significant.

Mitigation

Implement Mitigation Measures BIO-2 and BIO-6.

Initial Study – Environmental Checklist

XI. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting

The County Inland LUO was established to guide and manage the future growth in the county in accordance with the County General Plan; regulate land use in a manner that will encourage and support orderly development and beneficial use of lands; minimize adverse effects on the public resulting from inappropriate creation, location, use, or design of buildings or land uses; and protect and enhance significant natural, historic, archaeological, and scenic resources within the county. The County Inland LUO is the primary tool used by the County to carry out the goals, objectives, and policies of the County General Plan.

The County LUE provides policies and standards for the management of growth and development in each unincorporated community and rural areas of the county and serves as a reference point and guide for future land use planning studies throughout the county. The County LUE identifies strategic growth principles to define and focus the County’s proactive planning approach and balance environmental, economic, and social equity concerns. Each strategic growth principle correlates with a set of policies and implementation strategies that define how land will be used and resources protected. The County LUE also defines each of the 14 land use designations and identifies standards for land uses based on the designation they are located within. The project area is designated for CR land uses.

The County LUE also contains the area plans of each of the four inland planning areas: Carrizo, North County, San Luis Obispo, and South County. The area plans establish policies and programs for land use, circulation, public facilities, services, and resources that apply “areawide,” in rural areas, and in unincorporated urban areas within each planning area. Part three of the LUE contains each of the 13 inland community and village plans, which contain goals, policies, programs, and related background information for the County’s unincorporated inland urban and village areas. The project would be located within the community of Templeton, in the Salinas River Subarea of the North County Planning Area. In addition, the proposed parcel is located within the Highway 101/North Main Street Interchange area subject to the Templeton Community Standards (County LUO Section 22.104.090.C.5), which identifies allowable uses as bars and nightclubs, restaurants, gas stations, offices, hotels, and motels.

Initial Study – Environmental Checklist

Discussion

(a) *Physically divide an established community?*

Implementation of the project would result in the construction of 22 single-family residences and up to 22 ADUs/JADUs on an existing 10.02-acre parcel. The proposed project would be limited to development on an existing parcel and would not result in the removal or blockage of existing public roadways or other circulation paths and would not otherwise include any features that would physically divide an established community; therefore, *no impacts* would occur.

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

The project site is located within the CR land use category in the community of Templeton in the North County Planning Area. As described in section A. Project, the project includes a Land Use Ordinance Amendment (LRP2021-00006) to amend the Planning Area Standards in County LUO Section 22.94.080 and the Community Planning Standards in County LUO Section 22.104.090.C.5 to include Residential Single-Family as an allowable principal use on the 10.02-acre project parcel.

The project would be consistent with the guidelines and policies for development within the Templeton Area Plan, County LUO, and General Plan, as discussed below.

County Framework for Planning Principle 2 states, “strengthen and direct development toward existing and strategically planned communities,” and Policy 2 under that principle states “avoid establishing or expanding residential rural or residential suburban areas outside urban or village reserve areas.” The project would subdivide a 10.02-acre parcel located within the Templeton URL. Therefore, the project would be consistent with the applicable land use goals and policies set forth in the County Framework for Planning.

As described in the resources sections above, the project would be consistent with the type and density of surrounding residential uses and would not result in a conflict with policies regarding visual resources, agricultural resources, cultural resources, energy, or GHG emissions.

The County COSE also identifies goals and policies regarding the protection of biological resources. Potential impacts to threatened, rare, endangered, and sensitive species and native trees are identified in Section IV, *Biological Resources*. The project site does not support wetlands, aquatic habitats, or marine resources; therefore, with implementation of mitigation measures identified in Section IV, *Biological Resources*, the project would be consistent with goals and policies in the COSE related to biological resources.

The County COSE also identifies several goals and policies regarding improvement of local and regional air quality and strategies to combat global climate change, including, but not limited to, reduction of per capita VMT countywide, attaining and maintaining federal and state ambient air quality standards, and reduction of GHG emissions from County operations and communitywide sources. As described in Section III, *Air Quality*, and Section XVII, *Transportation*, the project site is located in a pre-screened area in which residential development projects are presumed to have a less than significant VMT impact. As discussed under Impact Discussion III(b), the project would not result in an exceedance of local air pollutant emission thresholds and therefore would not result in a cumulatively considerable contribution to regional attainment levels for state and local ambient air quality standards. Lastly, analysis provided in Section VIII, *Greenhouse Gas Emissions*, demonstrates

Initial Study – Environmental Checklist

that the project would not result in cumulatively considerable GHG emissions that would have an adverse effect on the environment or conflict with local, regional, or statewide policies.

Further, the project was found to be consistent with standards and policies set forth in the County General Plan, the 2001 CAP, and other land use policies for this area. The project would also be required to be consistent with standards set forth by County Fire/CAL FIRE and the County Public Works Department.

The project would be required to implement Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-11, and N-1 through N-3 to mitigate potential impacts associated with Air Quality, Biological Resources, Geology and Soils, Hydrology and Water Quality, and Noise, which is consistent with the identified plans and policies intended to avoid or mitigate adverse environmental effects. Upon implementation of the identified mitigation, the project would not conflict with other local policies or regulations adopted for the purpose of avoiding or mitigating environmental effects; therefore, impacts would be *less than significant with mitigation*.

Conclusion

Implementation of the proposed project would not physically divide an established community. Upon implementation of mitigation measures identified throughout this document, the project would be consistent with the County LUO, the County General Plan, the COSE, the Templeton Area Plan, the 2001 CAP, and other applicable documents. Therefore, impacts would be less than significant upon implementation of the identified mitigation measures.

Mitigation

Implement Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-12, and N-1 through N-3.

XII. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initial Study – Environmental Checklist

Setting

The California Surface Mining and Reclamation Act (SMARA) of 1975 requires that the State Geologist classify land into mineral resource zones (MRZ) according to the known or inferred mineral potential of the land (PRC Sections 2710–2796).

The three MRZs used in the SMARA classification-designation process in the San Luis Obispo-Santa Barbara Production-Consumption Region are defined as follows (California Geological Survey 2011a):

- **MRZ-1:** Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- **MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. This zone shall be applied to known mineral deposits or where well-developed lines of reasoning, based on economic-geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.
- **MRZ-3:** Areas containing known or inferred aggregate resources of undetermined significance.

The County LUO provides regulations for development in delineated Energy and Extractive Resource Areas (EX) and Extractive Resource Areas (EX1). The EX combining designation is used to identify areas of the county where:

1. Mineral or petroleum extraction occurs or is proposed to occur;
2. The state geologist has designated a mineral resource area of statewide or regional significance pursuant to PRC Sections 2710 et seq. (SMARA); and
3. Major public utility electric generation facilities exist or are proposed.

The purpose of this combining designation is to protect significant resource extraction and energy production areas identified by the County LUE from encroachment by incompatible land uses that could hinder resource extraction or energy production operations, or land uses that would be adversely affected by extraction or energy production.

Discussion

- (a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

The project is not located within a designated MRZ or an EX or EX1 combining designation (California Geological Survey 2011a). There are no known mineral resources in the project area; therefore, *no impacts* would occur.

- (b) *Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

The project site is not located within the EX or EX1 combining designation and there are no known mineral resources in the project area. Additionally, the project is not located within a designated MRZ (California Geological Survey 2011b). The project would not be located on land that is zoned or designated for mineral extraction; therefore, the project would not result in the loss of availability of

Initial Study – Environmental Checklist

a known mineral resource or result in the loss of availability of a locally important mineral resource recovery site, and *no impacts* would occur.

Conclusion

No impacts to mineral resources would occur, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

XIII. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project result in:</i>				
(a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The *County of San Luis Obispo General Plan Noise Element* provides a policy framework for addressing potential noise impacts in the planning process. The purpose of the County Noise Element is to minimize future noise conflicts. The County Noise Element identifies the major noise sources in the county (highways and freeways, primary arterial roadways and major local streets, railroad operations, aircraft and airport operations, local industrial facilities, and other stationary sources) and includes goals, policies, and implementation programs to reduce future noise impacts. Among the most significant policies of the County Noise Element are numerical noise standards that limit noise exposure within noise-sensitive land uses and performance standards for new commercial and industrial uses that might adversely impact noise-sensitive land uses.

Noise-sensitive uses that have been identified by the County include the following:

Initial Study – Environmental Checklist

- Residential development, except temporary dwellings
- Schools – preschool to secondary, college and university, specialized education and training
- Health care services (e.g., hospitals, clinics, etc.)
- Nursing and personal care
- Churches
- Public assembly and entertainment
- Libraries and museums
- Hotels and motels
- Bed and breakfast facilities
- Outdoor sports and recreation
- Offices

All sound levels referred to in the County Noise Element are expressed in A-weighted decibels (dBA). A-weighting deemphasizes the very low and very high frequencies of sound in a manner similar to the human ear. The nearest off-site noise-sensitive land use is a rural residence located approximately 400 feet south of the project site.

The County LUO establishes acceptable standards for exterior and interior noise levels and describes how noise shall be measured (Table 8). Exterior noise level standards are applicable when a land use affected by noise is one of the sensitive uses listed in the County Noise Element. Exterior noise levels are measured from the property line of the affected noise-sensitive land use.

Table 8. Maximum allowable exterior noise level standards¹

Sound Levels	Daytime 7 a.m. to 10 p.m.	Nighttime ²
Hourly Equivalent Sound Level (L _{eq} , dB)	50	45
Maximum level, dB	70	65

Note: L_{eq} = equivalent continuous sound level; dB = decibels

¹ When the receiving noise-sensitive land use is outdoor sports and recreation, the noise level standards are increased by 10 dB.

² Applies only to uses that operate or are occupied during nighttime hours.

An Acoustical Analysis was prepared for the proposed project to quantify project site noise exposure and determine noise mitigation requirements (WJVA 2022; see Appendix F). Existing and predicted noise levels at the project site were determined based on continuous 24-hour noise level measurements at the project site and the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (WJVA 2022; see Appendix F).

Initial Study – Environmental Checklist

Discussion

- (a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Existing ambient noise levels in the project area are primarily dominated by vehicle traffic along US 101 and North Main Street as well as noise from surrounding public facility, commercial retail, and industrial land uses. Other common sources of noise include occasional aircraft overflights, common birds, and agricultural activities (WJVA 2022; see Appendix F). Based on continuous 24-hour noise level measurements taken at the project site, average hourly noise levels at the western side of the project site (LT-1) range between 49.5 and 58.2 decibels (dB) with a maximum noise level ranging between 61.8 to 74.8 dBA and average noise levels at the eastern side of the project site (LT-2) range between 44.9 and 56.3 dB with a maximum noise level ranging between 65.5 to 70.4 dBA (WJVA 2022; see Appendix F).

During project construction, noise from construction activities may intermittently dominate the noise environment in the immediate project area. The project would require the use of typical construction equipment (e.g., dozers, excavators, etc.) during proposed construction activities. According to the FHWA, noise from standard construction equipment generally ranges from 80 to 85 dBA at 50 feet from the source, as shown in Table 9.

Table 9. Construction Equipment Noise Emission Levels

Equipment Type	Typical Noise Level (dBA) 50 Feet from Source
Concrete Mixer, Dozer, Excavator, Jackhammer, Man Lift, Paver, Scraper	85
Heavy Truck	84
Crane, Mobile	83
Concrete Pump	82
Backhoe, Compactor	80

Source: FHWA (2018)

The nearest off-site noise-sensitive land use is a rural residence located approximately 400 feet south of the project site. Construction-related noise would be short term and intermittent and would not result in a permanent increase in ambient noise within the project area. According to County LUO Section 22.10.120.A.4, construction noise is exempt from the County's noise standards between the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on weekends.

While construction noise levels generated during the permitted hours are exempt from compliance with County noise standards, there is potential for average construction equipment noise levels to exceed the County's noise standards at the nearest residential land uses, when louder equipment is

Initial Study – Environmental Checklist

used near the project site boundaries. Mitigation Measure N-1 has been identified to require implementation of noise reduction measures to limit construction activities to the less noise-sensitive periods of the day and reduce potential construction-period noise impacts to nearby sensitive receptors to the extent feasible. With implementation of Mitigation Measure N-1, potential impacts associated with construction noise would be less than significant with mitigation.

During operation, the project would result in the operation of 22 single-family residences and up to 22 ADUs/JADUs, which would result in a marginal increase in ambient noise in the project area. Noise associated with the project would be generally consistent with existing development in the project area and would not generate noise in exceedance of applicable County noise standards.

The project site is bordered by US 101 to the west and North Main Street to the east. The nearest proposed residential lots to US 101 are Lots 1 and 13, and the nearest proposed residential lot to North Main Street is Lot 12. Existing and predicted roadway noise along US 101 and North Main Street at the nearest residential lots are shown in Table 10.

Table 10. Future and Predicted Traffic Noise

Lot	Nearest Roadway	Existing Noise Exposure Level (dB, L _{dn})	Future (2045) Noise Exposure Level (dB, L _{dn})
1	US 101	65	66
12	N. Main St.	54	58
13	US 101	61	62

Source: WJVA (2022)

Note: L_{dn} = day-night average sound level

As shown in Table 10, noise levels from US 101 at Lots 1 and 13 would exceed the County's exterior noise standards of 60 dB day-night average sound level (L_{dn}). Therefore, Mitigation Measure N-2 establishes requirements for the construction of sound walls to reduce vehicle noise at the proposed residential land uses. Implementation of the identified sound walls would reduce existing and predicted noise levels to 59 dB L_{dn}, which would fall below the County's exterior noise standards (WJVA 2022; see Appendix F). Noise levels from North Main Street would not exceed the County's exterior noise standards of 60 dB L_{dn}.

Proposed residential development would be required to be constructed in accordance with the 2022 CBC, which would reduce exterior noise levels by approximately 25 dB when windows and doors are closed; therefore, the project would not exceed the County's interior noise standards of 45 dB L_{dn}. Mitigation Measure N-3 requires that proposed residential buildings are equipped with a heating, ventilation, and air conditioning (HVAC) system to allow doors and windows to remain closed for sound insulation. Based on implementation of Mitigation Measures N-1 through N-3, the project would not exceed the County's noise standards; therefore, impacts would be *less than significant with mitigation*.

Initial Study – Environmental Checklist

(b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

According to County LUO Section 22.10.170, construction-related vibration is exempt from the County's vibration standards between the hours of 7:00 a.m. and 9:00 p.m. The project does not propose substantial grading/earthmoving activities, pile driving, or other high impact activities that would generate substantial groundborne noise or groundborne vibration during construction. Standard construction equipment would generate some groundborne noise and vibration during ground-disturbing activities; however, these activities would be limited in duration and consistent with other standard construction activities. In addition, any groundborne noise or vibration generated by short-term construction activities would be limited to the immediate work area and is not anticipated to disturb off-site residential land uses. Operation of the project does not include new features that could generate substantial groundborne noise. Therefore, impacts related to exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would be *less than significant*.

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

The nearest airport to the project site is Oak Country Ranch Airport, which is a private airstrip located approximately 5.20 miles west of the project site. The project site is not located within or adjacent to an airport land use plan or within 2 miles of a public airport or private airstrip; therefore, *no impacts* related to excessive airport-related noise would occur.

Conclusion

Short-term construction activities would be limited in nature and duration and conducted during daytime periods per County LUO standards. No long-term operational noise or ground vibration would occur as a result of the project. Mitigation Measures N-1 through N-3 would ensure consistency with the County's interior and exterior noise standards. Therefore, upon implementation of the identified mitigation, potential impacts related to noise would be less than significant, and no mitigation measures are necessary.

Mitigation

N-1 Prior to issuance of grading permits and during project site preparation and construction activities, the project contractor shall detail the following measures on project construction plans and implement the following measures during construction of the project to minimize noise impacts to nearby sensitive receptors:

1. Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with the manufacturer's standards.
2. Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest to the active project site.
3. Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all project construction.
4. Prohibit extended idling time of internal combustion engines.

Initial Study – Environmental Checklist

5. Where feasible, all noise-producing construction activities should be limited to between the hours of 8:00 a.m. and 5:30 p.m.
6. Coordinate with the County of San Luis Obispo Planning and Building Department to identify the contact at the County of San Luis Obispo who would be responsible for responding to any local complaints about construction noise. The contact would be responsible for determining the cause of the noise complaint(s) (e.g., starting too early, bad muffler, etc.) and would determine and implement reasonable measures warranted to correct the problem.

N-2 At the time of application for building permits, all building and construction plans shall show the following requirements for the construction of sound walls at the project site:

1. At the northern lots, a sound wall constructed to a minimum height of 11 feet above the lot grade elevation (of backyard) shall be required at Lot 1. The height of the sound wall can taper to a height of 7 feet above backyard lot grade at Lot 2, a height of 6.5 feet at Lot 3, and a height of 6 feet at Lot 4. Sound walls are not required for compliance for the remaining northern lots. Suitable construction materials include concrete blocks, masonry, or stucco on both sides of a wood or steel stud wall.
2. At the southern lots, a sound wall constructed to a minimum height of 8.5 feet above the lot grade elevation (of backyard) shall be required at Lot 13. The height of the sound wall can taper to a height of 7 feet at the southern edge of Lot 13 and a height of 6 feet at Lot 14. Sound walls are not required for compliance for the remaining southern lots. Suitable construction materials include concrete blocks, masonry, or stucco on both sides of a wood or steel stud wall.

N-3 At the time of application for building permits, all building and construction plans shall show mechanical ventilation or air conditioning for all homes so that windows and doors can remain closed for sound insulation purposes.

XIV. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Initial Study – Environmental Checklist

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

California Regional Housing Needs Plan

California State Housing Element Law requires the San Luis Obispo Council of Governments (SLOCOG) and other regional councils of government in California to “determine the existing and projected housing need for its region” and to determine each jurisdiction’s share of the regional housing need in the region. SLOCOG’s region encompasses all of San Luis Obispo County, including its seven incorporated cities: Arroyo Grande, Atascadero, Grover Beach, Morro Bay, Paso Robles, Pismo Beach, and San Luis Obispo. SLOCOG has the responsibility of overseeing the assessment by identifying measures to gauge housing demand and comparing those numbers against socioeconomic factors throughout the region.

SLOCOG’s “6th Cycle” Regional Housing Needs Plan set a target for the creation of 10,810 new dwelling units for the region over the 2020 to 2028 planning period. The County and each of the seven cities adopted 2020 to 2028 Housing Elements showing how they will meet their share of regional housing needs. The County’s share is 3,256 new dwelling units, of which 1,170 (35.9%) must be affordable to very low-, low-, and moderate-income households (San Luis Obispo Council of Governments [SLOCOG] 2019).

County of San Luis Obispo 2020-2028 Housing Element

The County Housing Element establishes the framework to facilitate housing development and address current and projected housing needs, provides an assessment of housing needs for the unincorporated county, and provides a summary of the County’s progress in implementing the programs from the previous Housing Element. The County Housing Element identifies goals, objectives, policies, and programs to guide County decision-making and focused efforts during the planning period.

The County Housing Element also includes an analysis of vacant land in urban areas that are suitable for residential development to show there is adequate land zoned for housing to meet projected housing needs over the plan’s planning period (2020–2028). This analysis takes into consideration zoning provisions, development standards, growth patterns, environmental constraints, infrastructure, and various housing types (County of San Luis Obispo 2020).

Discussion

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

As of 2020, the population of Templeton was approximately 8,386 (U.S. Census Bureau 2024). According to the SLOCOG 2050 Regional Growth Forecast, the community of Templeton has a 2050 population projection of 9,017 and a projected buildout population of 9,172 (SLOCOG 2017). The

Initial Study – Environmental Checklist

project includes the construction of 22 single-family residences and up to 22 ADUs/JADUs in the community of Templeton. According to the Templeton Community Plan, there is an average of 2.68 persons per household in the community (County of San Luis Obispo 2014). Based on the average of 2.68 persons per household and the assumption that ADUs/JADUs have approximately 1/3 the household size of a standard dwelling unit, the project has the potential to result in an on-site population of approximately 79 people. Therefore, implementation of the proposed project would result in a marginal increase in population and would not result in an exceedance of the projected buildout population of the community or an accelerated rate of population growth beyond current projections.

Short-term construction activities may increase temporary construction-related employment opportunities; however, temporary employment opportunities generated by the project are anticipated to be filled by the local workforce and would not result in a substantial population increase within the county. The project does not include the development of new commercial or office land uses that could increase long-term employment opportunities and otherwise facilitate population growth within the county. Additionally, the project would not result in additional resource capacity or removal of a barrier to growth that could otherwise facilitate population growth. Therefore, the project would not induce substantial or unplanned population growth and potential impacts would be *less than significant*.

- (b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The project site does not consist of any existing residences and the project would not require the demolition of any existing residential structures. Therefore, the project would not displace existing people or housing or necessitate the construction of replacement housing elsewhere, and *no impacts* would occur.

Conclusion

The proposed project would not result in substantial or unplanned population growth and would not displace existing housing or necessitate the construction of replacement housing elsewhere. Therefore, potential impacts related to population and housing would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

Initial Study – Environmental Checklist

XV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Fire Protection Services

Fire protection services in unincorporated San Luis Obispo County are provided by CAL FIRE, which has been under contract with the County to provide full-service fire protection since 1930. Approximately 180 full-time state employees operate the County Fire Department, supplemented by as many as 100 state seasonal fire fighters, 300 County paid-call and reserve fire fighters, and 120 state inmate fire fighters. CAL FIRE responds to emergencies and other requests for assistance, plans for and takes action to prevent emergencies and to reduce their impact, coordinates regional emergency response efforts, and provides public education and training in local communities. CAL FIRE has 24 fire stations located throughout the county, and the nearest CAL FIRE station is Station 30, located approximately 1.3 miles north of the project site.

Law Enforcement Services

Police protection and emergency services in the unincorporated portions of the county are provided by the San Luis Obispo County Sheriff's Office. The Sheriff's Office Patrol Division responds to calls for service, conducts proactive law enforcement activities, and performs initial investigations of crimes. Patrol personnel are deployed from three stations throughout the county—the Coast Station in Los Osos, the

Initial Study – Environmental Checklist

North Station in Templeton, and the South Station in Oceano. The nearest sheriff's station is the North Station, located immediately north of the project site.

Public Schools

San Luis Obispo County has a total of 12 school districts that currently enroll approximately 34,000 students in over 75 schools. The project site is located in the Templeton Unified School District (TUSD).

Public Parks and Recreation Facilities

Within the County's unincorporated areas, there are currently 23 parks, three golf courses, four trails/staging areas, and eight Special Areas that include natural areas, coastal access, and historic facilities currently operated and maintained by the County. Evers Park Field is located approximately 0.6 mile southeast of the project site.

County of San Luis Obispo Public Facilities Fees

Public facilities fees, Quimby fees, and developer conditions are several ways the County currently funds public services. A public facility fee program (i.e., development impact fee program) has been adopted to address impacts related to public facilities (County) and schools (California Government Code Section 65995 et seq.). The fee amounts are assessed annually by the County based on the type of proposed development and the development's proportional impact and are collected at the time of building permit issuance. Public facility fees are used as needed to finance the construction of and/or improvements to public facilities required to serve the new development, including fire protection, law enforcement, schools, parks, and roads.

Discussion

- (a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

Fire protection?

The project would result in the construction of 22 single-family residences and up to 22 ADUs/JADUs that would generate a population increase of approximately 79 people, which would result in a marginal increase in demand on existing fire protection services. The project would be subject to standard Public Facilities Fees to offset the project's demand on existing fire protection services. Based on the marginal population increase and payment of Public Facilities Fees, the project would not require or otherwise facilitate the need for additional or expanded fire protection services, and impacts would be *less than significant*.

Police protection?

The project would result in the construction of 22 single-family residences and up to 22 ADUs/JADUs that would generate a population increase of approximately 79 people, which would result in a marginal increase in demand on existing police protection services. The project would be subject to standard Public Facilities Fees to offset the project's demand on existing police protection services. Based on the marginal population increase and payment of Public Facilities Fees, the project would

Initial Study – Environmental Checklist

not require or otherwise facilitate the need for additional or expanded police protection services; therefore, impacts would be *less than significant*.

Schools?

The project would result in the construction of 22 single-family residences and up to 22 ADUs/JADUs that would have the potential to increase the number of school-aged children in the project area. Therefore, implementation of the project has the potential to result in an increase in demand on the TUSD. The project would be required to pay Public Facilities Fees to offset its demand on the TUSD. Based on the marginal increase of school-aged children and payment of Public Facilities Fees, the project would not require or otherwise facilitate the need for additional or expanded TUSD facilities; therefore, impacts would be *less than significant*.

Parks?

Implementation of the proposed project could facilitate a population increase of approximately 79 people that would result in a marginal increase in demand on existing public recreation facilities. The project would be subject to the payment of standard Public Facilities Fees to offset its demand on existing public recreation facilities. Therefore, based on the marginal population increase and payment of Public Facilities Fees, the project would not require or otherwise facilitate the need for additional or expanded public recreational facilities, and impacts would be *less than significant*.

Other public facilities?

Implementation of the proposed project could facilitate a population increase of approximately 79 people that would result in a marginal increase in demand on other public facilities within the project region. The project would be subject to the payment of standard Public Facilities Fees to account for an increased demand on existing public services. The project would not facilitate the need for additional or expanded public services; therefore, potential impacts would be *less than significant*.

Conclusion

The project would be subject to payment of development impact fees to reduce the project's negligible contribution to increased demands on public services and facilities. Therefore, potential impacts related to public services would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

Initial Study – Environmental Checklist

XVI. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

County of San Luis Obispo General Plan Parks and Recreation Element

The *County of San Luis Obispo General Plan Parks and Recreation Element* establishes goals, policies, and implementation measures for the management, renovation, and expansion of existing parks and recreation facilities and the development of new parks and recreation facilities in order to meet existing and projected needs and to assure an equitable distribution of parks throughout the county.

2015/16 San Luis Obispo County Bikeways Plan

The *2015/16 San Luis Obispo County Bikeways Plan* identifies and prioritizes bikeway facilities throughout the unincorporated area of the county, including bikeways, parking, connections with public transportation, educational programs, and funding. The County Bikeways Plan is updated every 5 years and was last updated in 2016. The plan identifies goals, policies, and procedures geared towards realizing significant bicycle use as a key component of the transportation options for San Luis Obispo County residents. The plan also includes descriptions of bikeway design and improvement standards, an inventory of the current bicycle circulation network, and a list of current and future bikeway projects within the county.

Determining Park Needs

The County's most recent resource summary report is the *2016–2018 Resource Summary Report* evaluates existing resources using a Resource Management System, which helps decision makers balance land development and existing resources by assessing resource levels and determining the level of development those resources could sustain. The Resource Management System identifies the following three alert levels called "levels of severity" to identify potential resource deficiencies (County of San Luis Obispo 2019):

- **Level 1.** For regional parks, the County provides between 10 and 15 acres of regional parkland per 1,000 persons in the entire county (i.e., incorporated and unincorporated areas). For community parks, the County provides 2 to 3 acres of community parkland per 1,000 persons in an unincorporated community.

Initial Study – Environmental Checklist

- **Level 2.** For regional parks, the County provides between 5 and 10 acres of regional parkland per 1,000 persons in the entire county. For community parks, the County provides 1 to 2 acres of community parkland per 1,000 persons in an unincorporated community.
- **Level 3.** For regional parks, the County provides less than 5 acres of regional parkland per 1,000 persons in the entire county. For community parks, the County provides 1 acre or less of community parkland per 1,000 persons in an unincorporated community.

Development Impact Fees

Public facilities fees, Parkland fees (Quimby fees), and developer conditions are several ways the County currently funds public parks and recreational facilities. Public facility fees are collected upon construction of new residential units and currently provide funding for new community-serving recreation facilities. These fees are determined on a per-dwelling-unit basis. The Park Public Facility Fees can be used for construction, expansion, or improvement of parks and recreation related public facilities but cannot be used for ongoing costs, such as operation and maintenance. The Board of Supervisors adopts a Public Facilities Financing Plan, which includes a “Needs List” of facilities that are eligible to be financed through the Public Facility Fees.

Quimby fees are authorized by California Government Code section 66477, commonly known as the Quimby Act, and are imposed by the County through Chapter 9 of Title 21. A developer must satisfy the Quimby Act requirement by either dedicating land or paying an in-lieu fee. The fees are paid by developers of new residential subdivisions and are meant to help fund the acquisitions, development, and maintenance of parks and recreational facilities to serve the subdivision. The project includes a subdivision and would be subject to payment of Quimby fees to offset incremental impacts on existing recreational resources.

Lastly, a discretionary permit issued by the County may condition a project to provide land, amenities, or facilities consistent with the County Parks and Recreation Element.

Discussion

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

The project includes the construction of 22 single-family residences and up to 22 ADU/JADUs, in the community of Templeton. According to the Templeton Community Plan, there is an average of 2.68 persons per household in the community (County of San Luis Obispo 2014). Based on the average of 2.68 persons per household and the assumption that ADUs/JADUs have approximately 1/3 the household size of a standard dwelling unit, the project has the potential to result in a population increase of approximately 79 people. Therefore, implementation of the proposed project would result in a limited increase in population and would not result in a substantial increase in demand on existing recreational facilities. Further, the project would be subject to the payment of standard Quimby Fees to offset its demand on existing public recreation facilities. Based on the limited population increase and payment of Quimby Fees, implementation of the project would not increase the use of existing recreational facilities in a manner that would result in substantial physical deterioration of the facility; therefore, impacts would be *less than significant*.

Initial Study – Environmental Checklist

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

The project does not include the construction of new recreational facilities and would not result in a substantial increase in demand or use of parks and recreational facilities. Additionally, the project would be subject to payment of Quimby fees to offset incremental impacts on existing recreational resources. Implementation of the project would not require the construction or expansion of recreational facilities; therefore, *no impacts* would occur.

Conclusion

The project would not result in the significant increase in use, construction, or expansion of parks or recreational facilities, and the project would be subject to payment of Quimby fees to offset increased use of existing recreational resources. Therefore, potential impacts related to recreation would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

XVII. TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Senate Bill 743 and Vehicle Miles Traveled

In 2013 SB 743 was signed into California State law with the intent to “more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health

Initial Study – Environmental Checklist

through active transportation, and reduction of greenhouse gas emissions” and required the California Governor’s Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. As a result, in December 2018, the California Natural Resources Agency certified and adopted updates to the State CEQA Guidelines. The revisions included new requirements related to the implementation of SB 743 and identified VMT per capita, VMT per employee, and net VMT as new metrics for transportation analysis under CEQA (as detailed in Section 15064.3[b]).

The County has developed a VMT Program (Transportation Impact Analysis Guidelines [San Luis Obispo County Department of Public Works, October 2020]). The program provides interim operating thresholds and includes a screening tool for evaluating VMT impacts. Screening criteria were developed for projects within San Luis Obispo County based on methodology provided in the *County of San Luis Obispo VMT Thresholds Study* (GHD 2020). The screening maps indicate where residential and work-based projects would generate an average VMT of 15% or less below the VMT baselines and would not require a VMT analysis. It is important to emphasize that if a project is not presumed to be less than significant based on these screening maps, it does not necessarily mean that the project will have a VMT impact, only that a less-than-significant impact determination cannot be assumed and that a VMT analysis would be necessary to make that determination (GHD 2020).

Regional Transportation Planning

SLOCOG holds several key roles in transportation planning within the county. As the Regional Transportation Planning Agency (RTPA), SLOCOG is responsible for conducting a comprehensive, coordinated transportation program, preparing an RTP/SCS, allocating state funds for transportation projects, and administering and allocating transportation development act funds required by state statutes. SLOCOG represents and works with the County as well as the local City governments within the county in facilitating the development of the RTP/SCS and the Regional Housing Needs Allocation.

The RTP, adopted June 7, 2023, is a long-term blueprint of San Luis Obispo County’s transportation system that identifies and analyzes the transportation needs of the region and creates a framework for project priorities. The RTP also establishes goals and recommendations to develop, promote, and invest in the public transit systems, rail systems, air transportation services, harbor improvements, and commodity movements within the county in order to meet the needs of transit-dependent individuals and encourage the increasing use of alternative modes by all travelers that choose public transportation.

Local Transportation Planning

The County’s Framework for Planning (Inland), Part I of the County Land Use and Circulate Elements (LUCE), establishes goals and strategies to meet pedestrian circulation needs by providing usable and attractive sidewalks, pathways, and trails to establish maximum access and connectivity between land use designations. The *County of San Luis Obispo General Plan Circulation Element* sets forth policies and programs to address transportation impacts.

The County Department of Public Works maintains updated traffic count data for all County-maintained roadways. In addition, Traffic Circulation Studies have been conducted within several community areas using traffic models to reasonably simulate current traffic flow patterns and forecast future travel demands and traffic flow patterns. These community Traffic Circulation Studies include the South County, Los Osos, Templeton, San Miguel, Avila, and North Coast Circulation Studies. The California Department of Transportation (Caltrans) maintains annual traffic data on state highways and interchanges within the county.

Initial Study – Environmental Checklist

The County's Framework for Planning (Inland) establishes goals and strategies to meet pedestrian circulation needs by providing usable and attractive sidewalks, pathways, and trails to establish maximum access and connectivity between land use designations.

Existing Conditions

The project site is bound by US 101 to the west and North Main Street to the east. Access to the project site is provided from a driveway off of North Main Street, which is a two- to three-lane arterial roadway with Class II bike lanes and intermittent sidewalks (Figure 10). The posted speed limit is 40 miles per hour (mph) adjacent to the project site. The average daily traffic (ADT) on North Main Street north of Creekside Ranch Road was approximately 5,800 in June 2020, below levels counted in May 2015, when the ADT was 6,550. San Luis Obispo Regional Transit Authority (SLORTA) Route 10 provides service from San Luis Obispo to Paso Robles. However, the only stops in Templeton are located on Las Tablas Road west of US 101.



Figure 10. Photograph of North Main Street from the project site frontage, facing north (February 26, 2024).

Initial Study – Environmental Checklist

A Transportation Impact Analysis was prepared for the project to evaluate the project's potential impacts on the existing roadway network (CCTC 2022; see Appendix G).

Discussion

- (a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

The project includes the construction of 22 single-family residences and up to 22 ADUs/JADUs on a 10.02-acre project site in the community of Templeton. The project site is included in the Templeton Circulation Study (Omni-Means 2017) in traffic analysis zone (TAZ) 458 along with the Sheriff's parcel to the north and three additional vacant CR parcels. Under 2015 conditions, 578 daily government trips were estimated for the TAZ. Under 2035 conditions, an additional 1,305 daily vehicle trips were estimated for the TAZ. The project site comprises approximately 59% (or 770 trips) of the vacant CR land in the TAZ. According to the Transportation Impact Analysis prepared for the project, the project would generate 251 new vehicle trips per weekday, including 19 AM peak hour trips and 24 PM peak hour trips. Therefore, the proposed project would generate fewer trips than estimated in the Templeton Circulation Study and would not exceed the existing or planned capacity of surrounding roadways (CCTC 2022). The project would be subject to the payment of standard road improvement fees for the Templeton road fee area to contribute to maintenance and improvements of other roadways within the project area. There are existing Class II bike lanes along North Main Street that connect to existing Class III bike lanes to the north and south of the project site. As a result, the project would be accessible using alternative modes of transportation, which is consistent with the SLOCOG 2023 RTP/SCS and County Bikeways Plan. The project would be consistent with applicable circulation system plans; therefore, impacts would be *less than significant*.

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

The County has developed a VMT Program (Transportation Impact Analysis Guidelines [San Luis Obispo County Department of Public Works 2020]; VMT Thresholds Study [GHD 2020]). The program provides interim operating thresholds and includes a screening tool for evaluating VMT impacts.

County guidelines describe screening criteria for projects consistent with the County General Plan presumed to have a less-than-significant impact based on project type, intensity, or location. Projects located within an area identified as having below-threshold VMT are presumed to have a less-than-significant impact. According to the Transportation Impact Analysis prepared for the project, the project site is located in an area identified by the County as having a below-threshold VMT impact and would be exempt from detailed VMT analysis. The proposed project would result in a less-than-significant impact on VMT (CCTC 2022). Therefore, the project would not conflict with regional VMT-reduction efforts, and impacts would be *less than significant*.

- (c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

The project includes the construction of a proposed 967-foot-long and 38-foot-wide private road from North Main Street. The private road would terminate in a cul-de-sac with a 40-foot radius turnaround in the western portion of the project site. The project also includes the construction of frontage improvements along North Main Street. The proposed access roadway and associated improvements would be required to comply with County Public Works Department requirements

Initial Study – Environmental Checklist

and County Fire/CAL FIRE standards to avoid hazardous roadway design. In addition, the proposed driveway would be adequate to meet the County's sight distance standards (CCTC 2022). According to the Transportation Impact Analysis prepared for the project, there is not a history of collisions along proximate roadways. Further, as discussed in Impact Discussion XVII(a), the project would not result in an increase in vehicle trips in exceedance of existing or planned roadway capacity. Therefore, the project would not be expected to increase roadway hazards due to a substantial increase in vehicle trips or associated vehicle congestion. Based on existing roadway conditions and required compliance with County Public Works Department and County Fire/CAL FIRE requirements, implementation of the proposed project would not substantially increase roadway hazards; therefore, impacts would be *less than significant*.

(d) *Result in inadequate emergency access?*

The project site would be accessed via a proposed 967-foot-long and 38-foot-wide private road from North Main Street. The private road would terminate in a cul-de-sac with a 40-foot radius turnaround in the western portion of the project site. In addition, the project includes the construction of frontage improvements along North Main Street. The proposed roadway would be required to comply with County Public Works Department and County Fire/CAL FIRE standards to ensure adequate emergency vehicle access to the project site. Proposed construction activities are not anticipated to require any long-term road closures or traffic controls that could impede emergency access in the area. Based on required compliance with County Public Works Department and County Fire/CAL FIRE requirements, implementation of the proposed project would not result in inadequate emergency access, and impacts would be *less than significant*.

Conclusion

The project would be consistent with the SLOCOG 2023 RTP/SCS, County Bikeways Plan, and County Circulation Element and would not generate vehicle trips that would exceed existing VMT thresholds. In addition, the project would be consistent with County Public Works Department and County Fire/CAL FIRE standards for site access and driveway design; therefore, impacts related to transportation would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

Initial Study – Environmental Checklist

XVIII. TRIBAL CULTURAL RESOURCES

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

Setting

Approved in 2014, AB 52 added tribal cultural resources to the categories of resources that must be evaluated under CEQA. Tribal cultural resources are defined as either of the following:

1. Sites, features, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - a. Included or determined to be eligible for inclusion in the CRHR; or
 - b. Included in a local register of historical resources as defined in PRC Section 5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1.

Initial Study – Environmental Checklist

Recognizing that tribes have expertise with regard to their tribal history and practices, AB 52 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe regarding the potential for adverse impacts on tribal cultural resources as a result of a project. Consultation may include discussing the type of environmental review necessary, the presence and/or significance of tribal cultural resources, the level of significance of a project's impacts on the tribal cultural resources, and available project alternatives and mitigation measures recommended by the tribe to avoid or lessen potential impacts on tribal cultural resources.

Discussion

(a) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

(a-i) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

The project site is currently undeveloped and does not consist of any residences, buildings, or other structures that could be eligible for listing as historical resources in the CRHR. Further, the records search did not reveal any historic or tribal historic resources within the project area (Stone Archaeological Consulting 2022). Because there are no historic or tribal historic resources within or directly adjacent to the project site, implementation of the proposed project would not cause a substantial adverse change in the significance of a tribal historical resource; therefore, *no impacts* would occur.

(a-ii) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

Pursuant to AB 52, the County provided notice to local California native tribes with geographic and/or cultural ties to the project region. Referral letters were sent to tribal representatives on January 26, 2024. In addition, Karen White of the Xolon Salinan Tribe responded on February 19, 2024, and requested to review the archaeological report prepared for the project site. County staff provided Karen White a copy of the Phase I Archaeological Resources Report prepared for the project on February 21, 2024 and no requests for consultation have been received from the Xolon Salinan Tribe to date (May 1, 2024).

In addition, Patti Dunton, Administrator for the Salinan Tribe of San Luis Obispo and Monterey Counties responded on February 16 and requested that a Phase I survey be completed and requested to review the survey report when completed. County staff provided the Salinan Tribe of San Luis Obispo and Monterey Counties with a copy of the Phase I Archeological Resources Report to the Salinan Tribe of San Luis Obispo and Monterey Counties and on March 8, 2024 Patti Dunton responded and stated that they reviewed the cultural report prepared for the project and had no concerns at this time. Pattie Dunton also included a request to be notified in the event of an

Initial Study – Environmental Checklist

unanticipated discovery during project work. No further comments or requests for information have been received to date (May 1, 2024).

Based on the results of the Phase I Archaeological Resources Report, there are no known cultural or tribal cultural archaeological resources within the project area (Stone Archaeological Consulting 2022). The project would be required to comply with County LUO Section 22.10.040 in the event of inadvertent discovery of tribal cultural resources. Per County LUO Section 22.10.040, in the event an unknown cultural resource site is encountered, all work within the vicinity of the find must be halted until a qualified archaeologist is retained to evaluate the nature, integrity, and significance of the find. In addition, the project would be required to comply with California Health and Safety Code Section 7050.5, which identifies the proper protocol in the event of inadvertent discovery of human remains, including the cessation of work within the vicinity of the discovery, identification of human remains by a qualified coroner, and if the remains are identified to be of Native American descent, contact with the NAHC. Based on required compliance with the County LUO and California Health and Safety Code Section 7050.5, the project is not anticipated to result in adverse impacts to known or unknown cultural archaeological resources, and impacts would be *less than significant*.

Conclusion

No tribal cultural resources are known or expected to occur within or adjacent to the project site. In the event unanticipated sensitive resources are discovered during project activities, adherence with County LUO standards and California Health and Safety Code procedures would reduce potential impacts to less than significant; therefore, potential impacts to tribal cultural resources would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

XIX. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
(a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Initial Study – Environmental Checklist

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Per the County's Stormwater Program, the County Public Works Department is responsible for ensuring that new construction sites implement BMPs during construction, and that site plans incorporate appropriate post-construction stormwater runoff controls. Construction sites that disturb 1 acre or more must obtain coverage under the SWRCB's Construction General Permit.

PG&E is the primary electricity provider and both PG&E and SoCalGas provide natural gas services for urban and rural communities within San Luis Obispo County.

The TCSD provides the community of Templeton with water, sewer, fire protection, parks and recreation, refuse, lighting, and drainage services. According to the TCSD *Water and Wastewater Master Plan Update* (2013), the current water supply is comprised of groundwater, purchased water, and treated recycled water. The TCSD's water sources and annual volume are shown in Table 11.

Table 11. TCSD Existing Water Supply

Source	Summer (April 1–Sept. 30)	Winter (Oct. 1–March 31)	Annual Volume (Acre-Feet per Year)
Templeton Subunit Deep Aquifer	No Restrictions	No Restrictions	1,040
Salinas River Underflow	--	--	--
Water Rights Permit 8964	0	500	500

Initial Study – Environmental Checklist

Greer Riparian Right (April 1–Oct. 15)	102	0	102
Riparian Right Agency Agreements	No Restrictions	No Restrictions	60
Treated Wastewater Effluent Salinas River Underflow Augmentation	No Restrictions	No Restrictions	164
Nacimiento Water Supply Project	No Restrictions	No Restrictions	245
Total	--	--	2,111

Source: TCSD (2013)

Note: “No Restrictions” refers only to the season of use.

As shown in Table 10, the TCSD has an existing water supply volume of 2,111 acre-feet per year (TCSD 2013).

Wastewater within the TCSD is treated at either the Meadowbrook Wastewater Treatment Plant (WWTP), which is operated by the TCSD, or the Paso Robles WWTP, which is operated by the City of El Paso de Robles. The existing TCSD service area generates an average daily flow volume of 371,693 gallons per day (gpd) and has a projected buildout average daily flow volume of 674,380 gpd. Currently, the Meadowbrook WWTP treats an average of 150,000 gpd and approximately 220,000 gpd is sent to the Paso Robles WWTP. The Meadowbrook WWTP has a projected capacity of 0.6 million gallons per day (MGD). The TCSD owns 443,000 gpd (9%) of capacity rights of the 4.9 MGD Paso Robles WWTP capacity (TCSD 2013).

There are three landfills in San Luis Obispo County: Cold Canyon Landfill, located south of the city of San Luis Obispo; Chicago Grade Landfill, located near the community of Templeton; and Paso Robles Landfill, located east of the city of Paso Robles. The project would be served by the Chicago Grade Landfill.

Discussion

- (a) *Require or result in the relocation (or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?*

The proposed residential lots would be served by community water and wastewater collection and treatment services by the TCSD. The project would include construction of off-site pipeline tie-ins to existing water and wastewater mains located along North Main Street within the roadway right-of-way. As evaluated throughout this Initial Study, the project has the potential to result in adverse construction-related impacts related to Air Quality, Biological Resources, Geology and Soils, Hydrology and Water Quality, and Noise. Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-12, and N-1 through N-3 have been included to avoid and/or minimize adverse construction-related impacts to less-than-significant levels and construction of proposed utility infrastructure and connections have been incorporated into this analysis. Therefore, upon implementation of the identified mitigation measures, installation of utility infrastructure is not anticipated to result in adverse impacts to the environment; therefore, potential impacts would be *less than significant with mitigation*.

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

The project would be provided water from the TCSD, which has an existing water supply volume of 2,111 acre-feet per year (TCSD 2013). The TCSD has provided a conditional will-serve letter to

Initial Study – Environmental Checklist

provide water to the project site and have confirmed that no infrastructure upgrades would be needed to provide water to the future residential uses on-site (TCSD 2024). Therefore, there would be adequate capacity to provide water to the project, and impacts would be *less than significant*.

- (c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The project would be provided wastewater services by the TCSD. Wastewater would be treated and disposed of at either the Meadowbrook WWTP or the Paso Robles WWTP. Currently, the Meadowbrook WWTP currently treats an average of 150,000 gpd and approximately 220,000 gpd is sent to the Paso Robles WWTP. The Meadowbrook WWTP has a projected capacity of 0.6 MGD. The TCSD owns 443,000 gpd of capacity rights of the Paso Robles treatment plant capacity (TCSD 2013). The project would result in a marginal increase in wastewater generation from proposed residential land uses. The TCSD has provided a conditional will-serve letter to provide wastewater services to the project site. Therefore, there would be adequate capacity to treat wastewater generated by the project, and impacts would be *less than significant*.

- (d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

The project would result in the construction of 22 single-family residences and up to 22 ADUs/JADUs that would result in a marginal increase in solid waste that would be hauled to Chicago Grade Landfill. According to the California Department of Resources Recycling and Recovery (CalRecycle), Chicago Grade Landfill has a maximum permitted capacity of 10,548,980 cubic yards and maximum capacity of 500 tons of solid waste per day. The estimated remaining capacity of the landfill is 4,435,887 cubic yards and the estimated closure date is December 2039 (CalRecycle 2011).

During construction, the project would result in a short-term increase in construction-related solid waste. According to the County's Integrated Waste Management Authority (IWMA), construction waste would be subject to CALGreen Sections 4.408 and 5.408, which require diversion of at least 75% of construction waste (IWMA 2022). Based on required compliance with CALGreen regulations, construction of the project would not generate solid waste in excess of local infrastructure capacity.

According to the CalRecycle Estimated Solid Waste Generation Rates, the operation of a total of 44 new residential units would result in approximately 538.12 pounds of solid waste per day (CalRecycle 2019). Proposed solid waste calculations are shown in Table 12.

Table 12. Estimated Solid Waste Generation Rates

Waste Generation Source	Generation Rate	Unit of Measure	Proposed Development	Total
Residential	12.23	pounds/household/day	44 residential units	538.12 pounds
			Total	538.12 pounds

Source: CalRecycle Estimated Solid Waste Generation Rates (2019)

Implementation of the project would result in a long-term increase in operational solid waste generation. In addition, the project would be required to comply with County-implemented recycling

Initial Study – Environmental Checklist

and organic waste disposal programs during operation, which would reduce the amount of solid waste taken to Chicago Grade Landfill. Chicago Grade Landfill would have adequate available capacity to support the increase of solid waste; therefore, impacts would be *less than significant*.

- (e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The project’s solid waste would be hauled to Chicago Grade Landfill, which is fully compliant with existing state and local regulations related to disposal of solid waste. As evaluated above, future construction and operation of the project is not expected to generate solid waste in excess of state or County regulations for solid waste. In addition, the project would be required to comply with CALGreen regulations during construction and County-implemented recycling and organic waste disposal programs during operation, which would be consistent with federal, state, and local solid waste reduction goals; therefore, impacts would be *less than significant*.

Conclusion

Implementation of Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-12, and N-1 through N-3 would reduce potential adverse environmental impacts related to the expansion of utility infrastructure to less-than-significant levels. The project would not increase water demand or generate wastewater or solid waste in exceedance of state or County regulations. Therefore, upon implementation of the identified mitigation measures, potential impacts would be less than significant.

Mitigation

Implement Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-12, and N-1 through N-3.

XX. WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>				
(a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Initial Study – Environmental Checklist

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Setting

Topography influences wildland fire to such an extent that slope conditions can often become a critical wildland fire factor. Conditions such as speed and direction of dominant wind patterns, the length and steepness of slopes, direction of exposure, and/or overall ruggedness of terrain influence the potential intensity and behavior of wildland fires and/or the rates at which they may spread.

CAL FIRE Fire Hazard Severity Zones

FHSZs are defined by CAL FIRE based on the presence of fire-prone vegetation, climate, topography, assets at risk (e.g., high population centers), and a fire protection agency's ability to provide service to the area. FHSZs throughout the county have been designated as "Very High," "High," or "Moderate." In San Luis Obispo County, most of the area that has been designated as a Very High FHSZ is located in the Santa Lucia Mountains, which extend parallel to the coast along the entire length of San Luis Obispo County, from Monterey County in the north to Santa Barbara County in the south. A lack of designation does not mean the area cannot experience a damaging fire; rather, it indicates that the probability is reduced, generally because the number of days a year that the area has "fire weather" is less than in moderate, high, or very high FHSZ. The project site does not have an FHSZ designation, and it is located in an LRA (CAL FIRE 2022).

County of San Luis Obispo Emergency Operations Plan

The County has prepared the County EOP to outline the emergency measures that are essential for protecting public health and safety. These measures include, but are not limited to, public alert and notifications, emergency public information, and protective actions. The County EOP also addresses policy and coordination related to emergency management. The County EOP includes the following components:

- Identifies the departments and agencies designated to perform response and recovery activities and specifies tasks they must accomplish;
- Outlines the integration of assistance that is available to local jurisdictions during disaster situations that generate emergency response and recovery needs beyond what the local jurisdiction can satisfy;

Initial Study – Environmental Checklist

- Specifies the direction, control, and communications procedures and systems that will be relied on to alert, notify, recall, and dispatch emergency response personnel; alert the public; protect residents and property; and request aid/support from other jurisdictions and/or the federal government;
- Identifies key continuity of government operations; and
- Describes the overall logistical support process for planned operations.

County of San Luis Obispo General Plan Safety Element

The County Safety Element establishes goals, policies, and programs to reduce the threat to life, structures, and the environment caused by fire. Policy S-13 identifies that new development should be carefully located, with special attention given to fuel management in higher fire risk areas, and that new development in fire hazard areas should be configured to minimize the potential for added danger. Implementation strategies for this policy include identifying high risk areas, the development and implementation of mitigation efforts to reduce the threat of fire, requiring fire resistant material to be used for building construction in fire hazard areas, and encouraging applicants applying for subdivisions in fire hazard areas to cluster development to allow for a wildfire protection zone.

California Fire Code

The CFC provides minimum standards for many aspects of fire prevention and suppression activities. These standards include provisions for emergency vehicle access, water supply, fire protection systems, and the use of fire-resistant building materials.

Discussion

(a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

The project site is located in an LRA without an FHSZ designation and would be accessed via a proposed private driveway connecting to North Main Street. The proposed driveway would terminate in a cul-de-sac with a 40-foot radius to allow for firetruck turnaround. Future construction activities are not expected to require any long-term road closures or traffic controls that could result in permanent impacts to traffic circulation in the area. The proposed development would be required to comply with County Public Works Department and County Fire/CAL FIRE standards to ensure adequate emergency vehicle and other access to and from the project site. In addition, the proposed development is located in an area that is prescreened for below-threshold VMT, indicating a limited increase in vehicle trips (CCTC 2022). As such, the proposed residential development would not increase traffic congestion or otherwise impede circulation within the area. Based on required compliance with County Public Works Department and County Fire/CAL FIRE requirements and limited impacts to circulation, implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; therefore, impacts would be *less than significant*.

(b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

The 10.02-acre project property is located in an LRA without an FHSZ designation and is characterized by nearly level to gently sloping topography. The entire property is currently undeveloped and supports grassland habitat and one mature valley oak tree. Implementation of the

Initial Study – Environmental Checklist

project would result in the development of 22 new single-family residential units and 22 ADU/JADUs, which would be required to be constructed in accordance with the most recent CFC and CBC requirements to reduce risks associated with wildfire ignition. In addition, the project would be required to implement design recommendations identified by County Fire/CAL FIRE to ensure adequate ability to provide fire protection services to the proposed project. Based on required compliance with CFC, CBC, and County Fire/CAL FIRE requirements, the project is not anticipated to significantly exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; therefore, impacts would be *less than significant*.

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

The project site is located in an area without an FHSZ designation (CAL FIRE 2022). Construction of the proposed private drive and utility infrastructure required for the project would be required to comply with County Public Works Department and County Fire/CAL FIRE standards to reduce the risk of accidental wildfire ignition at the project site. Based on required compliance with applicable County Fire/CAL FIRE and County Public Works Department requirements, proposed utility infrastructure and installation of a new private drive would not exacerbate wildfire risk at the project site; therefore, potential impacts would be *less than significant*.

- (d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is located in an area without an FHSZ designation within an LRA with low potential for landslide to occur. As evaluated in Section X, *Hydrology and Water Quality*, the project site is located in a 100-year flood zone and would be required to comply with County LUO Section 22.14.060.D to ensure construction above the base flood elevation to avoid the exposure of project occupants to increased hazard related to flooding. The project includes the construction of two stormwater retention basins in the eastern portion of the project site that have been designed in accordance with on-site drainage conditions and the *Templeton Drainage and Flood Control Study* and County Public Improvement Standards to contain flows from a 2-year, 10-year, 50-year, and 100-year flood at the project site. As such, the potential flood flows would be contained on-site. Proposed buildings would be constructed in accordance with CBC, CFC, and County LUO regulations to reduce risk associated with wildfire and post-wildfire events. Based on required compliance with CFC, CBC, and County LUO requirements, proposed development would not increase the potential for post-fire risks to occur; therefore, impacts would be *less than significant*.

Conclusion

Based on required compliance with CFC, CBC, County Fire/CAL FIRE, and County Public Works Department development requirements for proposed residential development and associated site improvements, the proposed project and associated activities would not result in significant adverse impacts related to wildfire, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

Initial Study – Environmental Checklist

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

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

Discussion

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

Based on the analysis provided in individual resource sections above, the project has the potential to disturb sensitive biological resources and unknown cultural and/or tribal cultural resources. Mitigation Measures BIO-1 through BIO-12 have been identified and would reduce potential impacts related to sensitive biological resources to less than significant. Additionally, adherence to County LUO Section 22.10.040 and California Health and Safety Code Section 7050.5 would reduce impacts

Initial Study – Environmental Checklist

to unknown cultural and/or tribal cultural resources if present within the project area. Therefore, potential impacts would be *less than significant with mitigation*.

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

Based on the nature of proposed development and the analysis provided in resource sections above, the project would have the potential to result in environmental impacts associated with Air Quality, Biological Resources, Geology and Soils, Hydrology and Water Quality, and Noise that could have a cumulative effect with other development projects in the project region. Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-13, and N-1 through N-3 have been identified to reduce potential environmental impacts associated with the project to a less-than-significant level. Other past and future development projects requiring a discretionary permit in the project region would also be subject to applicable mitigation measures to reduce potential impacts associated with these impact issue areas. Therefore, based on the implementation of project-level mitigation measures and discretionary review and CEQA review of other projects within the project area, potential impacts would be *less than cumulatively considerable with mitigation*.

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

Based on the nature and scale of proposed development and the analysis provided in individual resource sections above, the project has the potential to have environmental effects that could result in substantial adverse effects on human beings. Potential impacts associated with air quality and noise would be reduced to less-than-significant levels with the implementation of Mitigation Measures AQ-1, AQ-2, and N-1 through N-3. Therefore, potential impacts associated with environmental effects that would cause substantial adverse effects on human beings would be *less than significant with mitigation*.

Conclusion

Potential impacts associated with mandatory findings of significance would be less than significant with mitigation.

Mitigation

Implement Mitigation Measures AQ-1 and AQ-2, BIO-1 through BIO-12, and N-1 through N-3.

Initial Study – Environmental Checklist

Exhibit A - Initial Study References and Agency Contacts

The County Planning Department has contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an ☒) and when a response was made, it is either attached or in the application file:

Contacted	Agency	Response
<input checked="" type="checkbox"/>	County Public Works Department	In File**
<input checked="" type="checkbox"/>	County Environmental Health Services	In File**
<input type="checkbox"/>	County Agricultural Commissioner's Office	None
<input type="checkbox"/>	County Airport Manager	Not Applicable
<input type="checkbox"/>	Airport Land Use Commission	Not Applicable
<input checked="" type="checkbox"/>	Air Pollution Control District	In File**
<input type="checkbox"/>	County Sheriff's Department	Not Applicable
<input checked="" type="checkbox"/>	Regional Water Quality Control Board	None
<input type="checkbox"/>	CA Coastal Commission	Not Applicable
<input checked="" type="checkbox"/>	CA Department of Fish and Wildlife	None
<input checked="" type="checkbox"/>	CA Department of Forestry (CAL FIRE)	None
<input checked="" type="checkbox"/>	CA Department of Transportation	None
<input checked="" type="checkbox"/>	Templeton Community Services District	In File**
<input checked="" type="checkbox"/>	Other AB 52/SB 18 Tribal Consultation	In File**
<input checked="" type="checkbox"/>	Other County Parks and Recreation Department	In File**
<input checked="" type="checkbox"/>	Other Templeton Area Advisory Group	None
<input checked="" type="checkbox"/>	Other Bicycle Advisory Committee	None

** "No comment" or "No concerns"-type responses are usually not attached

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

<input checked="" type="checkbox"/> Project File for the Subject Application	<input type="checkbox"/> Design Plan
<u>County Documents</u>	<input type="checkbox"/> Specific Plan
<input type="checkbox"/> Coastal Plan Policies	<input type="checkbox"/> Annual Resource Summary Report
<input checked="" type="checkbox"/> Framework for Planning (Coastal/Inland)	<input checked="" type="checkbox"/> Templeton Circulation Study
<input checked="" type="checkbox"/> General Plan (Inland/Coastal), includes all maps/elements; more pertinent elements:	<u>Other Documents</u>
<input checked="" type="checkbox"/> Agriculture Element	<input checked="" type="checkbox"/> Clean Air Plan/APCD Handbook
<input checked="" type="checkbox"/> Conservation & Open Space Element	<input checked="" type="checkbox"/> Regional Transportation Plan
<input type="checkbox"/> Economic Element	<input checked="" type="checkbox"/> Uniform Fire Code
<input checked="" type="checkbox"/> Housing Element	<input checked="" type="checkbox"/> Water Quality Control Plan (Central Coast Basin – Region 3)
<input checked="" type="checkbox"/> Noise Element	<input type="checkbox"/> Archaeological Resources Map
<input checked="" type="checkbox"/> Parks & Recreation Element/Project List	<input type="checkbox"/> Area of Critical Concerns Map
<input checked="" type="checkbox"/> Safety Element	<input type="checkbox"/> Special Biological Importance Map
<input checked="" type="checkbox"/> Land Use Ordinance (Inland/Coastal)	<input checked="" type="checkbox"/> CA Natural Species Diversity Database
<input type="checkbox"/> Building and Construction Ordinance	<input checked="" type="checkbox"/> Fire Hazard Severity Map
<input checked="" type="checkbox"/> Public Facilities Fee Ordinance	<input checked="" type="checkbox"/> Flood Hazard Maps
<input type="checkbox"/> Real Property Division Ordinance	<input checked="" type="checkbox"/> Natural Resources Conservation Service Soil Survey for SLO County
<input type="checkbox"/> Affordable Housing Fund	<input checked="" type="checkbox"/> GIS mapping layers (e.g., habitat, streams, contours, etc.)
<input type="checkbox"/> Airport Land Use Plan	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Energy Wise Plan	
<input checked="" type="checkbox"/> North County Area Plan/Salinas River SA	

Initial Study – Environmental Checklist

In addition, the following project-specific information and/or reference materials have been considered as a part of the Initial Study:

AKA Engineering Company. 2023. *Preliminary Drainage Calculations 301 North Main Street, Templeton, CA SUB2023-00013 TR-3212 (APN: 040-201-033)*.

California Air Resources Board (CARB). 020. Maps of State and Federal Area Designations. Available at: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>. Accessed on January 23, 2024.

———. 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. December 2022. Available at: <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf>.

———. 2023. Current California GHG Emission Inventory Data. Available at: <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed February 15, 2024.

———. 2024. Advanced Clean Cars Program. Available at: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about>.

California Department of Conservation (CDC). 2015. Fault Activity Map of California. Available at: <https://maps.conservation.ca.gov/cgs/fam/>. Accessed January 22, 2024.

———. 2018. California Important Farmland Finder. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed January 19, 2024.

———. 2020. San Luis Obispo County Tsunami Inundation Maps. Available at: <https://www.conservation.ca.gov/cgs/tsunami/maps/san-luis-obispo>. Accessed January 23, 2024.

———. 2021. Earthquake Zones of Required Investigation. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed January 22, 2024.

California Department of Fish and Wildlife (CDFW). 2024. Habitat Connectivity Viewer. Available at: <https://apps.wildlife.ca.gov/bios6/?bookmark=648>. Accessed January 24, 2024.

California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fire Hazard Severity Zone Viewer. Available at: <https://egis.fire.ca.gov/FHSZ/>. Accessed January 23, 2024.

California Department of Housing and Community Development. 2024. Accessory Dwelling Units. Available at: [https://www.hcd.ca.gov/policy-and-research/accessory-dwelling-units#:~:text=Junior%20Accessory%20Dwelling%20Units%20\(JADUs\)%20are%20allowed%20to%20be%20created,JADUs%20offer%20additional%20housing%20options..](https://www.hcd.ca.gov/policy-and-research/accessory-dwelling-units#:~:text=Junior%20Accessory%20Dwelling%20Units%20(JADUs)%20are%20allowed%20to%20be%20created,JADUs%20offer%20additional%20housing%20options..) Accessed February 5, 2024.

California Department of Resources Recycling and Recovery (CalRecycle). 2011. SWIS Facility/Site Activity Details Chicago Grade Landfill (40-AA-0008). Available at: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1512?siteID=3174>. Accessed January 23, 2024.

Initial Study – Environmental Checklist

- . 2019. Estimated Solid Waste Generation Rates. Available at: <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates#:~:text=Residential%20Sector%20Generation%20Rates%20%20%20Waste,%20Cor%20...%20%208%20more%20rows%20>. Accessed January 23, 2024.
- California Department of Toxic Substance Control (DTSC). 2024. EnviroStor Database. Available at: <https://www.envirostor.dtsc.ca.gov/public/>. Accessed January 23, 2024.
- California Department of Transportation (Caltrans). 2021. California State Scenic Highway System Map. Available at: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed January 16, 2024.
- . 2023. Scenic Highways – Frequently Asked Questions. Available at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways/lap-liv-i-scenic-highways-faq2>. Accessed February 5, 2024.
- California Geological Survey. 2011a. *Update of Mineral Land Classification: Concrete Aggregate in the San Luis Obispo – Santa Barbara Production-Consumption Region, California*. Available at: <https://agenda.slocounty.ca.gov/iip/sanluisobispo/file/getfile/120384>. Accessed January 23, 2024.
- . 2011b. *Updated Aggregate Resource Sector Map for the San Luis Obispo – Santa Barbara Production-Consumption Region, California – Northern Part*. Available at: https://www.conservation.ca.gov/cgs/documents/publications/special-reports/SR_215-MLC-Plate2A.pdf. Accessed January 23, 2024.
- California Legislative Information. 2022. AB-1279 The California Climate Crisis Act. Available at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB1279.
- Central Coast Community Energy (3CE). 2023. How 3CE Works. Available at: <https://3cenergy.org/about-us/how-ccce-works/>.
- Central Coast Transportation Consulting (CCTC). 2022. *301 North Main Street, Templeton (APN 040-201-033) – Transportation Impact Analysis*. September 20, 2022.
- County of San Luis Obispo. 1990. Templeton Community Design Plan. Available at: <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Design-Plans/Templeton-Community-Design-Plan.pdf>.
- . 1999. *County of San Luis Obispo General Plan Safety Element*. Available at: <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Safety-Element.pdf>. Accessed January 23, 2024.
- . 2010. *County of San Luis Obispo General Plan Conservation and Open Space Element*. Available at: [https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Conservation-and-Open-Space-Element-\(1\)/Conservation-and-Open-Space-Element.pdf](https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Conservation-and-Open-Space-Element-(1)/Conservation-and-Open-Space-Element.pdf). Accessed January 16, 2024.
-

Initial Study – Environmental Checklist

- . 2014. Templeton Community Plan. Adopted February 2014. Available at: <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Community-Plans/Templeton-Community-Plan.pdf>.
- . 2019. *2016-2018 Resource Summary Report*. Adopted March 12, 2019. Available at: https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/General-Plan-Forms-and-Documents/Resource-Summary-Report/2016-2018-Public-Hearing-Draft-RSR-Volume-II_FINAL.pdf. Accessed January 23, 2024.
- . 2020. County of San Luis Obispo General Plan 2020-2028 Housing Element. Available at: <https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Housing-Element.pdf>.
- . 2023. Land Use View Map. Available at: https://gis.slocounty.ca.gov/Html5Viewer/Index.html?configBase=https://gis.slocounty.ca.gov/Geocortex/Essentials/REST/sites/PL_LandUseView/viewers/PL_LandUseView/virtualdirectory/Resources/Config/Default. Accessed January 19, 2024.
- Federal Emergency Management Agency (FEMA). 2024. Flood Map Service Center. Available at: <https://msc.fema.gov/portal/home>. Accessed January 24, 2024.
- Federal Highway Administration (FHWA). 2018. *Construction Noise Handbook*. Available at: <https://www.nrc.gov/docs/ML1805/ML18059A141.pdf>. Accessed January 23, 2024.
- GHD. 2020. VMT Thresholds Study. County of San Luis Obispo.
- Kevin Merk Associates, LLC (KMA). 2022. *301 North Main Street, Templeton, San Luis Obispo County, California (Assessor's Parcel Number 040-201-033) Biological Resources Assessment*. October 19, 2022.
- . 2024. Memorandum: Potential Culvert Extension at 301 North Main Street, Templeton, CA.
- Kimley-Horn and Associates, Inc. (Kimley-Horn). 2022. *Health Risk Assessment 310 N. Main Street Project San Luis Obispo County, California*.
- Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey. U.S. Department of Agriculture Natural Resources Conservation Service. Available at: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed January 22, 2024.
- Omni-Means. 2017. Templeton Community 2017 Travel Demand Model and Circulation Study Update. Available at: <https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Transportation/Circulation-Studies/2017-Templeton-Circulation-Study.pdf>
- Pacific Gas and Electric Company (PG&E). 2022. Exploring Clean Energy Solutions. Available at: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page. Accessed January 23, 2024.
- Regional Water Quality Control Board (RWQCB). 2019. *Water Quality Control Plan for the Central Coast Basin*. Central Coast Regional Water Quality Control Board. Available at: https://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/docs/2019_basin_plan_r3_complete_webaccess.pdf. Accessed January 23, 2024.
-

Initial Study – Environmental Checklist

- San Luis Obispo Air Pollution Control District (SLOAPCD). 2023a. *CEQA Air Quality Handbook; 2023 Administrative Update Version to APCD Board Adopted 2012 Version*. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA%20Handbook%202023_Final.pdf. Accessed January 23, 2024.
- . 2023b. *CEQA Greenhouse Gas Thresholds & Guidance for the San Luis Obispo County Air Pollution Control District's 2012 CEQA Air Quality Handbook and Related Guidance on Use of Screening Tool, CalEEMod, and Local Reductions/Sequestration Projects & Offset Mix Calculator*. August 9. Available at: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/2023UpdatedSLOCountyAPCDCEQA-GHG_Guidance%26Thresholds-FINAL-StandAloneVersion.pdf. Accessed January 23, 2024.
- . 2024. NOA Screening Buffers. Available at: <https://www.google.com/maps/d/viewer?mid=1YAKjBzVkw1bZ4rQ1p6b2OmyvIM&ll=35.39907691906895%2C-120.38950318979299&z=12>. Accessed January 23, 2024.
- San Luis Obispo Council of Governments (SLOCOG). 2017. 2050 Regional Growth Forecast for San Luis Obispo County; Population, Housing, and Employment Projections. Available at: https://www.dropbox.com/s/gia0tlcyqs51a3w/2050RegionalGrowthForecast_01FullReport_RevDec2018.pdf?e=1&dl=0.
- . 2019. 2019 Regional Housing Needs Allocation Plan 2020-2028. Available at: https://www.dropbox.com/s/stbw4b26apatv3f/2019%20RHNA%20Plan_adopted_final.pdf?e=1&dl=0.
- . 2023. 2023-2045 Regional Transportation Plan. Available at: <https://www.dropbox.com/s/2zp8vhl9q4n9l5/00-%202023%20RTP%20Final%20Adopted.pdf?e=1&dl=0>.
- San Luis Obispo County Department of Public Works. 2020. Transportation Impact Analysis Guidelines; San Luis Obispo County.
- San Luis Obispo County Flood Control and Water Conservation District. 2014. Templeton Drainage and Flood Control Study and Project 8 Addendum Final Report. Available at: <https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Water-Resources/Drainage-Studies/Templeton-Drainage-Study.pdf>.
- San Luis Obispo County Integrated Waste Management Authority (IWMA). 2022. Construction and Demolition Guidelines. Available at: <https://www.iwma.com/construction-demolition-guidelines>. Accessed January 22, 2024.
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Available at: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf. Accessed January 24, 2024.
- Southern California Gas Company (SoCalGas). 2021. SoCalGas Facilities Begin Switch to 100% Renewable Power Under Green Rate Program. Available at: <https://newsroom.socalgas.com/press-release/socalgas-facilities-begin-switch-to-100-renewable-power-under-green-rate-program>. Accessed January 24, 2024.
-

Initial Study – Environmental Checklist

State Water Resources Control Board (SWRCB). 2024. GeoTracker Database. Available at: <https://geotracker.waterboards.ca.gov/>. Accessed January 23, 2024.

Stone Archaeological Consulting. 2022. *Phase 1 Archaeological Resources Report 301 North Main Street, Templeton, California APN 040-201-033*.

Templeton Community Services District (TCSD). 2103. *2013 Water and Wastewater Master Plan Update*. Available at: <http://www.templetoncsd.org/DocumentCenter/View/77/Master-Plan-October-2013?bidId=>. Accessed January 23, 2024.

———. 2024. Correspondence with Keri Dodson, Executive Assistant/Board Clerk and other TCSD staff on Thursday, February 8, 2024.

U.S. Census Bureau. 2024. QuickFacts Templeton CDP, California. Available at: <https://www.census.gov/quickfacts/fact/table/templetoncdpcalifornia/PST045222>. Accessed January 23, 2024.

U.S. Fish and Wildlife Service (USFWS). 2024. National Wetlands Inventory Surface Waters and Wetlands Mapper. Available at: <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>. Accessed January 24, 2022.

U.S. Geological Survey (USGS). 2004. Geologic map of the Templeton quadrangle, San Luis Obispo County, California. Available at: https://ngmdb.usgs.gov/Prodesc/prodesc_71752.htm. Accessed January 22, 2024.

———. 2022. Areas of Land Subsidence in California Map. Available at: https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed January 22, 2024.

WJV Acoustics, Inc. (WJVA). 2022. *Acoustical Analysis 301 North Main Street Residential Subdivision Templeton, California San Luis Obispo County*.

Wolf Environmental, Inc. 2023. *San Luis obispo County, CA Air Quality and Greenhouse Gas Assessment*.

Initial Study – Environmental Checklist

Appendices

- Appendix A – Project Plans
- Appendix B – Air Quality and Greenhouse Gas Assessment
- Appendix C – Health Risk Assessment
- Appendix D – Biological Resources Assessment
- Appendix E – Drainage Memorandum
- Appendix F – Acoustical Analysis
- Appendix G – Transportation Memorandum
- Appendix H – Biological Resources Memorandum

Initial Study – Environmental Checklist

Exhibit B - Mitigation Summary

The applicant has agreed to incorporate the measures detailed in the attached Developer's Statement into the project. These measures become a part of the project description and therefore become a part of the record of action upon which the environmental determination is based. All development activity must occur in strict compliance with the following mitigation measures. These measures shall be perpetual and run with the land. These measures are binding on all successors in interest of the subject property.

DATE: May 7, 2024

**DEVELOPER'S STATEMENT & MITIGATION MONITORING PROGRAM
FOR THE MITTRY VESTING TENTATIVE TRACT MAP AND LAND USE ORDINANCE
AMENDMENT LRP2021-00006 /SUB2023-00013 (ED24-028)**

The applicant agrees to incorporate the following measures into the project. These measures become a part of the project description and therefore become a part of the record of action upon which the environmental determination is based. All development activity must occur in strict compliance with the following mitigation measures. These measures shall be perpetual and run with the land. These measures are binding on all successors in interest of the subject property.

Per Public Resources Code Section 21081.6 the following measures also constitute the mitigation monitoring and/or reporting program that will reduce potentially significant impacts to less than significant levels. These measures will become conditions of approval (COAs) should the project be approved. The Lead Agency (County) or other Responsible Agencies, as specified in the following measures, is responsible to verify compliance with these COAs.

Note: The items contained in the boxes labeled "Monitoring" describe the County procedures to be used to ensure compliance with the mitigation measures.

AIR QUALITY (AQ)

AQ-1 San Luis Obispo County Air Pollution Control District Limits on Idling During Construction. At time of application for grading and construction permits, the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities when diesel-powered vehicles/equipment are in use:

1. State law prohibits idling diesel engines for more than 5 minutes. All projects with diesel-powered construction activity shall comply with Section 2485 of Title 13 of the California Code of Regulations and the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use Off-Road Diesel regulation to minimize toxic air pollution impacts from idling diesel engines. The specific requirements and exceptions for the on-road and off-road regulations can be reviewed at the following websites: https://ww2.arb.ca.gov/sites/default/files/classic/msprog/truck-idling/13ccr2485_09022016.pdf and <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2007/ordiesl07/frooal.pdf>.

2. In addition, because this project is located within 1,000 feet of sensitive receptors, the project applicant shall comply with the following more restrictive requirements to minimize impacts to nearby sensitive receptors.
 - a. Staging and queuing areas shall be located at the greatest distance from sensitive receptor locations as feasible;
 - b. Diesel idling while equipment is not in use shall not be permitted;
 - c. Use of alternative fueled equipment is recommended; and
 - d. Signs must be posted and enforced at the project site that specify no idling areas.

AQ-2

San Luis Obispo County Air Pollution Control District Fugitive Dust Mitigation Measures (Expanded List). At the time of application for grading and construction permits, the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities:

1. Reduce the amount of the disturbed area where possible;
2. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the project site and from exceeding the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour. Reclaimed (non-potable) water shall be used whenever possible. When drought conditions exist and water use is a concern, the contractor or builder shall consider use of a dust suppressant that is effective for the specific site conditions to reduce the amount of water used for dust control. Please refer to the following link from the San Joaquin Valley Air District for a list of potential dust suppressants:
<https://ww2.valleyair.org/compliance/dust-control/>;
3. All dirt stockpile areas shall be sprayed daily and covered with tarps or other dust barriers as needed;
4. All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible, and building pads shall be laid as soon as possible after grading unless seeding, soil binders, or other dust controls are used;
5. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least 2 feet of freeboard (minimum

- vertical distance between top of load and top of trailer) or otherwise comply with California Vehicle Code Section 23114;
6. "Track-Out" is defined as sand or soil that adheres to and/or agglomerates on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto any highway or street as described in California Vehicle Code Section 23113 and California Water Code 13304. To prevent track out, access points shall be designated and all employees, subcontractors, and others shall be required to use them. A "track-out prevention device" shall be installed and operated where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can be any device or combination of devices that are effective at preventing track out, located at the point of intersection of an unpaved area and a paved road. Rumble strips or steel plate devices need periodic cleaning to be effective. If paved roadways accumulate tracked out soils, the track-out prevention device may need to be modified;
 7. All fugitive dust mitigation measures shall be shown on grading and building plans;
 8. The contractor or builder shall designate a person or persons whose responsibility is to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to minimize dust complaints and reduce visible emissions below the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress (for example, wind-blown dust could be generated on an open dirt lot). The name and telephone number of such persons shall be provided to the San Luis Obispo County Air Pollution Control District Compliance Division prior to the start of any grading, earthwork, or demolition (Contact the Compliance Division at 805-781-5912);
 9. Permanent dust control measures identified in the approved project revegetation and landscape plans shall be implemented as soon as possible, following completion of any soil-disturbing activities;
 10. Exposed ground areas that are planned to be reworked at dates greater than 1 month after initial grading shall be sown with a fast

germinating, non-invasive grass seed and watered until vegetation is established;

11. All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the San Luis Obispo County Air Pollution Control District;
12. Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site;
13. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers shall be used with reclaimed water where feasible. Roads shall be pre-wetted prior to sweeping when feasible; and
14. Take additional measures as needed to ensure dust from the project site is not impacting areas outside the project boundary.

Monitoring: Required with construction or grading permits and prior to construction activities. Compliance will be verified by the County Department of Planning and Building and SLOAPCD.

BIOLOGICAL RESOURCES (BIO)

BIO-1 Environmental Awareness Training. Prior to mobilization of any equipment on the project site for initial site improvements and future residential development, a County of San Luis Obispo-qualified biologist shall conduct an environmental sensitivity training for all project personnel during the project kick-off meeting. The purpose of the training is to educate the personnel on the identification of special-status wildlife species that may occur within the project area and to provide an overview of the avoidance and minimization measures to be adhered to during the project. Specifically, the training will emphasize on all special-status wildlife species that would be expected to occur within the project limits, applicable regulatory policies and provisions regarding their protection, and a review of measures being implemented to avoid and/or minimize impacts to the species and their associated habitat. Furthermore, crew members will be briefed on the reporting process in the event that an inadvertent injury occurs to a special-status species during construction.

BIO-2 Best Management Practices. The following measures shall be printed on all construction plans prior to issuance of building permits, and shall be adhered to during construction activities:

1. The use of heavy equipment and vehicles shall be limited to the proposed project limits and defined staging areas/access points. The boundaries of each work area shall be clearly defined and marked with high visibility fencing. No work shall occur outside these limits.
2. No vehicles or equipment shall be refueled within 50 feet of drainage features unless a bermed and lined refueling area is constructed. No vehicles or construction equipment shall be stored overnight within 100 feet of these areas unless drip pans or ground covers are used. Construction staging areas shall attain zero discharge of stormwater runoff into these habitats.
3. Secondary containment, such as drip pans, shall be used to prevent leaks and spills of potential contaminants.
4. Washing of concrete, paint, or equipment and refueling and maintenance of equipment shall occur only in designated staging areas. Sandbags and/or absorbent pads and spill control kits shall always be available on-site to clean up and contain fuel spills and other contaminants, and a Spill Response Plan shall be in place. Washing of equipment, tools, etc. shall not be allowed in any location where the tainted water could enter on-site drainages.
5. All project-related spills of hazardous materials within or adjacent to the project site shall be cleaned up immediately.
6. Construction equipment shall be inspected by the operator daily to ensure that equipment is in good working order and no fuel or lubricant leaks are present.
7. The use of pesticides (including rodenticides) and herbicides on the property shall be in compliance with all federal, state, and local regulations to avoid primary and secondary poisoning of sensitive species that may be using the project site.
8. Plastic monofilament netting (erosion control matting) or similar material will not be used on-site due to the potential to entangle special-status wildlife. Acceptable substitutes are coconut coir matting, biodegradable fiber rolls, or tackified hydroseeding compounds.
9. A Sediment and Erosion Control Plan may be required by the County of San Luis Obispo and shall be prepared by a qualified engineer. The use of silt fence, straw wattles, erosion control blankets, straw bales, sandbags, fiber rolls, and other appropriate techniques shall be employed to protect the drainage features on

and off the property. Biotechnical approaches using native vegetation shall be used as feasible. All areas with soil disturbance shall have appropriate erosion controls and other stormwater protection best management practices installed to prevent erosion potential. All sediment and erosion control measures shall be installed per the engineer's requirements, and in place prior to October 15. These measures shall be maintained in good operating condition throughout the construction period. Methods that are not biodegradable shall be removed after vegetation has become established and following the end of the rainy season (late-spring or summer).

10. Areas with temporarily disturbed soils shall be restored under the direction of the project engineer in consultation with a qualified biologist as needed. Methods may include recontouring graded areas to blend in with existing natural contours, covering the areas with salvaged topsoil containing native seedbank from the project site, and/or applying the native seed mix shown on the project plans supplemented with species in the table below. Native seed mix shall be applied to the temporarily disturbed areas outside future development through either direct hand seeding or hydroseeding methods. Seeding with the erosion control native seed mix shall be provided on all disturbed soil areas prior to the onset of the rainy season (by October 15).
11. The revegetated areas shall be inspected by the qualified restoration ecologist and Stormwater Pollution Protection Plan (SWPPP) monitor to ensure that disturbed soils have successfully been stabilized in the short- and long-term. The monitoring visit shall include the removal of non-native species that favor disturbed conditions and outcompete native species.

Erosion Control Native Seed Mix

Species	Application Rate (lbs/acre)
<i>Bromus carinatus</i> (California brome)	10
<i>Stipa pulchra</i> (purple needlegrass)	5
<i>Trifolium wildenovii</i> (tomcat clover)	5
<i>Vulpia microstachys</i> (six weeks fescue)	5
Total	25

BIO-3 Nesting Bird Surveys. For any construction scheduled to start between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey for nesting birds within and adjacent to the property. The survey shall be conducted within 7 days before the initiation of construction within the nesting season. During this survey, the qualified biologist shall search for birds exhibiting nesting behavior and inspect all potential nest substrates (including grassland habitat) in the impact area. Any nests identified will be monitored to determine if they are active. If no active nests are found, construction may proceed. If an active nest is found within 50 feet (250 feet for raptors) of the construction area, the biologist, in consultation with the County of San Luis Obispo, shall determine the extent of a buffer to be established around the nest. The buffer shall be delineated with flagging, and no work shall take place within the buffer area until the young have left the nest, as determined by the qualified biologist. Once nesting has ceased and the young are no longer reliant on the nest, project activities can commence in the buffer zone.

Prior to construction of any phase of the project, at any time of year, a qualified biologist shall survey the project site plus a buffer of 250 feet for communal roosts of the yellow-billed magpie. If any are found and individuals may be affected by tree removal or construction disturbance, the biologist shall consult with County of San Luis Obispo and develop appropriate measures to avoid adverse impacts.

BIO-4 Roosting Bat Surveys. During the period from April to October, prior to construction, a preconstruction survey for roosting bats shall be conducted. Bat surveys shall be timed to their activity period in this region, which is generally April to October. A qualified biologist shall survey the trees to be removed during the day for sign of roosting bats such as guano or prey remains. The biologist shall assess the suitability of potential roost sites and utilize the following to determine if additional surveys are warranted:

1. No roost suitability: no further surveys needed.
2. Low roost suitability: one exit survey at dusk.
3. Moderate roost suitability: two surveys, preferably one exit or emergence survey at sunset and one re-entry survey at dawn, separated by at least 2 weeks
4. High roost suitability: three surveys, with two exit surveys and at least one re-entry survey, separated by at least 1 week.

The biologist shall determine the most likely locations for bat roosts, and utilizing an appropriate number of surveyors assigned to each potential roost site, conduct emergence/re-entry surveys, as follows:

5. Bat emergence surveys shall be conducted when air temperature is above 50 degrees Fahrenheit, wind is less than 10 miles per hour, and there is no precipitation or dense fog.
6. Emergence surveys shall begin 30 minutes before sunset and continue until at least 1 hour after sunset.
7. Re-entry surveys can be conducted at dawn as bats return to the roost. Re-entry surveys shall be from 1 hour before sunrise to 15 minutes after sunrise.
8. Surveyors shall be positioned so that emerging bats will be silhouetted against the sky as they exit or enter the roost. Surveyors shall be close enough to observe all bats but not too close to influence their behavior.
9. Lights shall not be shown on roosts. Use of infra-red, night vision, or thermal-imaging video camera or spotted scope is recommended but not required.
10. All bats leaving/entering the roost shall be counted.

The qualified biologist shall determine whether a maternity roost is present by carefully observing individuals on the roost. If young are present, construction shall be delayed until they have matured and can fly on their own. If no evidence of roosting bats is found during the surveys, work may proceed.

If any evidence of individual roosting bats is found (i.e., no maternity roosts), the biologist shall develop appropriate exclusion techniques and coordinate with the County of San Luis Obispo and California Department of Fish and Wildlife, as described in Mitigation Measure BIO-5.

BIO-5 **Bat Roost Relocation.** Bat roost site exclusion and relocation shall be conducted for sites that cannot be avoided. If bat roosts are found during the preconstruction survey, the qualified biologist shall work with the County of San Luis Obispo, and California Department of Fish and Wildlife as appropriate, to exclude the bat from using the cavity with netting or another approved method. Temporary roost structures may be erected for displaced bats, and these structures may need to be specific for the species of bat using the roost. Identification of species would require the use of an acoustic monitoring bat detector and analysis software to be performed by a qualified biologist. Replacement roost structures shall be

installed prior to bat exclusion activities. When it has been determined that no young are present, the biologist shall monitor the roost in the evening when the bats leave to forage and then install bat exclusion netting or another approved medium to prevent bats from re-entering the roost site. The netting shall be inspected the following morning to ensure that no bats have become entangled in the netting and that none remain in the structure. The netting shall remain in place until the construction activities have been completed.

BIO-6 Ephemeral Stream Protection. Ground disturbance shall be avoided below the top of bank of the ephemeral stream, if possible. Prior to construction, a County-qualified biologist shall review project plans to ensure the limits of the stream course are adequately avoided to the greatest extent feasible. The biologist shall work with project engineers and surveyors to delineate and mark the top of bank on the north side of the ephemeral stream in proximity to grading and development. Orange protective fencing in combination with silt fence is the recommended method for clearly marking the area to be avoided during construction.

BIO-7 Wetland Delineation. The project, as proposed, avoids and protects the ephemeral stream onsite, but road improvements at Main Street may require culvert extension and modification of the stream channel. At the time of application for a grading permit, the project applicant shall retain a County-qualified biologist to prepare and submit a Preliminary Delineation of Wetlands and Other Waters (wetland delineation) to the County of San Luis Obispo Planning and Building Department for review. This report shall include a formal delineation of waters and wetlands under the jurisdiction of state and federal resource agencies using current USACE and state guidance concerning waters and wetlands delineations and quantification of the total permanent and temporary areas of impact. This report shall provide details regarding the waters and wetland habitat and may be used to support permit application(s) to the USACE, CDFW, and/or RWQCB, as applicable.

BIO-8 Waters and Wetlands Compensatory Mitigation and Monitoring Plan. At the time of application for a grading permit, the project applicant shall retain a County-qualified biologist to prepare and submit a Waters and Wetlands Compensatory Mitigation and Monitoring Plan (CMMP) to the County of San Luis Obispo Planning and Building Department for review. The total area of habitat restoration and enhancement shall be established at a minimum 3:1 ratio (e.g., if the project would result in 0.5 acre of impacted habitat area, a minimum of 1.5 acres of habitat shall be restored). If permits are required from other jurisdictions such as the USACE, RWQCB and/or CDFW as part of the permitting process, additional

requirements identified by permitting agencies shall be incorporated into the final CMMP accordingly. The CMMP will at a minimum include the following components:

1. Description of restoration site, including its location, size, current environmental conditions, ownership, and measures to ensure its long-term protection.
2. Overall goals and measurable objectives to create a self-sustaining stream habitat that requires minimal maintenance. A description of how habitat enhancement work in the creek corridor and buffer area will promote the ecological integrity of the restoration site and compensate for the loss of onsite stream channel from road improvements.
3. An implementation plan, including schedule, site preparation (including non-native invasive species removal), planting plan (species and number of each, propagule type, seeding/planting density), and responsible party.

A maintenance plan detailing activities to be conducted during the establishment period (irrigation, non-native species removal) and schedule for implementation. The maintenance plan shall also address the long-term guidelines and constraints to maintaining the vegetation in the mitigation area. No pesticides, herbicides or fertilizers shall be used in a manner in which these substances can affect the creek habitat and biota. Guidelines shall be provided for the maintenance of planted trees, such as trimming or replacement.

4. A monitoring plan, including data collection methodology, how success criteria will be measured, and monitoring schedule for a period of at least five years. Monitoring will include establishing photo points that will aid in tracking the success of the planted propagules during each annual monitoring period. The vegetation density, cover and species richness of the mitigation site shall be assessed during the spring and fall throughout the monitoring period.
5. Final success criteria based on the goals and measurable objectives to ensure that a viable native plant community is established consistent with the requirements established by the County and other involved regulatory agencies, if applicable.
6. Contingency measures, such as supplemental planting, seeding or herbivore control, if success criteria are not being met.

7. Reporting requirements and notification of completion to the County and other regulatory agencies, if applicable.

- BIO-9 Protective Oak Tree Fencing.** Protective fencing shall be installed around the critical root zone of the valley oak tree to be retained or line of encroachment and disturbance shall be avoided during construction. Within 2 weeks prior to the initiation of ground disturbance, protective fencing shall be installed around the outer critical root zone of the oak tree to be retained, or if project activities will encroach into the root zone, the fencing shall delineate the line of allowable encroachment. Effort shall be made to maximize the distance from the protected tree. Tree buffer areas shall be shown on all construction plans. The protective fencing shall be orange plastic construction fencing or similar material and staked into the ground delineating the tree's protective buffer zone. The fencing shall be maintained throughout construction and removed only after there is no potential for construction-related impacts to trees. Trenching or placement of fill or structures shall not be located within the critical root zone. Any trenching within the critical root zone of protected trees shall be hand dug where practicable and major roots avoided. For any construction activity that cannot be repositioned outside the critical root zone, Mitigation Measures BIO-11 and BIO-12 are required.
- BIO-10 Earthwork Monitoring.** Earth work shall be monitored in the critical root zone and remedial measures shall be conducted to minimize damage to critical roots. A qualified arborist shall monitor excavation and grading activities within the critical root zone of the one valley oak to be retained. If large (>1 inch in diameter) roots are encountered during grading near the oak tree, the arborist shall cleanly cut the root following standard arboricultural techniques to maintain the health of the specimen. Soils within the critical root zone that have been compacted by construction activities shall be carefully scarified and aerated as soon as possible. Methods may include water jetting, adding a 4- to 6-inch layer of chip mulch, and boring small holes with an auger. The arborist shall advise the appropriate methods for soil aeration and whether fertilizer or other amendments need to be applied.
- BIO-11 Arborist Requirement for Oak Trimming.** A certified arborist shall be employed for oak tree trimming. The applicant shall employ the services of a certified arborist to trim the oak tree to be retained, as necessary for clearance. The arborist shall determine whether "extensive trimming" (i.e., over 25% of the canopy) is required, and if so, the tree would be considered "impacted" and subject to mitigation as described in Mitigation Measure BIO-13. The arborist shall also be utilized to monitor grading or

excavation that may be required in the critical root zone, and properly prune all significant roots that may be encountered.

BIO-12 Oak Tree Planting Mitigation. On-site oak tree mitigation shall be implemented to compensate for project impacts on valley oak trees. The impacted tree shall be mitigated at a 2:1 ratio. Replacement trees shall be the same as the species impacted, of local origin, and at least 1 gallon in size. The trees shall be planted in areas of the property that will not be affected by future development or other site uses (i.e., the open space buffer). A maintenance and monitoring plan shall be prepared that includes details on how container plants will be installed, maintenance techniques, and methods to monitor their establishment. An As-Built Planting Plan shall be prepared to track the replacement trees. Annual reports detailing monitoring of the mitigation effort shall be prepared by a qualified botanist and submitted to the County of San Luis Obispo by December 31st of each year following planting. All replacement trees shall be maintained and monitored for a minimum of 7 years, or as determined by the County of San Luis Obispo, to ensure successful establishment. If replacement trees die or do not successfully establish, then additional trees shall be installed and monitored accordingly to meet the plan's success criteria.

Monitoring: Required at the time of application for construction or grading permits, prior to any site disturbance, or during project implementation. Compliance will be verified by the County Department of Planning and Building.

Noise (N)

N-1 Prior to issuance of grading permits and during project site preparation and construction activities, the project contractor shall detail the following measures on project construction plans and implement the following measures during construction of the project to minimize noise impacts to nearby sensitive receptors:

1. Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with the manufacturer's standards.
2. Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest to the active project site.
3. Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all project construction.

4. Prohibit extended idling time of internal combustion engines.
5. Where feasible, all noise-producing construction activities should be limited to between the hours of 8:00 a.m. and 5:30 p.m.
6. Coordinate with the County of San Luis Obispo Planning and Building Department to identify the contact at the County of San Luis Obispo who would be responsible for responding to any local complaints about construction noise. The contact would be responsible for determining the cause of the noise complaint(s) (e.g., starting too early, bad muffler, etc.) and would determine and implement reasonable measures warranted to correct the problem.

N-2

At the time of application for building permits, all building and construction plans shall show the following requirements for the construction of sound walls at the project site:

1. At the northern lots, a sound wall constructed to a minimum height of 11 feet above the lot grade elevation (of backyard) shall be required at Lot 1. The height of the sound wall can taper to a height of 7 feet above backyard lot grade at Lot 2, a height of 6.5 feet at Lot 3, and a height of 6 feet at Lot 4. Sound walls are not required for compliance for the remaining northern lots. Suitable construction materials include concrete blocks, masonry, or stucco on both sides of a wood or steel stud wall.
2. At the southern lots, a sound wall constructed to a minimum height of 8.5 feet above the lot grade elevation (of backyard) shall be required at Lot 13. The height of the sound wall can taper to a height of 7 feet at the southern edge of Lot 13 and a height of 6 feet at Lot 14. Sound walls are not required for compliance for the remaining southern lots. Suitable construction materials include concrete blocks, masonry, or stucco on both sides of a wood or steel stud wall.

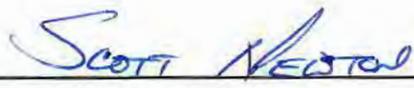
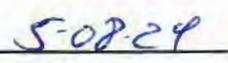
N-3

At the time of application for building permits, all building and construction plans shall show mechanical ventilation or air conditioning for all homes so that windows and doors can remain closed for sound insulation purposes.

Monitoring: Required at the time of application for construction permits. Compliance will be verified by the County Department of Planning and Building.

May 7, 2024

The applicant understands that any changes made to the project description subsequent to this environmental determination must be reviewed by the Environmental Coordinator and may require a new environmental determination for the project. By signing this agreement, the owner(s) agrees to and accepts the incorporation of the above measures into the proposed project description.

		
Signature of Applicant	Name (Print)	Date

APPENDIX A

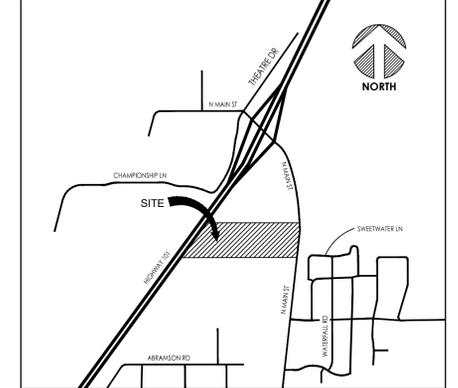
Project Plans



PROJECT DATA

LAND OWNER:	MITRY FARMS TRUST PO BOX 3431 SHELL BEACH, CA 93448 559-285-6214
PROJECT ADDRESS:	301 N. MAIN, TEMPLETON CA 93465
LEGAL DESCRIPTION:	RHO PR PTN LT 30
EXISTING PROPERTY ZONE:	C-R
AREA CALCULATIONS:	
TOTAL SITE AREA:	10.02 AC
LOT 23 OPEN SPACE / COMMON AREA:	4.56 AC
TOTAL (22) PROPOSED PARCELS:	5.46 AC
PROPOSED PRIVATE DRIVE R.O.W.:	1.16 AC
PROPOSED OPEN SPACE:	2.37 AC
PROPOSED BASIN AREA:	1.03 AC

VICINITY MAP



A
A101 **CONCEPTUAL SITE LAYOUT**
SCALE: 1" = 50'-0"
0' 25' 50' 100' 150'
NORTH

PROPOSED RESIDENTIAL SUBDIVISION
301 N MAIN STREET
TEMPLETON, CA 93465
APN: 040-201-033

07/20/2023



CONCEPT ELEVATION 1



CONCEPT ELEVATION 2



CONCEPT ELEVATION 3



CONCEPT ELEVATION 4



CONCEPT ELEVATION 5

SINGLE STORY NOT ILLUSTRATED BUT WILL BE AN OPTION. THESE FOOTPRINTS DEMONSTRATE THE SQUARE FOOTAGE OF 2200 TO 2800 SQUARE FEET LIKELY OR CAPABLE OF MEETING SETBACK REQUIREMENTS



INSPIRATION IMAGE A



INSPIRATION IMAGE B



INSPIRATION IMAGE C



INSPIRATION IMAGE D



INSPIRATION IMAGE E



INSPIRATION IMAGE F



INSPIRATION IMAGE G

PROPOSED RESIDENTIAL SUBDIVISION
301 N MAIN STREET
TEMPLETON, CA 93465
APN: 040-201-033

01/24/2023

APPENDIX B

**Air Quality and Greenhouse Gas
Assessment**

San Luis Obispo County, CA
**Air Quality and Greenhouse
Gas Assessment**



WOLF ENVIRONMENTAL, INC

22-Unit Residential Development

December 22, 2023



1.0 Introduction

The Project Applicant is proposing to develop a 22-unit single-family residential tract (Project) in unincorporated San Luis Obispo County on APN 040-201-033.

1.1 Air District

This Air Quality & Greenhouse Gas Impact Assessment has been prepared for the purpose of identifying potential project-specific or site-specific air quality impacts that may result from the Project. Figures 1 and 2 show the location of the Project and a proposed site plan.

San Luis Obispo County (County) is located in the South Central Coast Air Basin and the local agency management of the San Luis Obispo County Air Pollution Control District (SLOAPCD or, air district). The air district is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within the County. The air district also has responsibility for monitoring air quality and setting and enforcing limits for source emissions.

1.2 Regulatory

Air quality within the Project area is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policymaking, education, and a variety of programs. The agencies primarily responsible for improving the air quality within the project area are discussed below along with their individual responsibilities.

1.2.1 Federal Agencies

✓ U.S. Environmental Protection Agency (EPA)

The Federal Clean Air Bill was first adopted in 1967 and periodically amended since then, established federal ambient air quality standards. A 1987 amendment to the Bill set a deadline for the attainment of these standards. That deadline has since passed. The other Clean Air Act (CAA) Bill Amendments, passed in 1990, share responsibility with the State in reducing emissions from mobile sources. The U.S. Environmental Protection Agency (EPA) is responsible for enforcing the 1990 amendments.

The CAA and the national ambient air quality standards identify levels of air quality for six “criteria” pollutants, which are considered the maximum levels of ambient air pollutants considered safe, with an adequate margin of safety, to protect public health and welfare. The six criteria pollutants include ozone, carbon monoxide (CO), nitrogen dioxide, sulfur dioxide, particulate matter, and lead.

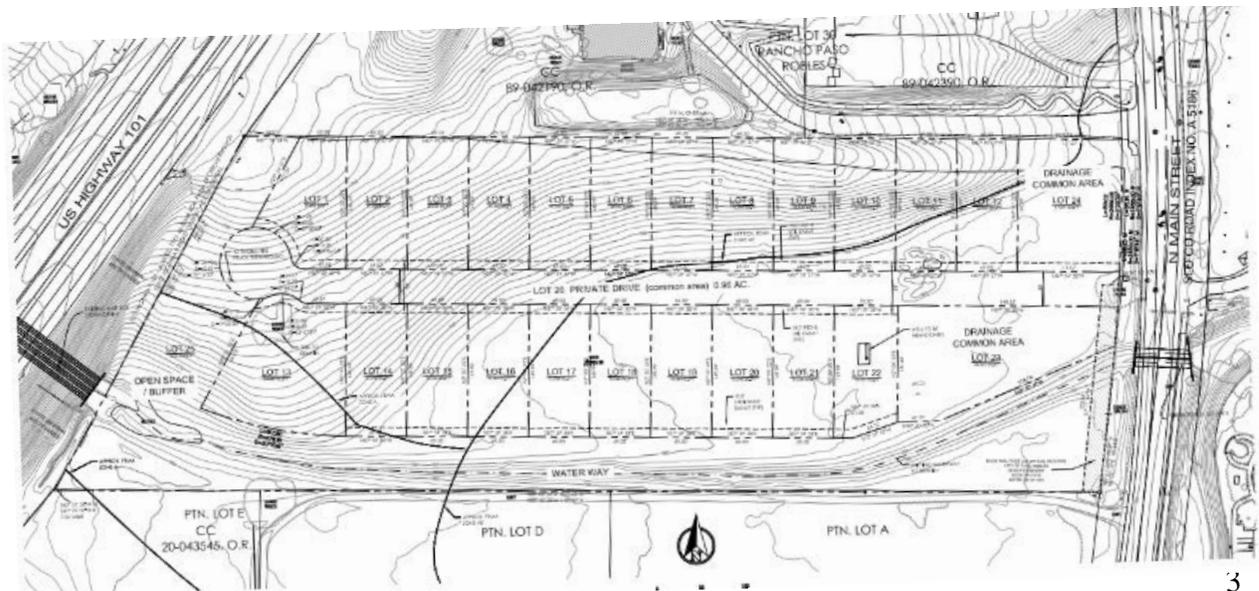
CAA Section 176(c) (42 U.S.C. 7506(c)) and EPA transportation conformity regulations (40 CFR 93 Subpart A) require that each new RTP and Transportation Improvement Program (TIP) be

demonstrated to conform to the State Implementation Plan (SIP) before the RTP and TIP are approved by the Metropolitan planning organization (MPO) or accepted by the U.S. Department of Transportation (DOT). The conformity analysis is a federal requirement designed to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS). However, because the State Implementation Plan (SIP) for particulate matter 10 microns or less in diameter (PM10), particulate matter 2.5 microns or less in diameter (PM2.5), and Ozone address attainment of both the State and federal standards, for these pollutants, demonstrating conformity to the federal standards is also an indication of progress toward attainment of the State standards. Compliance with the State air quality standards is provided on the pages following this federal conformity discussion. The County is located in a nonattainment area for the 8-hour ozone standard and PM10 standard but complies with federal standards.

Figure 1
Project Location



Figure 2
Site Plan



Federal Regulations

✓ **State Implementation Plan (SIP)/ Air Quality Management Plans (AQMPs)**

To ensure compliance with the NAAQS, EPA requires states to adopt SIP aimed at improving air quality in areas of nonattainment or a Maintenance Plan aimed at maintaining air quality in areas that have attained a given standard. New and previously submitted plans, programs, district rules, state regulations, and federal controls are included in the SIPs. Amendments made in 1990 to the federal CAA established deadlines for attainment based on an area's current air pollution levels. States must enact additional regulatory programs for nonattainment's areas in order to adhere with the CAA Section 172. In California, the SIPs must adhere to both the NAAQS and the California Ambient Air Quality Standards (CAAQS).

To ensure that State and federal air quality regulations are being met, Air Quality Management Plans (AQMPs) are required. AQMPs present scientific information and use analytical tools to identify a pathway towards attainment of NAAQS and CAAQS. The San Luis Obispo Air Pollution Control District (APCD) develops the AQMPs for the region where the San Luis Obispo Council of Governments (SLOCOG) operates. The regional air districts begin the SIP process by submitting their AQMPs to the California Air Resources Board (CARB). CARB is responsible for revising the SIP and submitting it to EPA for approval. EPA then acts on the SIP in the Federal Register. The items included in the California SIP are listed in the Code of Federal Regulations Title 40, Chapter 1, Part 52, Subpart 7, Section 52.220.

✓ **Transportation Control Measures**

One particular aspect of the SIP development process is the assessment of available transportation control measures (TCMs) as a part of making progress towards clean air goals. TCMs are defined in Section 108(f)(1) of the CAA and are strategies designed to reduce vehicle miles traveled, vehicle idling, and associated air pollution. These goals are generally achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

✓ **Energy Policy Act of 1992 (EPAAct)**

The Energy Policy Act of 1992 (EPAAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAAct requires certain federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of alternative fueled vehicles (AFVs). States are also required by the act to consider a variety of incentive programs to help promote AFVs.

1.2.3 State Agencies

✓ California Air Resources Board (CARB)

CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California and for implementing its own air quality legislation called the California Clean Air Act (CCAA), adopted in 1988. CARB was created in 1967 from the merging of the California Motor Vehicle Pollution Control Board and the Bureau of Air Sanitation and its Laboratory.

CARB has primary responsibility in California to develop and implement air pollution control plans designed to achieve and maintain the NAAQS established by the EPA. Whereas CARB has primary responsibility and produces a major part of the SIP for pollution sources that are statewide in scope, it relies on the local air districts to provide additional strategies for sources under their jurisdiction. CARB combines its data with all local district data and submits the completed SIP to the EPA. The SIP consists of the emissions standards for vehicular sources and consumer products set by CARB, and attainment plans adopted by the Air Pollution Control Districts (APCDs) and Air Quality Management District's (AQMDs) and approved by CARB.

States may establish their own standards, provided the State standards are at least as stringent as the NAAQS. California has established California Ambient Air Quality Standards (CAAQS) pursuant to California Health and Safety Code (CH&SC) [§39606(b)] and its predecessor statutes.

The CH&SC [§39608] requires CARB to “identify” and “classify” each air basin in the State on a pollutant-by-pollutant basis. Subsequently, CARB designated areas in California as nonattainment based on violations of the CAAQSs. Designations and classifications specific to the SJVAB can be found in the next section of this document. Areas in the State were also classified based on severity of air pollution problems. For each nonattainment class, the CCAA specifies air quality management strategies that must be adopted. For all nonattainment categories, attainment plans are required to demonstrate a five percent-per-year reduction in nonattainment air pollutants or their precursors, averaged every consecutive three-year period, unless an approved alternative measure of progress is developed. In addition, air districts in violation of CAAQS are required to prepare an Air Quality Attainment Plan (AQAP) that lays out a program to attain and maintain the CCAA mandates.

CARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. For the San Luis Obispo Council of Governments (SLOCOG), CARB set targets at 9.4 percent per capita decrease in 2020 and a 10.9 percent per capita decrease in 2035 from a base year of 2005. SLOCOG's RTP/SCS projects that the region would achieve the prescribed emissions targets.

Other CARB duties include monitoring air quality. CARB has established and maintains, in conjunction with local APCDs and AQMDs, a network of sampling stations (called the State and Local Air Monitoring [SLAMS] network), which monitor the present pollutant levels in the ambient air.

Federal and State standards for criteria pollutants are provided in Table 1.

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		--		
Fine Particulate Matter (PM2.5) ⁹	24 Hour	--	--	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	--	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	--	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		--	--	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	--	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	--	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	--		--	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	--	
	Annual Arithmetic Mean	--		0.030 ppm (for certain areas) ¹¹	--	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m ³ (for certain areas) ¹¹	Same as Primary Standard	
	Rolling 3-Month Average	--		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

San Luis Obispo County 22-Unit Residential Project

Air Quality & Greenhouse Gas Impact Assessment

Footnotes:

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
 2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
 4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
 7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
 8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
 9. On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
 10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
 11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
 13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
 14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

1.2.4 State Regulations

✓ **CARB Mobile-Source Regulation**

The State of California is responsible for controlling emissions from the operation of motor vehicles in the State. Rather than mandating the use of specific technology or the reliance on a specific fuel, CARB's motor vehicle standards specify the allowable grams of pollutant per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved.

✓ **California Clean Air Act**

The CCAA was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. The CCAA establishes more stringent ambient air quality standards than those included in the Federal CAA. CARB is the agency responsible for administering the CCAA. CARB established ambient air quality standards pursuant to the CH&SC [§39606(b)], which are similar to the federal standards.

✓ **California Air Resources Board (CARB) 2022 Scoping Plan for Achieving Carbon Neutrality**

The 2022 Scoping Plan Update assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

✓ **Tanner Air Toxics Act**

California regulates Toxic Air Contaminants (TACs) primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted EPA's list of Hazardous Air Pollutants (HAPs) as TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology (BACT) to minimize emissions.

AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction

measures. CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators).

These rules and standards provide for:

- More stringent emission standards for some new urban bus engines, beginning with 2002 model year engines.
- Zero-emission bus demonstration and purchase requirements applicable to transit agencies
- Reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule.

✓ **AB 1493 (Pavley)**

AB 1493 (Pavley) enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. Regulations adopted by CARB would apply to 2009 and later model year vehicles. CARB estimated that the regulation would reduce climate change emissions from light duty passenger vehicles by an estimated 18 percent in 2020 and by 27 percent in 2030 [Association of Environmental Professionals (AEP) 2007)]. In 2005, the CARB requested a waiver from U.S. EPA to enforce the regulation, as required under the CAA. Despite the fact that no waiver had ever been denied over a 40-year period, the then Administrator of the EPA sent Governor Schwarzenegger a letter in December 2007, indicating he had denied the waiver. On March 6, 2008, the waiver denial was formally issued in the Federal Register. Governor Schwarzenegger and several other states immediately filed suit against the federal government to reverse that decision. On January 21, 2009, CARB requested that EPA reconsider denial of the waiver. EPA scheduled a re-hearing on March 5, 2009. On June 30, 2009, EPA granted a waiver of CAA preemption to California for its greenhouse gas emission standards for motor vehicles beginning with the 2009 model year.

✓ **Assembly Bill 32 (California Global Warming Solutions Act of 2006)**

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. December 31, 2020, is the deadline for achieving the 2020 GHG emissions cap. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 would represent an approximate 25 to 30 percent reduction in current emissions levels. However, CARB has discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions.

CARB's 2017 Climate Change Scoping Plan builds on the efforts and plans encompassed in the initial Scoping Plan adopted in December of 2008. The current plan has identified new policies and actions to accomplish the State's 2030 GHG limit.

✓ **Senate Bill 375**

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPO's regional transportation plan. CARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. For the San Luis Obispo Council of Governments (SLOCOG), CARB set targets at 9.4 percent per capita decrease in 2020 and a 10.9 percent per capita decrease in 2035 from a base year of 2005. SLOCOG's RTP/SCS projects that the region would achieve the prescribed emissions targets.

This law also extends the minimum time period for the regional housing needs allocation cycle from five years to eight years for local governments located within an MPO that meets certain requirements. City or county land use policies (including general plans) are not required to be consistent with the regional transportation plan (and associated SCS or APS). However, new provisions of CEQA incentivize (through streamlining and other provisions) qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

✓ **Executive Order B-30-15**

Executive Order B-30-15, which was signed by Governor Brown in 2016, establishes a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. Executive Order B-30-15 requires MPO's to implement measures that will

achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets.

✓ **California Global Warming Solutions Act of 2006: emissions limit, or SB 32**

SB 32 is a California Senate bill expanding upon AB 32 to reduce greenhouse gas (GHG) emissions. The lead author is Senator Fran Pavley and the principal co-author is Assembly member Eduardo Garcia. SB 32 was signed into law on September 8, 2016, by Governor Brown. SB 32 sets into law the mandated reduction target in GHG emissions as written into Executive Order B-30-15. SB 32 requires that there be a reduction in GHG emissions to 40% below the 1990 levels by 2030. Greenhouse gas emissions include carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. The California Air Resources Board (CARB) is responsible for ensuring that California meets this goal. The provisions of SB 32 were added to Section 38566 of the Health and Safety Code subsequent to the bill's approval. The bill went into effect January 1, 2017. SB 32 builds onto Assembly Bill (AB) 32 written by Senator Fran Pavley and Assembly Speaker Fabian Nunez passed into law on September 27, 2006. AB 32 required California to reduce greenhouse gas emissions to 1990 levels by 2020 and SB 32 continues that timeline to reach the targets set in Executive Order B-30-15. SB 32 provides another intermediate target between the 2020 and 2050 targets set in Executive Order S-3-05.

1.2.5 *Regional Agencies*

✓ **San Luis Obispo County Air Pollution Control District**

The air district is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within the County. The air district also has responsibility for monitoring air quality and setting and enforcing limits for source emissions. CARB is the agency with the legal responsibility for regulating mobile source emissions. The air district is precluded from such activities under State law.

Activities of the air district include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the FCAA and CCAA.

Air Quality

The SLO County APCD 2012 CEQA Air Quality Handbook defines the criteria used by the SLO County APCD when evaluating new development to determine when an air quality analysis is necessary, the type of analysis that should be performed, the significance of the impacts predicted by the analysis, and the mitigation measures to reduce overall air quality impacts. The 2017 Clarification Memo for the 2012 CEQA Air Quality Handbook provides

administrative clarity on certain sections of the Handbook.

Greenhouse Gas Emissions

Based on the adopted air district guidance, the following three quantitative thresholds may be used to evaluate the level of significance of GHG emissions impacts for residential and commercial projects:

1. **Qualified GHG Reductions Strategies.** A project would have a significant impact if it were not consistent with a qualified GHG reduction strategy that meets the requirements of the State CEQA Guidelines. If a project is consistent with a qualified GHG reduction strategy, it would not have a significant impact; OR,
2. **Bright-Line Threshold.** A project would have a significant impact if it exceeds the “bright-line threshold” of 1,150 metric tons CO₂E/year; OR,
3. **Efficiency Threshold.** A project would have a significant impact if the efficiency threshold exceeds 4.9 metric tons of CO₂E/service population/year. The service population is defined as the number of residents plus employees for a given project.

The efficiency threshold is specifically intended to avoid penalizing large-scale plans or projects that incorporate emissions-reducing features and/or that are located in a manner that results in relatively low vehicle miles traveled.

✓ **San Luis Obispo Council of Governments 2023 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)**

The 2023 RTP is the region's long-range (2023-2045) plan and Sustainable Communities Strategy (SCS). The RTP provides a collective vision for the region's future balancing transportation and housing needs with social, economic, and environmental goals. The Plan identified and tested growth scenarios to accommodate the coming 42,000 new people, 18,000 new homes, and 18,000 new jobs. The plan helps guide future planning efforts and policy decisions that affect transportation, including its relationship with housing and land use that will reduce greenhouse gas emissions in our region. The 2023 RTP provides recommendations to help cities and the County of San Luis Obispo make important decisions about transportation, housing, and land-use. The 2023 RTP provides forward looking recommendations out to 2045 because many local government decisions will influence the region's long-term growth and development over the coming decades.

1.2.6 Local Plans

✓ **County of San Luis Obispo General Plan**

California State Law requires every city and county to adopt a comprehensive General Plan to guide its future development. The General Plan essentially serves as a “constitution for

development”— the document that serves as the foundation for all land use decisions. The County’s General Plan Update (2010) includes various elements, including air quality and greenhouse gases, which address local concerns and provides goals and policies to achieve its development goals.

✓ **County of San Luis Obispo Clean Air Plan (CAP)**

As part of the California Clean Air Act, the APCD is required to develop a plan to achieve and maintain the state ozone standard by the earliest practicable date. The Clean Air Plan (CAP) outlines the District's strategies to reduce ozone precursor emissions from a wide variety of stationary and mobile sources. The 2001 CAP was adopted by the Air Pollution Control Board at their hearing on March 26, 2002.

2.0 Environmental Setting

2.1 Climate Conditions

The climate of the county can be generally characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to the distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90s. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland (SLOAPCD 2001).

Regional meteorology is largely dominated by a persistent high-pressure area which commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as the onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland (SLOAPCD 2001).

From November through April the Pacific High tends to migrate southward, allowing northern storms to move across the county. About 90 percent of the total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably among different regions in the county. In the Coastal Plain, annual rainfall averages 16 to 28 inches, while the Upper Salinas River Valley generally receives about 12 to 20 inches of rain. The Carrizo Plain is the driest area of the county with less than 12 inches of rain in a typical year (SLOAPCD 2001).

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific High-pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer months, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze (SLOAPCD 2001).

In the Fall, onshore surface winds decline, and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a "sloshing" effect. Under these conditions, pollutants

may accumulate over the ocean for a period of one or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, "trapping" pollutants near the surface (SLOAPCD 2001).

This effect is intensified when the Pacific High weakens or moves inland to the east. This may produce a "Santa Ana" condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high-pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime sea breeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the "post-Santa Ana" condition lead to high ambient pollutant levels, but it does play an important role in the air pollution meteorology of the county (SLOAPCD 2001).

2.2 Anthropogenic (Man-made) Sources

In addition to climatic conditions (wind, lack of rain, etc.), air pollution can be caused by anthropogenic or man-made sources. Air pollution in the air district can be directly attributed to human activities, which cause air pollutant emissions. Human causes of air pollution in the Valley consist of population growth, urbanization (gas-fired appliances, residential wood heaters, etc.), mobile sources (i.e., cars, trucks, airplanes, trains, etc.), oil production, agriculture, and other socioeconomic activities.

Carbon monoxide emissions come from mobile sources in the County. Motor vehicles account for significant portions of regional gaseous and particulate emissions. Local large employers such as industrial plants can also generate substantial regional gaseous and particulate emissions. In addition, construction and agricultural activities can generate significant temporary gaseous and particulate emissions (dust, ash, smoke, etc.).

Ozone is the result of a photochemical reaction between Oxides of nitrogen (NO_x) and Reactive Organic Gases (ROG). Mobile sources contribute the majority of all NO_x emitted from anthropogenic sources in the County.

The principal factors that affect air quality in San Luis Obispo County are:

1. Automobile and truck travel
2. Increases in mobile and stationary pollutants generated by local urban growth

Automobiles, trucks, buses and other vehicles using hydrocarbon (HC) fuels release exhaust products into the air. Each vehicle by itself does not release large quantities; however, when considered as a group, the cumulative effect is significant.

Other sources may not seem to fit into any one of the major categories or they may seem to fit

in a number of them. These could include agricultural uses, dirt roads, animal shelters; animal feed lots, chemical plants and industrial waste disposal, which may be a source of dust, odors, or other pollutants.

2.2.1 Motor Vehicles

Automobiles, trucks, buses and other vehicles using hydrocarbon fuels release exhaust products into the air. Each vehicle by itself does not release large quantities; however, when considered as a group, the cumulative effect is significant.

2.2.2 Agricultural and Other Miscellaneous Activities

Other sources may not seem to fit into any one of the major categories or they may seem to fit in a number of them. These could include agricultural uses, dirt roads, animal shelters, animal feed lots, chemical plants and industrial waste disposal, which may be a source of dust, odors, or other pollutants.

2.2.3 Industrial Plants

Industrial contaminants and their potential to produce various effects depend on the size and type of industry, pollution controls, local topography, and meteorological conditions.

2.3 South Central Coast Air Basin Monitoring

The air district and the CARB maintain numerous air quality monitoring sites throughout each County in the Air Basin to measure ozone, PM_{2.5}, and PM₁₀. It is important to note that the federal ozone 1-hour standard was revoked by the EPA and is no longer applicable for federal standards.

Table 2 identifies the County's attainment status.

Table 2
SLO County Attainment Status

Pollutant	Federal Standards	State Standards
Ozone – 1 Hour	Revoked in 2005	Nonattainment
Ozone – 8 Hour	Nonattainment	Nonattainment
PM10	Nonattainment	Nonattainment
PM2.5	Attainment	Attainment
Carbon Monoxide	Unclassified/Attainment	Unclassified
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Sulfur Dioxide	Unclassified/Attainment	Attainment
Lead (Particulate)	Unclassified/Attainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified

2.4 Air Quality Standards

The FCAA, first adopted in 1963, and periodically amended since then, established National Ambient Air Quality Standards (NAAQS). A set of 1977 amendments determined a deadline for the attainment of these standards. That deadline has since passed. Other CAA amendments, passed in 1990, share responsibility with the State in reducing emissions from mobile sources.

In 1988, the State of California passed the CCAA (State 1988 Statutes, Chapter 568), which set forth a program for achieving more stringent California Ambient Air Quality Standards. The CARB implements State ambient air quality standards, as required in the CCAA, and cooperates with the federal government in implementing pertinent sections of the FCAA Amendments (FCAAA). Further, CARB regulates vehicular emissions throughout the State. The SLOAPCD regulates stationary sources, as well as some mobile sources. Attainment of the more stringent State PM10 Air Quality Standards is not currently required.

The EPA uses six "criteria pollutants" as indicators of air quality and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called the NAAQS.

The air district operates regional air quality monitoring networks that provide information on average concentrations of pollutants for which State or federal agencies have established ambient air quality standards. Descriptions of nine pollutants of importance in the County follow.

2.4.1 Ozone (1-hour and 8-hour)

The most severe air quality problem in the Air Basin is the high level of ozone. Ozone occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. Here, ground level, or "bad" ozone, is an air pollutant that damages human health, vegetation, and many common materials. It is a key ingredient of urban smog. The troposphere extends to

a level about 10 miles up, where it meets the second layer, the stratosphere. The stratospheric, or “good” ozone layer, extends upward from about 10 to 30 miles and protects life on earth from the sun’s harmful ultraviolet rays.

“Bad” ozone is what is known as a photochemical pollutant. It needs reactive organic gases (ROG), NO_x, and sunlight. ROG and NO_x are emitted from various sources throughout Tulare County. In order to reduce ozone concentrations, it is necessary to control the emissions of these ozone precursors.

Significant ozone formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

Ozone is a regional air pollutant. It is generated over a large area and is transported and spread by wind. Ozone, the primary constituent of smog, is the most complex, difficult to control, and pervasive of the criteria pollutants. Unlike other pollutants, ozone is not emitted directly into the air by specific sources. Ozone is created by sunlight acting on other air pollutants (called precursors), specifically NO_x and ROG. Sources of precursor gases to the photochemical reaction that form ozone number in the thousands. Common sources include consumer products, gasoline vapors, chemical solvents, and combustion products of various fuels. Originating from gas stations, motor vehicles, large industrial facilities, and small businesses such as bakeries and dry cleaners, the ozone-forming chemical reactions often take place in another location, catalyzed by sunlight and heat. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins. Approximately 50 million people lived in counties with air quality levels above the EPA’s health-based national air quality standard in 1994. The highest levels of ozone were recorded in Los Angeles, closely followed by the San Joaquin Valley. High levels also persist in other heavily populated areas, including the Texas Gulf Coast and much of the Northeast.

While the ozone in the upper atmosphere absorbs harmful ultraviolet light, ground-level ozone is damaging to the tissues of plants, animals, and humans, as well as to a wide variety of inanimate materials such as plastics, metals, fabrics, rubber, and paints. Societal costs from ozone damage include increased medical costs, the loss of human and animal life, accelerated replacement of industrial equipment, and reduced crop yields.

✓ **Health Effects**

While ozone in the upper atmosphere protects the earth from harmful ultraviolet radiation, high concentrations of ground-level ozone can adversely affect the human respiratory system. Many respiratory ailments, as well as cardiovascular disease, are aggravated by exposure to high ozone levels. Ozone also damages natural ecosystems, such as: forests and foothill communities; agricultural crops; and some man-made materials, such as rubber,

paint, and plastic. High levels of ozone may negatively affect immune systems, making people more susceptible to respiratory illnesses, including bronchitis and pneumonia. Ozone accelerates aging and exacerbates pre-existing asthma and bronchitis and, in cases with high concentrations, can lead to the development of asthma in active children. Active people, both children and adults, appear to be more at risk from ozone exposure than those with a low level of activity. Additionally, the elderly and those with respiratory disease are also considered sensitive populations for ozone.

People who work or play outdoors are at a greater risk for harmful health effects from ozone. Children and adolescents are also at greater risk because they are more likely than adults to spend time engaged in vigorous activities. Research indicates that children under 12 years of age spend nearly twice as much time outdoors daily than adults. Teenagers spend at least twice as much time as adults in active sports and outdoor activities. In addition, children inhale more air per pound of body weight than adults, and they breathe more rapidly than adults. Children are less likely than adults to notice their own symptoms and avoid harmful exposures.

Ozone is a powerful oxidant—it can be compared to household bleach, which can kill living cells (such as germs or human skin cells) upon contact. Ozone can damage the respiratory tract, causing inflammation and irritation, and it can induce symptoms such as coughing, chest tightness, shortness of breath, and worsening of asthmatic symptoms. Ozone in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. Exposure to levels of ozone above the current ambient air quality standard leads to lung inflammation and lung tissue damage and a reduction in the amount of air inhaled into the lungs.

2.4.2 Suspended PM (PM10 and PM2.5)

Particulate matter pollution consists of very small liquid and solid particles that remain suspended in the air for long periods. Some particles are large or concentrated enough to be seen as soot or smoke. Others are so small they can be detected only with an electron microscope. Particulate matter is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. Particulate matter is emitted from stationary and mobile sources, including diesel trucks and other motor vehicles; power plants; industrial processes; wood-burning stoves and fireplaces; wildfires; dust from roads, construction, landfills, and agriculture; and fugitive windblown dust. PM10 refers to particles less than or equal to 10 microns in aerodynamic diameter. PM2.5 refers to particles less than or equal to 2.5 microns in aerodynamic diameter and are a subset of PM10. Particulates of concern are those that are 10 microns or less in diameter. These are small enough to be inhaled, pass through the respiratory system and lodge in the lungs, possibly leading to adverse health effects.

In the western United States, there are sources of PM10 in both urban and rural areas. Because particles originate from a variety of sources, their chemical and physical compositions vary

widely. The composition of PM₁₀ and PM_{2.5} can also vary greatly with time, location, the sources of the material and meteorological conditions. Dust, sand, salt spray, metallic and mineral particles, pollen, smoke, mist, and acid fumes are the main components of PM₁₀ and PM_{2.5}. In addition to those listed previously, secondary particles can also be formed as precipitates from chemical and photochemical reactions of gaseous sulfur dioxide (SO₂) and NO_x in the atmosphere to create sulfates (SO₄) and nitrates (NO₃). Secondary particles are of greatest concern during the winter months where low inversion layers tend to trap the precursors of secondary particulates.

✓ **Health Effects**

PM₁₀ and PM_{2.5} particles are small enough—about one-seventh the thickness of a human hair, or smaller—to be inhaled and lodged in the deepest parts of the lung where they evade the respiratory system’s natural defenses. Health problems begin as the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of particulate matter in the air. Non-health-related effects include reduced visibility and soiling of buildings. PM₁₀ can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body’s ability to fight infections. PM₁₀ and PM_{2.5} can aggravate respiratory disease and cause lung damage, cancer, and premature death.

Although particulate matter can cause health problems for everyone, certain people are especially vulnerable to adverse health effects of PM₁₀. These “sensitive populations” include children, the elderly, exercising adults, and those suffering from chronic lung disease such as asthma or bronchitis. Of greatest concern are recent studies that link PM₁₀ exposure to the premature death of people who already have heart and lung disease, especially the elderly. Acidic PM₁₀ can also damage manmade materials and is a major cause of reduced visibility in many parts of the United States.

2.4.3 Carbon Monoxide (CO)

Carbon monoxide (CO) is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. CO is an odorless, colorless, poisonous gas that is highly reactive. CO is a byproduct of motor vehicle exhaust, contributes more than two thirds of all CO emissions nationwide. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. These emissions can result in high concentrations of CO, particularly in local areas with heavy traffic congestion. Other sources of CO emissions include industrial processes and fuel combustion in sources such as boilers and incinerators. Despite an overall downward trend in concentrations and emissions of CO, some metropolitan areas still experience high levels of CO.

✓ **Health Effects**

CO enters the bloodstream and binds more readily to hemoglobin than oxygen, reducing the oxygen-carrying capacity of blood and thus reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected but only at higher levels of exposure. At high concentrations, CO can cause heart difficulties in people with chronic diseases and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and in prolonged, enclosed exposure, death.

The adverse health effects associated with exposure to ambient and indoor concentrations of CO are related to the concentration of carboxyhemoglobin (COHb) in the blood. Health effects observed may include an early onset of cardiovascular disease; behavioral impairment; decreased exercise performance of young, healthy men; reduced birth weight; sudden infant death syndrome (SIDS); and increased daily mortality rate.

Most of the studies evaluating adverse health effects of CO on the central nervous system examine high-level poisoning. Such poisoning results in symptoms ranging from common flu and cold symptoms (shortness of breath on mild exertion, mild headaches, and nausea) to unconsciousness and death.

2.4.4 Nitrogen Dioxide (NO₂)

Nitrogen oxides (NO_x) is a family of highly reactive gases that are primary precursors to the formation of ground-level ozone and react in the atmosphere to form acid rain. NO_x is emitted from combustion processes in which fuel is burned at high temperatures, principally from motor vehicle exhaust and stationary sources such as electric utilities and industrial boilers. A brownish gas, NO_x is a strong oxidizing agent that reacts in the air to form corrosive nitric acid, as well as toxic organic nitrates. EPA regulates only nitrogen dioxide (NO₂) as a surrogate for this family of compounds because it is the most prevalent form of NO_x in the atmosphere that is generated by anthropogenic (human) activities.¹

✓ **Health Effects**

NO_x is an ozone precursor that combines with Reactive Organic Gases (ROG) to form ozone. See the ozone section above for a discussion of the health effects of ozone.

Direct inhalation of NO_x can also cause a wide range of health effects. NO_x can irritate the lungs, cause lung damage, and lower resistance to respiratory infections such as influenza. Short-term exposures (e.g., less than 3 hours) to low levels of nitrogen dioxide (NO₂) may

¹ United States Environmental Protection Agency (EPA), Nitrogen Oxides (NO_x). Why and How They Are Controlled, 456/F-99-006R, November 2019

lead to changes in airway responsiveness and lung function in individuals with preexisting respiratory illnesses. These exposures may also increase respiratory illnesses in children. Long-term exposures to NO₂ may lead to increased susceptibility to respiratory infection and may cause irreversible alterations in lung structure. Other health effects associated with NO_x are an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO₂ may lead to eye and mucus membrane aggravation, along with pulmonary dysfunction. NO_x can cause fading of textile dyes and additives, deterioration of cotton and nylon, and corrosion of metals due to production of particulate nitrates. Airborne NO_x can also impair visibility. NO_x is a major component of acid deposition in California. NO_x may affect both terrestrial and aquatic ecosystems. NO_x in the air is a potentially significant contributor to a number of environmental effects such as acid rain and eutrophication in coastal waters. Eutrophication occurs when a body of water suffers an increase in nutrients that reduce the amount of oxygen in the water, producing an environment that is destructive to fish and other animal life.

NO₂ is toxic to various animals as well as to humans. Its toxicity relates to its ability to combine with water to form nitric acid in the eye, lung, mucus membranes, and skin. Studies of the health impacts of NO₂ include experimental studies on animals, controlled laboratory studies on humans, and observational studies.

In animals, long-term exposure to NO_x increases susceptibility to respiratory infections, lowering their resistance to such diseases as pneumonia and influenza. Laboratory studies show susceptible humans, such as asthmatics, exposed to high concentrations of NO₂, can suffer lung irritation and, potentially, lung damage. Epidemiological studies have also shown associations between NO₂ concentrations and daily mortality from respiratory and cardiovascular causes as well as hospital admissions for respiratory conditions.

NO_x contributes to a wide range of environmental effects both directly and when combined with other precursors in acid rain and ozone. Increased nitrogen inputs to terrestrial and wetland systems can lead to changes in plant species composition and diversity. Similarly, direct nitrogen inputs to aquatic ecosystems such as those found in estuarine and coastal waters can lead to eutrophication as discussed above. Nitrogen, alone or in acid rain, also can acidify soils and surface waters. Acidification of soils causes the loss of essential plant nutrients and increased levels of soluble aluminum, which is toxic to plants. Acidification of surface waters creates conditions of low pH and levels of aluminum that are toxic to fish and other aquatic organisms.

2.4.5 Sulfur Dioxide (SO₂)

The major source of sulfur dioxide (SO₂) is the combustion of high-sulfur fuels for electricity generation, petroleum refining and shipping. High concentrations of SO₂ can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Short-term exposures of asthmatic individuals to elevated SO₂ levels during moderate activity may result in breathing difficulties that can be accompanied by symptoms such as wheezing, chest tightness,

or shortness of breath. Other effects that have been associated with longer-term exposures to high concentrations of SO₂, in conjunction with high levels of PM, include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs' defenses. SO₂ also is a major precursor to PM_{2.5}, which is a significant health concern and a main contributor to poor visibility. In humid atmospheres, sulfur oxides can react with vapor to produce sulfuric acid, a component of acid rain.

2.4.6 Lead (Pb)

Lead, a naturally occurring metal, can be a constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. Lead was used until recently to increase the octane rating in automobile fuel. Since the 1980s, lead has been phased out in gasoline, reduced in drinking water, reduced in industrial air pollution, and banned or limited in consumer products. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels; however, the use of leaded fuel has been mostly phased out. Since this occurred the ambient concentrations of lead have dropped dramatically.

Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children. Effects on the nervous systems of children are one of the primary health risk concerns from lead. In high concentrations, children can even suffer irreversible brain damage and death. Children 6 years old and under are most at risk, because their bodies are growing quickly.

2.4.7 Toxic Air Contaminants (TAC)

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TAC) are another group of pollutants of concern. TAC are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TAC is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TAC are regulated on the basis of risk rather than specification of safe levels of contamination. The ten TAC are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (diesel PM). Caltrans' guidance for transportation studies references the Federal Highway Administration (FHWA) memorandum titled "Interim Guidance on Air Toxic Analysis in NEPA Documents" which discusses emissions quantification of six "priority" compounds of 21 Mobile Source Air Toxics (MSAT) identified by the United States Environmental Protection Agency (USEPA). The six "priority" compounds are diesel exhaust (particulate matter and organic gases), benzene, 1,3-butadiene, acetaldehyde, formaldehyde, and acrolein.

Some studies indicate that diesel PM poses the greatest health risk among the TAC listed above.

A 10-year research program (California Air Resources Board 1998) demonstrated that diesel PM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to diesel PM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

Diesel PM differs from other TAC in that it is not a single substance but a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TAC, however, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. The CARB has made preliminary concentration estimates based on a diesel PM exposure method. This method uses the CARB emissions inventory's PM10 database, ambient PM10 monitoring data, and the results from several studies to estimate concentrations of diesel PM. Table 4 depicts the CARB Handbook's recommended buffer distances associated with various types of common sources.

Existing air quality concerns within the air basin are related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

TAC will be addressed in more detail in a Health Risk Assessment for this Project, which is outside the scope of this document but currently being prepared.

2.4.8 Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar

one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

The intensity of an odor source’s operations and its proximity to sensitive receptors influences the potential significance of odor emissions. The Project does not propose any uses that would be potential odor sources.

2.4.9 Naturally Occurring Asbestos (NOA)

Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. Asbestos is commonly found in ultramafic rock and near fault zones. The amount of asbestos that is typically present in these rocks’ ranges from less than 1% up to approximately 25% and sometimes more. It is released from ultramafic rock when it is broken or crushed. This can happen when cars drive over unpaved roads or driveways, which are surfaced with these rocks, when land is graded for building purposes, or at quarrying operations. Asbestos is also released naturally through weathering and erosion. Once released from the rock, asbestos can become airborne and may stay in the air for long periods of time. Asbestos is hazardous and can cause lung disease and cancer dependent upon the level of exposure. The longer a person is exposed to asbestos and the greater the intensity of the exposure, the greater the chances for a health problem.

The proposed Project's construction phase may cause asbestos to become airborne due to the construction activities that will occur on site. The Project would likely be required to submit a Dust Control Plan.

2.4.10 Greenhouse Gas Emissions

Gases that trap heat in the atmosphere are often called greenhouse gases. Some greenhouse gases such as carbon dioxide occur naturally and are emitted to the atmosphere through natural processes and human activities. Other greenhouse gases (e.g., fluorinated gases) are created and emitted solely through human activities. The principal greenhouse gases that enter the

atmosphere because of human activities are:

- ✓ **Carbon Dioxide (CO₂):** Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement, asphalt paving, truck trips). Carbon dioxide is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
- ✓ **Methane (CH₄):** Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- ✓ **Nitrous Oxide (N₂O):** Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
- ✓ **Fluorinated Gases:** Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are synthetic, powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances (i.e., CFCs, HCFCs, and halons). These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases, they are sometimes referred to as High Global Warming Potential gases ("High GWP gases").

3.0 Air-Quality Impacts

3.1 Methodology

The impact assessment for air quality focuses on potential effects the Project might have on air quality within the region. The air district has established thresholds of significance for determining environmental significance. These thresholds separate a project's short-term emissions from its long-term emissions. The short-term emissions are mainly related to the construction phase of a project, which are recognized to be short in duration. The long-term emissions are primarily related to the activities that will occur indefinitely as a result of Project operations. Impacts will be evaluated both on the basis of California Environmental Quality Act (CEQA) Appendix G criteria and SLOAPCD significance criteria. The impacts to be evaluated will be those involving construction and operational emissions of criteria pollutants. SLOAPCD's 2023 CEQA Handbook was used to determine the thresholds shown below.

3.1.1 CalEEMod

CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

The model is an accurate and comprehensive tool for quantifying air quality impacts from land use projects throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as CEQA and NEPA documents, pre-project planning, compliance with local air quality rules and regulations, etc. The modeling for this project was done using CalEEMod Version 2022.1.1.20.

3.2 Short-Term Impacts

Short-term impacts are mainly related to the construction phase of a project and are recognized to be short in duration. Construction air quality impacts are generally attributable to dust and exhaust pollutants generated by equipment and vehicles. Fugitive dust is emitted both during construction activity and as a result of wind erosion over exposed earth surfaces. Clearing and earth moving activities do comprise major sources of construction dust emissions, but traffic and general disturbances of soil surfaces also generate significant dust emissions. Further, dust generation is dependent on soil type and soil moisture. Exhaust pollutants are the non-useable gaseous waste products produced during the combustion process. Engine exhaust contains CO, HC, and NO_x pollutants which are harmful to the environment.

Adverse effects of construction activities cause increased dust-fall and locally elevated levels of total suspended particulate. Dust-fall can be a nuisance to neighboring properties or previously completed developments surrounding or within the Project area and may require frequent washing during the construction period.

PM10 emissions can result from construction activities of the Project. compliance with control measures will constitute sufficient mitigation to reduce PM10 impacts to a level considered less-than significant for most development projects.

Ozone precursor emissions are also an impact of construction activities and can be quantified through calculations. Numerous variables factored into estimating total construction emission include level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and amount of materials to be transported onsite or offsite. Additional exhaust emissions would be associated with the transport of workers and materials. Because the specific mix of construction equipment is not presently known for this Project, construction emissions were estimated using CalEEMod Model defaults for construction equipment.

Table 3 shows the CalEEMod estimated construction emissions that would be generated from construction of the Project and detailed results are included in Appendix A of this report. Results of the analysis show that emissions generated from construction of the Project will not exceed the air district’s emission thresholds.

Table 3
Project Construction Emissions (tons/year)

Summary Report	CO	NOx	ROG	SOx	PM10	PM2.5	CO2e
Project Construction Emissions	6.21	6.57	0.73	0.02	1.64	0.91	990.72
SLOAPCD Level of Significance	None	10 (NOx + ROG)	10 (NOx + ROG)	None	10	None	None
Does the Project Exceed Standard?	No	No	No	No	No	No	No

Source: CalEEMod

In order for the table to compare all emissions in tons/year, lbs./day have been converted to tons/year for illustrative purposes.

3.3 Long-Term Emissions

Long-Term emissions from the Project would be generated primarily by mobile source (vehicle) emissions from the Project site and area sources such as lawn maintenance equipment.

3.3.1 Localized Operational Emissions

Significance criteria have been established for criteria pollutant emissions as documented in Operational emissions have been estimated for the Project using the CalEEMod Model and detailed results are included in Appendix A of this report.

Results of the CalEEMod analysis are shown in Table 4. Results indicate that the annual operational emissions from the Project will be less than the air district emissions thresholds for criteria pollutants.

Table 4
Project Operational Emissions (tons/year)

Summary Report	CO	NOx	ROG	SOx	PM10	PM2.5	CO2e
Project Operational Emissions	1.10	0.15	0.37	0.02	0.11	0.04	216.04
SLOAPCD Level of Significance	100.44	25 (NOx + ROG)	25 (NOx + ROG)	None	25	None	None
Does the Project Exceed Standard?	No	No	No	No	No	No	No

Source: CalEEMod

In order for the table to compare all emissions in tons/year, lbs./day have been converted to tons/year for illustrative purposes.

3.3.2 Localized Operational Emissions

✓ Carbon Monoxide

An analysis of localized CO concentrations is typically warranted to ensure that standards are maintained.

✓ Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person’s reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or

recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the air district. Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact.

Air districts generally require that an analysis of potential odor impacts be conducted for the following two situations:

- Generators – projects that would potentially generate odorous emissions proposed to be located near existing sensitive receptors or other land uses where people may congregate, and
- Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people locating near existing odor sources.

The Project will not generate odorous emissions given the nature or characteristics of the Project. The intensity of an odor source’s operations and its proximity to sensitive receptors influences the potential significance of odor emissions.

✓ **Naturally Occurring Asbestos (NOA)**

Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. Construction of the Project may cause asbestos to become airborne due to the construction activities that will occur on site. The Project would be required to submit a Dust Control Plan to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities associated with the Project.

✓ **Greenhouse Gas Emissions**

CARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. For the San Luis Obispo Council of Governments (SLOCOG), CARB set targets at 9.4 percent per capita decrease in 2020 and a 10.9 percent per capita decrease in 2035 from a base year of 2005. SLOCOG’s Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which was adopted in August 2018, projects that the region would achieve the prescribed emissions targets.

Based on the adopted air district guidance, the following three quantitative thresholds may be used to evaluate the level of significance of GHG emissions impacts for residential and commercial projects:

1. Qualified GHG Reductions Strategies. A project would have a significant impact if it is not consistent with a qualified GHG reduction strategy that meets the requirements of the State CEQA Guidelines. If a project is consistent with a qualified GHG reduction strategy, it would not have a significant impact; OR,
2. Bright-Line Threshold. A project would have a significant impact if it exceeds the “bright-line threshold” of 1,150 metric tons CO₂e/year; OR,
3. Efficiency Threshold. A project would have a significant impact if the efficiency threshold exceeds 4.9 metric tons of CO₂e/service population/year. The service population is defined as the number of residents plus employees for a given project.

The efficiency threshold is specifically intended to avoid penalizing large-scale plans or projects that incorporate emissions-reducing features and/or that are located in a manner that results in relatively low vehicle miles traveled.

In the event that a local air district’s guidance for addressing GHG impacts does not use numerical GHG emissions thresholds, at the lead agency’s discretion, a neighboring air district’s GHG threshold may be used to determine impacts. In December 2008, the South Coast Air Quality Management District (SCAQMD) Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. The SCAQMD guidance identifies a threshold of 3,000 MTCO₂e./year for GHG for construction emissions amortized over a 30-year project lifetime, plus annual operation emissions. This threshold is often used by agencies, such as the California Public Utilities Commission, to evaluate GHG impacts in areas that do not have specific thresholds (CPUC 2015)². Though the Project is under SLOAPCD jurisdiction, the SCAQMD GHG threshold provides some perspective on the GHG emissions generated by the Project. Table 5 shows the yearly GHG emissions generated by the Project as determined by the CalEEMod model, which is significantly less than the threshold identified by the SCAQMD and Criteria 2 (1,150 MTCO₂e./year) above.

Table 5
Project Operational Greenhouse Gas Emissions

Summary	CO ₂ e
Project Operational Emissions Per Year (plus amortized construction emissions)	249.06 MT/yr.

Source: CalEEMod

² California Public Utilities Commission (CPUC). 2015. Section 4.7, “Greenhouse Gases.” Final Environmental Impact Report for the Santa Barbara County Reliability Project. May 2015. Accessed January 18, 2018. http://www.cpuc.ca.gov/environment/info/ene/sbcrp/SBCRP_FEIR.html.

4.0 Energy Impacts

4.1 Methodology

Energy consumption for electricity and natural gas was calculated using CalEEMod and are shown in Table 6 below (unmitigated). EMFAC was run to ascertain transportation fuel demand to further strengthen supporting data for the eventual CEQA document (gas, diesel, Phe only) using 2025 as the project buildout year. Those results are attached as Appendix B.

Table 6
Project Energy Consumption

Category	Result
Electricity	180,164 KWh/yr.
Natural Gas	612,479 kBTU/yr.

5.0 Impact Determinations and Recommended Mitigation*

****This is an effort to provide the foundations of the Air Quality and Greenhouse Gas sections of the future CEQA document for this project. We understand that County staff will prepare the Initial Study.***

In accordance with CEQA, when a proposed project is consistent with a General Plan for which an EIR has been certified, the effects of that project are evaluated to determine if they will result in project-specific significant adverse impacts on the environment. The criteria used to determine the significance of an air quality or greenhouse gas impact are based on the following thresholds of significance. Accordingly, air quality or greenhouse gas impacts resulting from the Project are considered significant if the Project would:

Air Quality

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- c) Expose sensitive receptors to substantial pollutant concentrations?
- d) Result in other emissions such as those leading to odors adversely affecting a substantial number of people?

Greenhouse Gas Emissions

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

5.1 Air Quality

5.1.1 *Conflict with or obstruct implementation of the applicable air quality plan*

The primary way of determining consistency with the air quality plan's (AQP's) assumptions is determining consistency with the applicable General Plan to ensure that the Project's population density and land use are consistent with the growth assumptions used in the AQPs for the air basin.

As required by California law, city and county General Plans contain a Land Use Element that details the types and quantities of land uses that the city or county estimates will be needed for

future growth, and that designate locations for land uses to regulate growth. Existing and future pollutant emissions computed in the AQP are based on land uses from area general plans. AQPs detail the control measures and emission reductions required for reaching attainment of the air standards.

The applicable General Plan for the project is the County's General Plan Update. The Project site is currently designated Commercial Retail (CR) in the General Plan Land Use map for the County, however the project application includes a General Plan Amendment to change the designation to residential such that the project would be consistent upon approval. Therefore, the Project is consistent with the growth assumptions used in the applicable AQPs. As a result, the Project will not conflict with or obstruct implementation of any air quality plans. Therefore, no mitigation is needed.

5.1.2 *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*

San Luis Obispo County is currently designated as non-attainment for ozone and PM10 under state ambient air quality standards. Construction of the project would result in emissions of ozone precursors including reactive organic gases (ROG), nitrous oxides (NOx), and fugitive dust emissions (PM10). During operation, the project would result in emissions of ozone precursors associated with mobile source emissions and other stationary sources. Inconsistency with any of the plans would be considered a cumulatively adverse air quality impact. As discussed in Section 4.1.1, the Project would be consistent with the General Plan Land Use Map for the County if approved.

Project specific emissions that exceed the thresholds of significance for criteria pollutants would be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the County is in non-attainment under applicable federal or state ambient air quality standards. It should be noted that a project is not characterized as cumulatively insignificant when project emissions fall below thresholds of significance.

As discussed above in Section 3.2 and 3.3, results of the analysis show that emissions generated from construction and operation of the Project will be less than the applicable air district emission thresholds for criteria pollutants. Therefore, no mitigation is needed.

5.1.3 *Expose sensitive receptors to substantial pollutant concentrations*

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 that have the greatest potential to attract these types of sensitive receptors include schools, parks, playgrounds, daycare centers, nursing homes, hospitals, and residential communities.

In the case of this project, sensitive receptors have been identified in the Health Risk Assessment as the residents that would live on-site upon Project completion.

Impacts

Vehicle DPM emissions were estimated using emission factors for coarse particulate matter less than 2.5 microns in diameter (PM_{2.5}) generated with the EMFAC developed by CARB. EMFAC is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to project changes in future emissions from on-road mobile sources. EMFAC incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment.

The PM_{2.5} and total organic gases (TOG) for one nearby freeway (US-101) was modeled in AERMOD. Based on the AERMOD outputs, the highest expected annual average diesel PM₁₀ emission concentrations from diesel truck traffic at the Project site would be 0.028 µg/m³ from US-101. CCR Title 24 Part 6 requires new development to use MERV 13 air filtration on space conditioning systems and ventilation systems that provide outside air to the occupiable space of a dwelling. According to the U.S. EPA's Exposure Factor Handbook (2011), on average, people spend 90 percent of their time indoors. As residents are not always indoors, the filtration's overall effectiveness accounts for the time spent outdoors, which equates to approximately three hours per day. It is noted that this is a conservative assumption for this Project, as all the time spent outdoors would not occur at the Project site. The Project's MERV 13 air filtration systems have an average particle size removal efficiency of approximately 75 percent for 0.3 to 1.0 µg/m³ (DPM) and 90 percent for 1.0 to 10 µg/m³ (PM₁₀ and PM_{2.5}) based on ASHRAE Standard 52.2. The filters would be installed in residential units prior to occupancy, and maintenance with filters of the same value would be included in the Project's operation and maintenance manual. Based on the particle removal efficiency and the percentage of time indoors, MERV 13 filters would reduce exposure to particulates by approximately 70 percent.

Based on the AERMOD outputs, the Project's MERV 13 air filtration systems would reduce the highest expected annual average diesel PM_{2.5} emission concentrations from traffic on US-101 to the future onsite sensitive receptors to 0.0084 µg/m³ in the opening year. The highest expected hourly TOG emission concentrations from automobile traffic at the Project site would be 0.042 µg/m³ (no reduction was applied to TOG concentrations). The calculations conservatively assume no cleaner technology with lower emissions in future years. Table 2 found in the Project's Health Risk Assessment shows that acute and chronic hazards would be below the threshold of 1.0.

The pollutant concentrations modeled in AERMOD represent the exposure levels outdoors. The analysis conservatively does not include indoor exposure adjustments for residents. However, the typical person spends the majority of time indoors rather than remaining outdoors in the

same location for 24 hours a day. Therefore, the AERMOD outdoor pollutant concentrations are not necessarily representative of actual exposure at the Project site and tend to overestimate exposure. The risk calculations are based on the pollutant concentration at the worst-case location and conservatively assume: no cleaner technology or lower emissions in future years, and 95th percentile breathing rates.

Impacts related to cancer risk would be less than significant, and no mitigation is required.

5.1.4 Result in other emissions such as those leading to odors adversely affecting a substantial number of people

CEQA requires that an analysis of potential odor impacts be conducted for the following two situations:

- ✓ Generators – projects that would potentially generate odorous emissions proposed to be located near existing sensitive receptors or other land uses where people may congregate, and
- ✓ Receivers – residential or other sensitive receptor projects or other projects built for the intent of attracting people located near existing odor sources.

The intensity of an odor source’s operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Air districts throughout the state have identified some common types of facilities that have been known to produce odors. The types of facilities that are known to produce odors are typically associated with heavy industry or agriculture. The Project will not generate odorous emissions given the residential nature or characteristics of the Project. Therefore, no mitigation is needed.

5.2 Greenhouse Gas Emissions

5.2.1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment

The air district acknowledges the current absence of numerical thresholds and recommends a tiered approach to establish the significance of the GHG impacts on the environment:

1. Qualified GHG Reductions Strategies. A project would have a significant impact if it were not consistent with a qualified GHG reduction strategy that meets the requirements of the State CEQA Guidelines. If a project is consistent with a qualified GHG reduction strategy, it would not have a significant impact; OR,
2. Bright-Line Threshold. A project would have a significant impact if it exceeds the “bright-line threshold” of 1,150 metric tons CO₂E/year; OR,

3. Efficiency Threshold. A project would have a significant impact if the efficiency threshold exceeds 4.9 metric tons of CO₂E/service population/year. The service population is defined as the number of residents plus employees for a given project.

In the event that a local air district's guidance for addressing GHG impacts does not use numerical GHG emissions thresholds, at the lead agency's discretion, a neighboring air district's GHG threshold may be used to determine impacts. In December 2008, the South Coast Air Quality Management District (SCAQMD) Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. The SCAQMD guidance identifies a threshold of 3,000 MTCO₂eq./year for GHG for construction emissions amortized over a 30-year project lifetime, plus annual operation emissions. Though the Project is under SLOAPCD jurisdiction, the SCAQMD GHG threshold provides some perspective on the GHG emissions generated by the Project. The tables above show the yearly GHG emissions generated by the Project as determined by the CalEEMod model, which is significantly less than SCAQMD thresholds as well as the bright-line threshold.

There would be no increase in severity to the greenhouse gas impacts, and implementation of the Project will not result in Project-specific or site-specific significant adverse impacts from greenhouse gas emissions within the Project study area. Therefore, no mitigation measures are needed.

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

California passed the California Global Warming Solutions Act of 2006. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. Under AB 32, CARB must adopt regulations by January 1, 2011, to achieve reductions in GHGs to meet the 1990 emission cap by 2020. On December 11, 2008, CARB adopted its initial Scoping Plan, which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. CARB's 2017 Climate Change Scoping Plan builds on the efforts and plans encompassed in the initial Scoping Plan.

SB 375 requires MPOs to adopt an SCS or APS that will prescribe land use allocation in that MPO's regional transportation plan. CARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. For the San Luis Obispo Council of Governments (SLOCOG), CARB set targets at 9.4 percent per capita decrease in 2020 and a 10.9 percent per capita decrease in 2035 from a base year of 2005. SLOCOG's RTP/SCS projects that the region would achieve the prescribed emissions targets.

Executive Order B-30-15 establishes a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas

emissions to 80 percent below 1990 levels by 2050. Executive Order B-30-15 requires MPO's to implement measures that will achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets.

As required by California law, city and county General Plans contain a Land Use Element that details the types and quantities of land uses that the city or county estimates will be needed for future growth, and that designate locations for land uses to regulate growth. SLOCOG uses the growth projections and land use information in adopted general plans to estimate future average daily trips and then VMT, which are then provided to SLOCOG to estimate future emissions in the AQPs.

The Project would be consistent with the currently adopted General Plan for the County upon approval of all requested entitlements as well as the adopted SLOCOG RTP/SCS. Therefore, the Project is consistent with the growth assumptions used in the applicable AQP.

CARB's 2017 Climate Change Scoping Plan builds on the efforts and plans encompassed in the initial Scoping Plan. The current plan has identified new policies and actions to accomplish the State's 2030 GHG limit. Below is a list of applicable strategies in the Scoping Plan and the Project's consistency with those strategies.

- ✓ California Light-Duty Vehicle GHG Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicles, alternative and renewable fuel and vehicle technology programs for long-term climate change goals.
 - The Project is consistent with this reduction measure. This measure cannot be implemented by a particular project or lead agency since it is a statewide measure. When this measure is implemented, standards would be applicable to light-duty vehicles that would access the Project. The Project would not conflict or obstruct this reduction measure.
- ✓ Energy Efficiency – Pursuit of comparable investment in energy efficiency from all retail providers of electricity in California. Maximize energy efficiency building and appliance standards.
 - The Project is consistent with this reduction measure. Though this measure applies to the State to increase its energy standards, the Project would comply with this measure through existing regulation. The Project would not conflict or obstruct this reduction measure.
- ✓ Low Carbon Fuel – Development and adoption of the low carbon fuel standard.
 - The Project is consistent with this reduction measure. This measure cannot be implemented by a particular project or lead agency since it is a statewide measure. When this measure is implemented, standards would be applicable to the fuel used by vehicles

that would access the Project. The Project would not conflict or obstruct this reduction measure.

Based on the assessment above, the Project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, any impacts would be less than significant.

6.0 Energy

6.1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project would result in an increase in the site's demand for energy compared to its existing undeveloped state. Specifically, the proposed project would increase consumption of energy for space and water heating, air conditioning, lighting, and operation of miscellaneous equipment and appliances. The project will be required to comply with all Title 24 Building Energy Efficiency Standards developed by the California Energy Commission. These standards apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. With the inclusion of Title 24 requirements, project impacts would be less than significant.

6.2 Conflict or obstruct a state or local plan for renewable energy or energy efficiency?

The project would not conflict with adopted energy conservation plans nor with state or local renewable energy or energy efficiency plans. Energy consumption is presented in Table 6 and is consistent with single-family residential energy use as it relates to both electricity and natural gas consumption. If the General Plan Amendment is adopted permitting the Project on the proposed site, the proposed tract would be consistent with County land use and therefore energy consumption on the site would not conflict with that document.

SLO County Residential Summary Report

Table of Contents

1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.4. Operations Emissions Compared Against Thresholds
6. Climate Risk Detailed Report
 - 6.2. Initial Climate Risk Scores
 - 6.3. Adjusted Climate Risk Scores
7. Health and Equity Details
 - 7.3. Overall Health & Equity Scores
 - 7.5. Evaluation Scorecard

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SLO County Residential
Construction Start Date	3/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	15.6
Location	35.56325081577734, -120.709567107363
County	San Luis Obispo
City	Unincorporated
Air District	San Luis Obispo County APCD
Air Basin	South Central Coast
TAZ	3309
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
------------------	------	------	-------------	-----------------------	------------------------	--------------------------------	------------	-------------

Single Family Housing	22.0	Dwelling Unit	7.14	42,900	257,683	0.00	53.0	—
-----------------------	------	---------------	------	--------	---------	------	------	---

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-3	Use Local Construction Contractors
Construction	C-4*	Use Local and Sustainable Building Materials
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads
Construction	C-13	Use Low-VOC Paints for Construction
Area Sources	AS-2	Use Low-VOC Paints

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.42	67.3	36.0	33.5	0.05	1.60	7.77	9.37	1.47	3.96	5.44	—	5,404	5,404	0.22	0.05	0.48	5,425
Mit.	4.42	13.6	36.0	33.5	0.05	1.60	7.77	9.36	1.47	3.96	5.43	—	5,403	5,403	0.22	0.05	0.48	5,423
% Reduced	—	80%	—	< 0.5%	—	—	< 0.5%	< 0.5%	—	—	—	—	< 0.5%	< 0.5%	—	—	1%	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.42	3.72	36.0	33.5	0.05	1.60	7.77	9.37	1.47	3.96	5.44	—	5,400	5,400	0.22	0.05	0.01	5,420
Mit.	4.42	3.72	36.0	33.5	0.05	1.60	7.77	9.36	1.47	3.96	5.43	—	5,399	5,399	0.22	0.05	0.01	5,418
% Reduced	—	—	—	< 0.5%	—	—	< 0.5%	< 0.5%	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.10	3.94	8.52	9.31	0.02	0.38	0.40	0.78	0.35	0.19	0.54	—	1,647	1,647	0.07	0.02	0.10	1,654
Mit.	1.10	0.99	8.52	9.31	0.02	0.38	0.40	0.77	0.35	0.19	0.54	—	1,647	1,647	0.07	0.02	0.09	1,654
% Reduced	—	75%	—	< 0.5%	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.72	1.55	1.70	< 0.005	0.07	0.07	0.14	0.06	0.03	0.10	—	273	273	0.01	< 0.005	0.02	274
Mit.	0.20	0.18	1.55	1.70	< 0.005	0.07	0.07	0.14	0.06	0.03	0.10	—	273	273	0.01	< 0.005	0.02	274
% Reduced	< 0.5%	75%	< 0.5%	< 0.5%	—	—	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	1%	< 0.5%

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.13	2.35	0.77	5.26	0.01	0.03	0.57	0.60	0.03	0.15	0.17	7.18	1,087	1,094	0.81	0.05	3.17	1,132
Mit.	1.13	2.06	0.77	5.26	0.01	0.03	0.57	0.60	0.03	0.15	0.17	7.18	1,087	1,094	0.81	0.05	3.17	1,132
% Reduced	—	12%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.99	2.22	0.80	4.27	0.01	0.03	0.57	0.60	0.03	0.15	0.17	7.18	1,063	1,071	0.82	0.05	0.38	1,106
Mit.	0.99	1.92	0.80	4.27	0.01	0.03	0.57	0.60	0.03	0.15	0.17	7.18	1,063	1,071	0.82	0.05	0.38	1,106
% Reduced	—	13%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.07	2.29	0.79	5.18	0.01	0.03	0.55	0.58	0.03	0.14	0.17	7.18	1,054	1,061	0.82	0.05	1.52	1,098
Mit.	1.07	2.00	0.79	5.18	0.01	0.03	0.55	0.58	0.03	0.14	0.17	7.18	1,054	1,061	0.82	0.05	1.52	1,098
% Reduced	—	13%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.42	0.14	0.94	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	1.19	175	176	0.14	0.01	0.25	182
Mit.	0.20	0.36	0.14	0.94	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	1.19	175	176	0.14	0.01	0.25	182
% Reduced	—	13%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	0	N/A
Wildfire	1	1	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	0	1	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	6.00

Healthy Places Index Score for Project Location (b)	73.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

calendar_yseason_m	sub_area	vehicle_class	fuel	process	pollutant	emission
2023 Annual	San Luis Obispo (	All Other Buses	Dsl	IDLEX	Fuel	0.00015
2023 Annual	San Luis Obispo (	All Other Buses	Dsl	RUNEX	Fuel	0.014056
2023 Annual	San Luis Obispo (	LDA	Dsl	RUNEX	Fuel	0.039984
2023 Annual	San Luis Obispo (	LDT1	Dsl	RUNEX	Fuel	0.000598
2023 Annual	San Luis Obispo (	LDT2	Dsl	RUNEX	Fuel	0.020798
2023 Annual	San Luis Obispo (	LHD1	Dsl	IDLEX	Fuel	0.005676
2023 Annual	San Luis Obispo (	LHD1	Dsl	RUNEX	Fuel	0.92686
2023 Annual	San Luis Obispo (	LHD2	Dsl	IDLEX	Fuel	0.003364
2023 Annual	San Luis Obispo (	LHD2	Dsl	RUNEX	Fuel	0.452992
2023 Annual	San Luis Obispo (	MDV	Dsl	RUNEX	Fuel	0.119908
2023 Annual	San Luis Obispo (	MH	Dsl	RUNEX	Fuel	0.0428
2023 Annual	San Luis Obispo (	Motor Coach	Dsl	IDLEX	Fuel	0.000972
2023 Annual	San Luis Obispo (	Motor Coach	Dsl	RUNEX	Fuel	0.023471
2023 Annual	San Luis Obispo (	PTO	Dsl	RUNEX	Fuel	0.067269
2023 Annual	San Luis Obispo (	SBUS	Dsl	IDLEX	Fuel	0.003053
2023 Annual	San Luis Obispo (	SBUS	Dsl	RUNEX	Fuel	0.033448
2023 Annual	San Luis Obispo (	T6 CAIRP Class 4	Dsl	IDLEX	Fuel	7.85E-07
2023 Annual	San Luis Obispo (	T6 CAIRP Class 4	Dsl	RUNEX	Fuel	0.0001
2023 Annual	San Luis Obispo (	T6 CAIRP Class 5	Dsl	IDLEX	Fuel	1.06E-06
2023 Annual	San Luis Obispo (	T6 CAIRP Class 5	Dsl	RUNEX	Fuel	0.000137
2023 Annual	San Luis Obispo (	T6 CAIRP Class 6	Dsl	IDLEX	Fuel	3.24E-06
2023 Annual	San Luis Obispo (	T6 CAIRP Class 6	Dsl	RUNEX	Fuel	0.000352
2023 Annual	San Luis Obispo (	T6 CAIRP Class 7	Dsl	IDLEX	Fuel	5.69E-06
2023 Annual	San Luis Obispo (	T6 CAIRP Class 7	Dsl	RUNEX	Fuel	0.00209
2023 Annual	San Luis Obispo (	T6 Instate Delivery Class 4	Dsl	IDLEX	Fuel	0.001106
2023 Annual	San Luis Obispo (	T6 Instate Delivery Class 4	Dsl	RUNEX	Fuel	0.020964
2023 Annual	San Luis Obispo (	T6 Instate Delivery Class 5	Dsl	IDLEX	Fuel	0.000675
2023 Annual	San Luis Obispo (	T6 Instate Delivery Class 5	Dsl	RUNEX	Fuel	0.013175
2023 Annual	San Luis Obispo (	T6 Instate Delivery Class 6	Dsl	IDLEX	Fuel	0.001662
2023 Annual	San Luis Obispo (	T6 Instate Delivery Class 6	Dsl	RUNEX	Fuel	0.031997
2023 Annual	San Luis Obispo (	T6 Instate Delivery Class 7	Dsl	IDLEX	Fuel	0.000395
2023 Annual	San Luis Obispo (	T6 Instate Delivery Class 7	Dsl	RUNEX	Fuel	0.011747
2023 Annual	San Luis Obispo (	T6 Instate Other Class 4	Dsl	IDLEX	Fuel	0.003688
2023 Annual	San Luis Obispo (	T6 Instate Other Class 4	Dsl	RUNEX	Fuel	0.076471
2023 Annual	San Luis Obispo (	T6 Instate Other Class 5	Dsl	IDLEX	Fuel	0.008978
2023 Annual	San Luis Obispo (	T6 Instate Other Class 5	Dsl	RUNEX	Fuel	0.203311
2023 Annual	San Luis Obispo (	T6 Instate Other Class 6	Dsl	IDLEX	Fuel	0.005253
2023 Annual	San Luis Obispo (	T6 Instate Other Class 6	Dsl	RUNEX	Fuel	0.111868
2023 Annual	San Luis Obispo (	T6 Instate Other Class 7	Dsl	IDLEX	Fuel	0.004012
2023 Annual	San Luis Obispo (	T6 Instate Other Class 7	Dsl	RUNEX	Fuel	0.092564
2023 Annual	San Luis Obispo (	T6 Instate Tractor Class 6	Dsl	IDLEX	Fuel	0.000107
2023 Annual	San Luis Obispo (	T6 Instate Tractor Class 6	Dsl	RUNEX	Fuel	0.002786
2023 Annual	San Luis Obispo (	T6 Instate Tractor Class 7	Dsl	IDLEX	Fuel	0.000938
2023 Annual	San Luis Obispo (	T6 Instate Tractor Class 7	Dsl	RUNEX	Fuel	0.02809
2023 Annual	San Luis Obispo (	T6 OOS Class 4	Dsl	IDLEX	Fuel	8.76E-07
2023 Annual	San Luis Obispo (	T6 OOS Class 4	Dsl	RUNEX	Fuel	0.000111

2023 Annual	San Luis Obispo (T6 OOS Class 5	Dsl	IDLEX	Fuel	1.18E-06
2023 Annual	San Luis Obispo (T6 OOS Class 5	Dsl	RUNEX	Fuel	0.000152
2023 Annual	San Luis Obispo (T6 OOS Class 6	Dsl	IDLEX	Fuel	3.62E-06
2023 Annual	San Luis Obispo (T6 OOS Class 6	Dsl	RUNEX	Fuel	0.00039
2023 Annual	San Luis Obispo (T6 OOS Class 7	Dsl	IDLEX	Fuel	5.97E-06
2023 Annual	San Luis Obispo (T6 OOS Class 7	Dsl	RUNEX	Fuel	0.002667
2023 Annual	San Luis Obispo (T6 Public Class 4	Dsl	IDLEX	Fuel	0.000225
2023 Annual	San Luis Obispo (T6 Public Class 4	Dsl	RUNEX	Fuel	0.002769
2023 Annual	San Luis Obispo (T6 Public Class 5	Dsl	IDLEX	Fuel	0.000822
2023 Annual	San Luis Obispo (T6 Public Class 5	Dsl	RUNEX	Fuel	0.010577
2023 Annual	San Luis Obispo (T6 Public Class 6	Dsl	IDLEX	Fuel	0.000599
2023 Annual	San Luis Obispo (T6 Public Class 6	Dsl	RUNEX	Fuel	0.007615
2023 Annual	San Luis Obispo (T6 Public Class 7	Dsl	IDLEX	Fuel	0.001493
2023 Annual	San Luis Obispo (T6 Public Class 7	Dsl	RUNEX	Fuel	0.025169
2023 Annual	San Luis Obispo (T6 Utility Class 5	Dsl	IDLEX	Fuel	0.000203
2023 Annual	San Luis Obispo (T6 Utility Class 5	Dsl	RUNEX	Fuel	0.005529
2023 Annual	San Luis Obispo (T6 Utility Class 6	Dsl	IDLEX	Fuel	3.86E-05
2023 Annual	San Luis Obispo (T6 Utility Class 6	Dsl	RUNEX	Fuel	0.001041
2023 Annual	San Luis Obispo (T6 Utility Class 7	Dsl	IDLEX	Fuel	4.41E-05
2023 Annual	San Luis Obispo (T6 Utility Class 7	Dsl	RUNEX	Fuel	0.00145
2023 Annual	San Luis Obispo (T7 CAIRP Class 8	Dsl	IDLEX	Fuel	0.022976
2023 Annual	San Luis Obispo (T7 CAIRP Class 8	Dsl	RUNEX	Fuel	0.296237
2023 Annual	San Luis Obispo (T7 NNOOS Class 8	Dsl	IDLEX	Fuel	0.024997
2023 Annual	San Luis Obispo (T7 NNOOS Class 8	Dsl	RUNEX	Fuel	0.349415
2023 Annual	San Luis Obispo (T7 NOOS Class 8	Dsl	IDLEX	Fuel	0.010623
2023 Annual	San Luis Obispo (T7 NOOS Class 8	Dsl	RUNEX	Fuel	0.12691
2023 Annual	San Luis Obispo (T7 Other Port Class 8	Dsl	IDLEX	Fuel	0.002017
2023 Annual	San Luis Obispo (T7 Other Port Class 8	Dsl	RUNEX	Fuel	0.074595
2023 Annual	San Luis Obispo (T7 POAK Class 8	Dsl	IDLEX	Fuel	4.55E-11
2023 Annual	San Luis Obispo (T7 POAK Class 8	Dsl	RUNEX	Fuel	9.01E-10
2023 Annual	San Luis Obispo (T7 POLA Class 8	Dsl	IDLEX	Fuel	4.60E-11
2023 Annual	San Luis Obispo (T7 POLA Class 8	Dsl	RUNEX	Fuel	1.19E-09
2023 Annual	San Luis Obispo (T7 Public Class 8	Dsl	IDLEX	Fuel	0.003671
2023 Annual	San Luis Obispo (T7 Public Class 8	Dsl	RUNEX	Fuel	0.089085
2023 Annual	San Luis Obispo (T7 Single Concrete/Transit M	Dsl	IDLEX	Fuel	0.001174
2023 Annual	San Luis Obispo (T7 Single Concrete/Transit M	Dsl	RUNEX	Fuel	0.028833
2023 Annual	San Luis Obispo (T7 Single Dump Class 8	Dsl	IDLEX	Fuel	0.003758
2023 Annual	San Luis Obispo (T7 Single Dump Class 8	Dsl	RUNEX	Fuel	0.077475
2023 Annual	San Luis Obispo (T7 Single Other Class 8	Dsl	IDLEX	Fuel	0.007626
2023 Annual	San Luis Obispo (T7 Single Other Class 8	Dsl	RUNEX	Fuel	0.155542
2023 Annual	San Luis Obispo (T7 SWCV Class 8	Dsl	IDLEX	Fuel	0.001489
2023 Annual	San Luis Obispo (T7 SWCV Class 8	Dsl	RUNEX	Fuel	0.102674
2023 Annual	San Luis Obispo (T7 Tractor Class 8	Dsl	IDLEX	Fuel	0.015596
2023 Annual	San Luis Obispo (T7 Tractor Class 8	Dsl	RUNEX	Fuel	0.230074
2023 Annual	San Luis Obispo (T7 Utility Class 8	Dsl	IDLEX	Fuel	0.000138
2023 Annual	San Luis Obispo (T7 Utility Class 8	Dsl	RUNEX	Fuel	0.006764
2023 Annual	San Luis Obispo (UBUS	Dsl	RUNEX	Fuel	0.037879

2023 Annual	San Luis Obispo (LDA	Gas RUNEX	Fuel	7.433681
2023 Annual	San Luis Obispo (LDA	Gas STREX	Fuel	0.226314
2023 Annual	San Luis Obispo (LDT1	Gas RUNEX	Fuel	1.086522
2023 Annual	San Luis Obispo (LDT1	Gas STREX	Fuel	0.040857
2023 Annual	San Luis Obispo (LDT2	Gas RUNEX	Fuel	5.278026
2023 Annual	San Luis Obispo (LDT2	Gas STREX	Fuel	0.162553
2023 Annual	San Luis Obispo (LHD1	Gas IDLEX	Fuel	0.005065
2023 Annual	San Luis Obispo (LHD1	Gas RUNEX	Fuel	1.340441
2023 Annual	San Luis Obispo (LHD1	Gas STREX	Fuel	0.015747
2023 Annual	San Luis Obispo (LHD2	Gas IDLEX	Fuel	0.000729
2023 Annual	San Luis Obispo (LHD2	Gas RUNEX	Fuel	0.191635
2023 Annual	San Luis Obispo (LHD2	Gas STREX	Fuel	0.002
2023 Annual	San Luis Obispo (MCY	Gas RUNEX	Fuel	0.057713
2023 Annual	San Luis Obispo (MCY	Gas STREX	Fuel	0.006699
2023 Annual	San Luis Obispo (MDV	Gas RUNEX	Fuel	4.606242
2023 Annual	San Luis Obispo (MDV	Gas STREX	Fuel	0.147202
2023 Annual	San Luis Obispo (MH	Gas RUNEX	Fuel	0.182945
2023 Annual	San Luis Obispo (MH	Gas STREX	Fuel	3.42E-05
2023 Annual	San Luis Obispo (OBUS	Gas IDLEX	Fuel	0.0005
2023 Annual	San Luis Obispo (OBUS	Gas RUNEX	Fuel	0.09842
2023 Annual	San Luis Obispo (OBUS	Gas STREX	Fuel	0.000854
2023 Annual	San Luis Obispo (SBUS	Gas IDLEX	Fuel	0.001097
2023 Annual	San Luis Obispo (SBUS	Gas RUNEX	Fuel	0.016949
2023 Annual	San Luis Obispo (SBUS	Gas STREX	Fuel	0.000106
2023 Annual	San Luis Obispo (T6TS	Gas IDLEX	Fuel	0.001227
2023 Annual	San Luis Obispo (T6TS	Gas RUNEX	Fuel	0.181273
2023 Annual	San Luis Obispo (T6TS	Gas STREX	Fuel	0.002222
2023 Annual	San Luis Obispo (T7IS	Gas RUNEX	Fuel	0.001159
2023 Annual	San Luis Obispo (T7IS	Gas STREX	Fuel	1.85E-05
2023 Annual	San Luis Obispo (UBUS	Gas RUNEX	Fuel	0.008281
2023 Annual	San Luis Obispo (UBUS	Gas STREX	Fuel	4.69E-05
2023 Annual	San Luis Obispo (LDA	Phe RUNEX	Fuel	0.097251
2023 Annual	San Luis Obispo (LDA	Phe STREX	Fuel	0.004177
2023 Annual	San Luis Obispo (LDT1	Phe RUNEX	Fuel	0.000279
2023 Annual	San Luis Obispo (LDT1	Phe STREX	Fuel	1.31E-05
2023 Annual	San Luis Obispo (LDT2	Phe RUNEX	Fuel	0.011842
2023 Annual	San Luis Obispo (LDT2	Phe STREX	Fuel	0.000604
2023 Annual	San Luis Obispo (MDV	Phe RUNEX	Fuel	0.008637
2023 Annual	San Luis Obispo (MDV	Phe STREX	Fuel	0.000555

APPENDIX C

Health Risk Assessment

Health Risk Assessment
310 N. Main Street Project
San Luis Obispo County, California



Expect More. Experience Better.

Prepared by:

Kimley-Horn and Associates, Inc.
10 S. Almaden Boulevard, Suite 1250
San José, California 95113
Contact: *Ms. Noemi Wyss*
669.800.4152

October 2022

TABLE OF CONTENTS

1 INTRODUCTION

1.1 Project Location 1

1.2 Project Description 1

2 ENVIRONMENTAL SETTING

2.1 Climate 5

2.2 Toxic Air Contaminants 5

2.3 Sensitive Receptors 7

3 REGULATORY SETTING

3.1 Federal 9

3.2 State of California 10

3.3 Regional 13

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Health Risk Analysis Thresholds 14

4.2 Methodology 15

5 POTENTIAL HEALTH RISK IMPACTS

5.1 Operational Health Risk Analysis 19

6 REFERENCES

References 21

TABLES

Table 1: Default Age Sensitivity Factors, Fraction of Time at Home, and Daily Breathing Rates 18

Table 2: Operational Risk Assessment Results 21

FIGURES

Figure 1: Regional Vicinity 2

Figure 2: Site Vicinity 3

Figure 3: Site Plan 4

APPENDIX

Appendix A: Modeling Data

LIST OF ABBREVIATED TERMS

A	absorption factor from inhalation
ACES	Advanced Collaborative Emissions Study
ASF	age sensitivity factor
AB	Assembly Bill
APS	auxiliary power system
AT	averaging time
ATCM	Air Toxic Control Measure
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CPF	cancer potency factor
C _{air}	air concentration from model
C _i	air concentration of substance
DBR	daily breathing rate
DOORS	Diesel Off-Road Reporting System
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan
Dose-air	dose through inhalation
EMFAC	Emissions Factor Model
ED	exposure duration
EF	exposure frequency
°F	Fahrenheit
FCAA	Federal Clean Air Act
FAH	fraction of time spent at home
GVWR	gross vehicle weight rating
HAP	hazardous air pollutant
HQ	health quotient
HRA	health risk assessment
kg	kilograms
L	liter
MICR	Maximum Individual Cancer Risk
mg	milligrams
µg/m ³	micrograms per cubic meter
MSAT	Mobile Source Air Toxic
NAAQS	National Ambient Air Quality Standards
NED	National Elevation Dataset
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
O ₃	ozone
OEHHA	Office Environmental Health Hazard Assessment
PM	particulate matter
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PERP	Portable Equipment Registration Program
REL	Reference Exposure Level
REL _i	Reference Exposure Level of substance
Risk _{inh-res}	residential inhalation cancer risk
SB	Senate Bill
SCCAB	South Central Coast Air Basin
SLO	San Luis Obispo
SLO APCD	San Luis Obispo Air Pollution Control District
TAC	Toxic Air Contaminant
U.S. EPA	United States Environmental Protection Agency
VMT	vehicle miles traveled

1 INTRODUCTION

The purpose of this Health Risk Assessment (HRA) is to evaluate potential health risks associated with Toxic Air Contaminants (TAC) including Diesel Particulate Matter (DPM) resulting from the implementation of the proposed 301 N Main Street Project (proposed Project) in the unincorporated area of Templeton in San Luis Obispo County. This HRA was prepared in accordance with the requirements of the San Luis Obispo County Air Pollution Control District (SLO APCD) and guidance from the Office of Environmental Health Hazard Assessment (OEHHA) to determine if health risks are likely to occur from the Project. Technical data is included as see [Appendix A: Modeling Data](#).

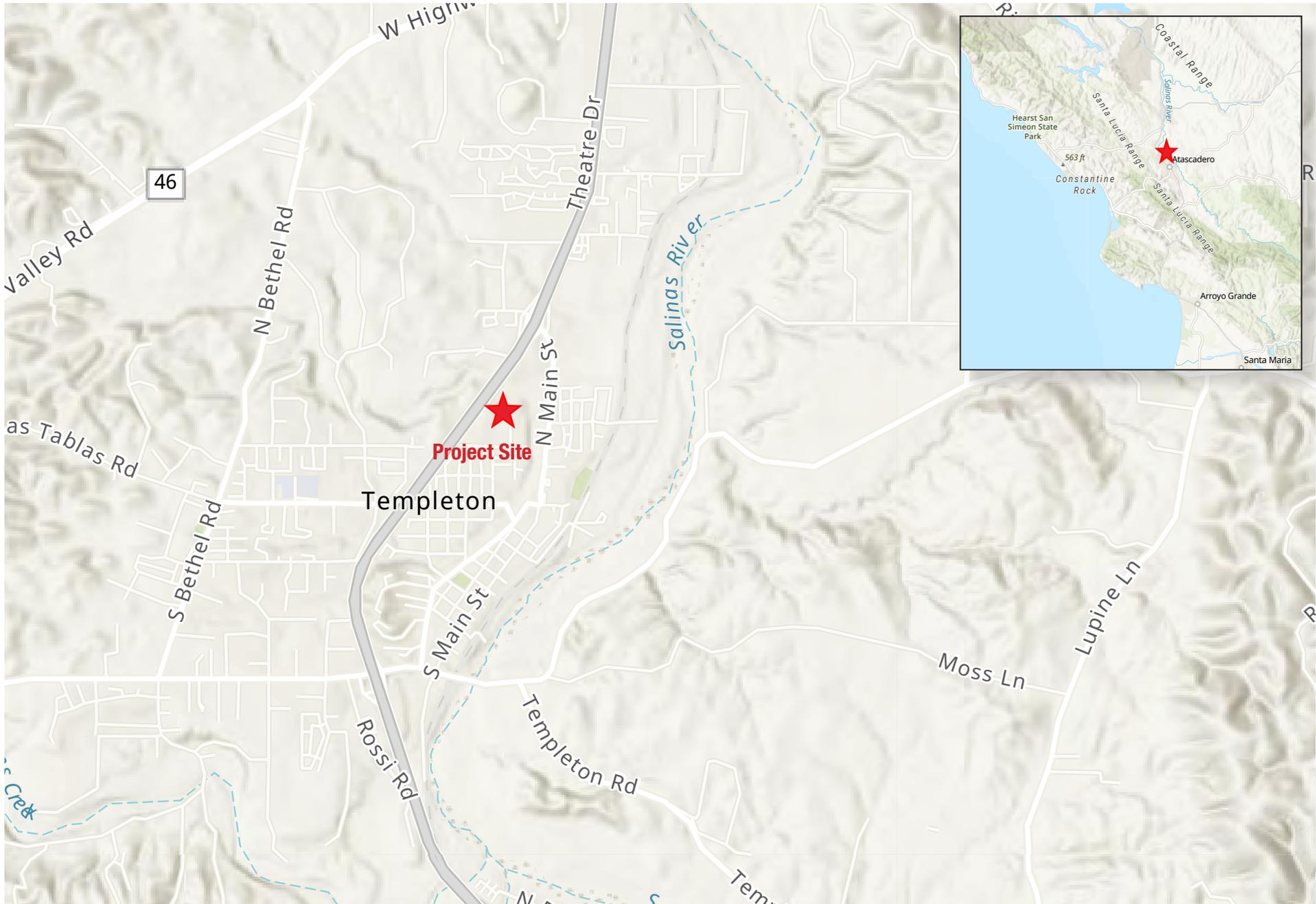
1.1 Project Location

The proposed Project is located on 301 N Main Street in the unincorporated area of Templeton, in San Luis Obispo County. [Figure 1: Regional Vicinity](#) and [Figure 2: Site Vicinity](#) depict the Project site in a regional and local context. The Project site is located in a mixed-use area with surrounding uses including residential, commercial, and agricultural uses. Across Main Street to the west are single and multi-family residences and to the north is the San Luis Obispo County sheriff's office. To the west of the Project site is Highway 101. The site is currently an undeveloped 10-acre lot.

1.2 Project Description

The proposed 301 Main Street Project would construct 22 new single-family residences. The proposed development would result in residential units ranging in size from 10,013 to 18,655 square foot lots. Proposed site work also includes site lighting and landscaping.

Access to the Project site would be provided via a driveway located at the eastern portion of the development from Main Street. A street extending from the driveway would run perpendicular to Main Street and provide access to each residential unit. [Figure 3: Site Plan](#), shows the proposed layout of the Project site.



Source: USGS, 2022

Figure 1: Regional Vicinity

310 N Main Street Project
Health Risk Assessment



Not to scale

Kimley»Horn

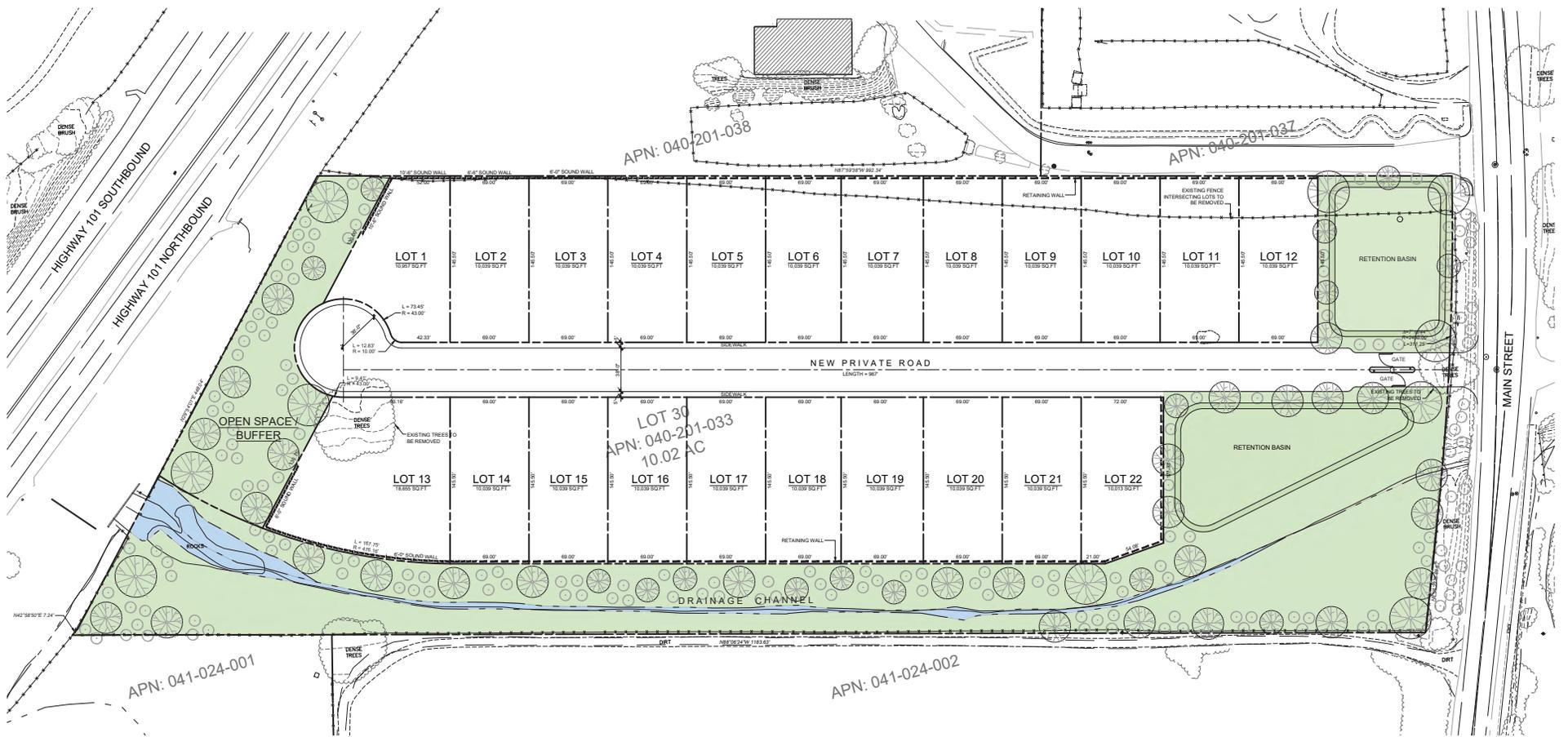


Source: NearMap, 2022

Figure 2: Site Vicinity
310 N Main Street Project
Health Risk Assessment



Not to scale



Source: LSA, 2022

Figure 3: Site Plan
 310 N Main Street Project
 Health Risk Assessment



Not to scale

2 ENVIRONMENTAL SETTING

2.1 Climate

The Project is located within San Luis Obispo County, which is part of the South Central Coast Air Basin (SCCAB). The county's climate is characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures prevail most of the year due to the moderating influence of the Pacific Ocean. The effects of the Pacific Ocean are diminished inland and by major intervening terrain features such as coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summertime temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90's. Average minimum winter temperatures range from the low 30's along the coast to the low 20's inland.

Regional meteorology is largely dominated by a persistent high-pressure area which commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific high remains generally fixed several hundred miles offshore from May through September. From November through April the Pacific High tends to migrate southward, allowing northern storms to move across the County. About 90 percent of the total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days.

2.2 Toxic Air Contaminants

Toxic Air Contaminants (TACs) are airborne substances capable of causing short-term (acute) and long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Hazardous Air Pollutants (HAP) is a term used by the Federal Clean Air Act (FCAA) that includes a variety of pollutants generated or emitted by industrial production activities. Identified as TACs under the California Clean Air Act (CCAA), have been singled out through ambient air quality data as being the most substantial health risk in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders. The California Air Resources Board (CARB) provides emission inventories for only the larger air basins.

Industrial facilities and mobile sources are significant sources of TACs. The electronics industry, including semiconductor manufacturing, has the potential to contaminate both air and water due to the highly toxic chlorinated solvents commonly used in semiconductor production processes. In addition to industrial sources, various common urban facilities also produce TAC emissions, such as gasoline stations (benzene), hospitals (ethylene oxide), and dry cleaners (perchloroethylene). Automobile exhaust also contains TACs such as benzene and 1,3-butadiene. Diesel particulate matter (DPM) was identified as a TAC by CARB in 1998. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances.

TACs do not have ambient air quality standards because no safe levels of TACs can be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic “Hot Spots” Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities subject to the toxic emission inventory requirements of the act must prepare and submit toxic emission inventory plans and reports, and periodically update those reports.

Toxic contaminants often result from fugitive emissions during fuel storage and transfer activities, and from leaking valves and pipes. For example, the electronics industry, including semiconductor manufacturing, uses highly toxic chlorinated solvents in semiconductor production processes. Sources of air toxics go beyond industry, however. Automobile exhaust also contains toxic air pollutants such as benzene and 1,3-butadiene.

An *Environmental Science and Technology* study published in 2015 quantified ambient concentration and emission trends between 1990-2012 for seven Toxic Air Contaminants that are responsible for most of the known cancer risk associated with airborne exposure in California¹. The study found that DPM concentrations declined 68 percent, even though the state’s population increased 31 percent, diesel vehicle-miles-traveled increased 81 percent, and the gross state product (GSP) increased 74 percent. The collective cancer risk from exposure to Toxic Air Contaminants declined 76 percent. The study anticipates significant reduction in cancer risk to continue from implementation of air toxics controls (especially for DPM).

In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total DPM emissions, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute about 5 percent of total DPM. CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan (DRRP), the Statewide Portable Equipment Registration Program (PERP), and the Diesel Off-Road Reporting System (DOORS). The PERP and DOORS programs allow owners or operators of portable engines and certain other types of equipment to register their units to operate their equipment throughout California without having to obtain individual permits from local air districts.

As stated above, diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by OEHHA. CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation

¹ Ralph Propper, et al., *Ambient and Emission Trends of Toxic Air Contaminants in California*, Environmental Science and Technology, September 2015.

in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. California has identified diesel exhaust particles as a carcinogen.

The 2015 Advanced Collaborative Emissions Study released by the Health Effects Institute found no evidence of carcinogenic effects from lifetime exposure to new technology diesel exhaust (compliant with 2007 regulations).² The study also confirmed that the concentrations of particulate matter and toxic air pollutants emitted from new technology diesel exhaust are more than 90 percent lower than emissions from traditional older diesel engines.

2.3 Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive receptors in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. For the purposes of this study, sensitive receptors are the on-site residents that would be located within the Project site.

² Health Effects Institute, *Advanced Collaborative Emissions Study (ACES): Lifetime Cancer and Non-Cancer Assessment in Rats Exposed to New-Technology Diesel Exhaust*, January 2015.

3 REGULATORY SETTING

3.1 Federal

Federal Clean Air Act

The FCAA was amended in 1990 to address the numerous air pollutants that are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects. 188 specific pollutants and chemical groups were initially identified as HAPs, and the list has been modified over time. The FCAA Amendments included new regulatory programs to control acid deposition and for the issuance of stationary source operating permits.

In 2001, the United States Environmental Protection Agency (U.S. EPA) issued its first Mobile Source Air Toxics Rule, which identified 21 mobile source air toxic (MSAT) compounds as being HAPs that required regulation. A subset of six of these MSAT compounds were identified as having the greatest influence on health: benzene, 1,3-butadiene, formaldehyde, acrolein, acetaldehyde, and DPM. More recently, the U.S. EPA issued a second MSAT Rule in February 2007, which generally supported the findings in the first rule and provided additional recommendations of compounds having the greatest impact on health. The rule also identified several engine emission certification standards that must be implemented. Unlike the criteria pollutants, toxics do not have National Ambient Air Quality Standards (NAAQS) making evaluation of their impacts less uniform.

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) were incorporated into a greatly expanded program for controlling toxic air pollutants. The provisions for attainment and maintenance of the NAAQS were substantially modified and expanded. Other revisions included provisions regarding stratospheric ozone protection, increased enforcement authority, and expanded research programs.

Section 112 of the FCAA Amendments governs the federal control program for HAPs. NESHAPs are issued to limit the release of specified HAPs from specific industrial sectors. These standards are technology-based, meaning that they represent the best available control technology an industrial sector could afford. The level of emissions controls required by NESHAPs are not based on health risk considerations because allowable releases and resulting concentrations have not been determined to be safe for the public. The FCAA does not establish air quality standards for HAPs that define legally acceptable concentrations of these pollutants in ambient air.

Federal Emissions Standards for On-Road Trucks

To reduce emissions from on-road, heavy-duty diesel trucks, the U.S. EPA established a series of increasingly strict emission standards for new engines, starting in 1988. The U.S. EPA promulgated the final and cleanest standards with the 2007 Heavy-Duty Highway Rule.³ The PM emission standard of 0.01 gram per horsepower-hour (g/hp-hr) is required for new vehicles beginning with model year 2007. Also, the NO_x and nonmethane hydrocarbon (NMHC) standards of 0.20 g/hp-hr and 0.14 g/hp-hr, respectively,

³ United States Environmental Protection Agency (U.S. EPA), *Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements*, Final Rule. 40 Code of Federal Regulations, Parts 69, 80, and 86. January 18, 2001.

were phased in together between 2007 and 2010 on a percent of sales basis: 50 percent from 2007 to 2009 and 100 percent in 2010.

Emission Standards for Nonroad Diesel Engines

To reduce emissions from off-road diesel equipment, the U.S. EPA established a series of cleaner emission standards for new off-road diesel engines. Tier 1 standards were phased in from 1996 to 2000 (year of manufacture), depending on the engine horsepower category. Tier 2 standards were phased in from 2001 to 2006. Tier 3 standards were phased in from 2006 to 2008. Tier 4 standards, which generally require add-on emission control equipment to attain them, are being phased in from 2008 to 2015.

3.2 State of California

California Air Resources Board

CARB's statewide comprehensive air toxics program was established in 1983 with AB 1807 the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (T-BACT) to minimize emissions.

CARB also administers the State's mobile source emissions control program and oversees air quality programs established by State statute, such as AB 2588 and AB 1807. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the AB 2588 was amended by Senate Bill (SB) 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan. AB 1807, the Toxic Air Contaminant Identification and Control Act, is a comprehensive statewide air toxics program that contributes to reduced freeway emissions. This, in turn with regulations CARB has implemented to reduce Toxic Air Contaminant exposure, have led to substantial over time and will continue to improve as the vehicle fleet turns over and older vehicles are retired and are replaced.

Diesel Risk Reduction Plan

The identification of DPM as a TAC in 1998 led CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (DRRP) in October 2000. The DRRP's goals include an 85 percent reduction in DPM by 2020 from the 2000 baseline⁴. CARB estimates that emissions of DPM in 2035 will be less than half those in 2010, further reducing statewide cancer risk and non-cancer health effects.⁵ The DRRP includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

⁴ California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October 2000.

⁵ California Air Resources Board, *Overview: Diesel Exhaust & Health*, available at: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>, accessed on November 2021.

In-Use Off-Road Diesel-Fueled Regulation

California adopted the In-Use Off-road Diesel-fueled Regulation in 2008 to reduce emissions of diesel particulate matter, oxides of nitrogen, other criteria pollutants, and greenhouse gases from off-road diesel-fueled vehicles.

Senate Bill (SB) 210

In 2019, SB 210 directed CARB to develop a Heavy-Duty Inspection and Maintenance Program. Engine and vehicle standards for new heavy-duty vehicles have considerably reduced emissions from the heavy-duty sector. However, when emissions control systems are not operating correctly, in-use nitrogen oxide and particulate matter emissions can significantly increase. CARB's existing programs, the Heavy-Duty Vehicle Inspection Program, and the Periodic Smoke Inspection Program, ensure vehicle emissions control systems are properly operating during periodic testing. CARB is also exploring the development of a more comprehensive Heavy-Duty Inspection and Maintenance Program, to maintain all vehicle emissions control systems throughout the vehicles' operating lives.

California Phase 2 Trailer Certification

The California Phase 2 trailer standards took effect in 2020 for all trailer manufacturers. The standards intend to make trailers more efficient and lower emissions associated with their use. Trailer manufacturers must certify to California standards and receive an Executive Order from CARB to legally sell trailers in California.

Caltrans Statewide Particulate Matter Hotspot Procedures

In addition to the CARB regulations described above, Caltrans guidance provides criteria for determining which roadways may have traffic volumes sufficient to potentially create health impacts. The Caltrans guidance for particulate matter hot spot analysis stems from the U.S. EPA March 10, 2006 Final Rule⁶ and focuses on diesel trucks. The Final Rule indicates that projects may be of concern where total traffic (annual average daily traffic [AADT]) is over 125,000, and diesel trucks are eight percent or more of that traffic. That translates to a diesel truck volume (AADT) of 10,000. Projects that exceed this threshold may still not have significant impacts, and project specific review is required.

Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM and NO_x emissions from existing diesel vehicles operating in California. The regulation requires PM retrofits on all diesel trucks and buses that operate in California (i.e., existing vehicles are required to be upgraded to reduce emissions). Heavier trucks must be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses would need to have 2010 model year engines or equivalent.

The regulation applies to most privately-owned and federally-owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks and

⁶ U.S. Environmental Protection Agency, *40 CFR Part 93, PM_{2.5} and PM₁₀ Hot-Spot Analyses in Project-Level Transportation Conformity Determinations for the New PM_{2.5} and Existing PM₁₀ National Ambient Air Quality Standards; Final Rule*, March 10, 2006.

there are several extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations. Privately and publicly owned school buses have different requirements.

Heavy-Duty Vehicle Idling Emission Reduction Program

The purpose of the CARB ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is to reduce public exposure to diesel particulate matter and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles. The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for greater than five minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system (APS) for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

CARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks, beginning in 2008, would require that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged.

CARB 2017 Technical Advisory (Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways)

CARB published a Technical Advisory in 2017 to provide planners and other stakeholders involved in land use planning and decision-making with information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways. Near-roadway development is a result of a variety of factors, including economic growth, demand for built environment uses, and the scarcity of developable land in some areas. The Technical Advisory notes that research has demonstrated the public health, climate, financial, and other benefits of compact, infill development along transportation corridors, and demonstrates that planners, developers, and local governments can pursue infill development while simultaneously reducing exposure to traffic-related pollution. On-site strategies to remove air pollution identified in the Technical Advisory include the use of particle filtration systems (i.e., high efficiency filtration in mechanical ventilation systems), solid barriers, and vegetation.

California Energy Commission - Title 24 Building Energy Efficiency Standards

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in California Code of Regulations (CCR) Title 24 Part 6, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Energy Standards include requirements for mandatory mechanical ventilation intended to improve indoor air quality in homes, and requirements for Minimum Efficiency Reporting Value (MERV) 13 air filtration on space conditioning systems, and ventilation systems that provide outside air to a dwelling's occupiable space. The Residential Compliance Manual for the 2019 Building Energy Efficiency Standards notes that air filter efficiencies of at least MERV 13 protect occupants from exposure to the smaller airborne particles (i.e., PM_{2.5}) that are known to adversely affect respiratory health. CCR Title 24 Part 6 requires a particle size efficiency rating equal to or greater than 85 percent in the 1.0 to 0.3 µg range.

CalEnviroScreen

OEHHA has developed CalEnviroScreen 4.0, which is a mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the State. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.

According to CalEnviroScreen, the Project site along with its nearest sensitive receptors are located within Census Tract 6079010300, which is within the 20-30 percentile. It should be noted that the CalEnviroScreen scores are not an expression of health risk, and do not provide quantitative information on increases in cumulative impacts for specific sites or projects. Further, as a comparative screening tool, the results do not provide a basis for determining when differences between scores are significant in relation to public health or the environment.

CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission "last-mile" delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- **Zero-Emission Truck Sales:** Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- **Company and Fleet Reporting:** Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Executive Order N-79-20

Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal

toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

3.3 Regional

San Luis Obispo Air Pollution Control District

The SLO APCD is the primary agency responsible for planning to meet NAAQS and California Ambient Air Quality Standards (CAAQS) in San Luis Obispo County. Consistent with State law, it adopted a Clean Air Plan for San Luis Obispo County in 2001 to address attainment of state ozone and particulate matter standards. The 2001 Clean Air Plan outlines the SLO APCD's strategies to reduce emissions from a wide variety of stationary and mobile sources, and a Triennial Report regularly documents the County's progress towards attainment. The County is currently designated as a "nonattainment" area for ozone with respect to the CAAQS and nonattainment for PM₁₀ with respect to the NAAQS and CAAQS.

At the local level, air districts may adopt and enforce CARB control measures. Under SLO APCD Rule 202 ("Permits"), Rule 204 ("Requirements"), and Rule 219 ("Toxics New Source Review"), all sources that possess the potential to emit TACs are required to obtain permits from the SLO APCD. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations and air toxics control measures such as Rule 218 ("Federal Requirements for Hazardous Air Pollutants"), Rule 219 ("Toxics New Source Review"), Rule 308 ("Fees for Air Toxics 'Hot Spots' Program"), Rule 412 ("Airborne Toxic Control Measures"), Rule 418 ("Asbestos Containing Serpentine"), and Rule 701 ("National Emission Standards for Hazardous Air Pollutants"). SLO APCD limits emissions and public exposure to TACs through a number of programs. SLO APCD prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors. Sensitive receptors are people, or facilities that generally house people (e.g., schools, hospitals, residences) that may experience adverse effects from unhealthy concentrations of air pollutants.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Health Risk Analysis Thresholds

Project health risks are determined by examining the types and levels of air toxics generated and the associated impacts on factors that affect air quality.

The SLO County APCD CEQA Air Quality Handbook identifies two types of land use projects that have the potential to cause long-term public health risk impacts:

- **Type A Projects:** new proposed land use projects that generate toxic air contaminants (such as gasoline stations, distribution facilities or asphalt batch plants) that impact sensitive receptors. Air districts across California are uniform in their recommendation to use the significance thresholds that have been established under each district's "Hot Spots" and permitting programs. The SLO County APCD has defined the excess cancer risk significance threshold at 10 in a million for Type A projects in SLO County; and
- **Type B Projects:** new land use projects that will place sensitive receptors (e.g., residential units) in close proximity to existing toxic sources (e.g., freeway). The SLO County APCD has established a CEQA health risk threshold of 89 in-a-million for the analysis of projects proposed in close proximity to toxic sources. This value represents the population weighted average health risk caused by ambient background concentrations of toxic air contaminants in San Luis Obispo County. The SLO County APCD recommends Health Risk screening and, if necessary, Health Risk Assessment (HRA) for any residential or sensitive receptor development proposed in proximity to toxic sources.

Type B HRAs calculate health risk from the existing environment on a project's sensitive receptors (typically residences, schools, day care centers, hospitals, and other sensitive populations). In San Luis Obispo County, the most significant health risk impacts are typically related to diesel truck exhaust impacts from high volume roadways, diesel particulate matter from railroad lines with significant idling potential, and toxic air contaminants and carcinogens.

Cancer risk is expressed in terms of expected incremental incidence per million population. SLO APCD has established an individual project screening assessment incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk. This threshold serves to determine if a given project has a potentially significant development-specific and cumulative impact. The 10 in one million standard is a health-protective significance threshold. A risk level of 10 in one million implies a likelihood that up to 10 persons, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics. To put this risk in perspective, the risk of dying from accidental drowning is 1,000 in one million which is 100 times more than the threshold of 10 in one million.

The SLO APCD uses the non-carcinogenic risk parameters for use in HRAs that are established by CAPCOA. Noncarcinogenic risks are quantified by calculating a hazard index (HI), expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A HI less than 1.0 means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less than significant.

The SLO APCD recommends assessing health risk impacts of development adjacent to Highway 101 and railroads. A 1,000-foot radius is consistent with findings in CARB's Air Quality and Land Use Handbook (2005) and the California Health & Safety Code §42301.6 (Notice for Possible Source Near School). The CARB Air Quality and Land Use Handbook found that TAC concentrations are reduced substantially at a distance 1,000 feet downwind from sources such as freeways or large distribution centers.

CARB's Air Quality and Land Use Handbook (2005) also includes an advisory recommendation to avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day. Although the closest residence in the project would be located approximately 250 feet or more from the freeway, the segment of U.S. 101 adjacent to the project has significantly less than 100,000 daily vehicles. According to the Caltrans Traffic Census, the segment of U.S. 101 has a total daily volume of 65,000 vehicles⁷, which is below the 100,000 vehicles identified in the CARB Air Quality and Land Use Handbook. It should also be noted that the freeway buffer distance of 500 feet reported in the CARB Handbook is based on a study from 2002. The CARB Handbook notes that risk from diesel particulate matter (DPM) will decrease over time as cleaner technology phases in. The CARB Handbook states that to determine the actual risk near a particular facility, a site-specific analysis would be required.⁸ The Health Risk Assessment prepared for the project is a site-specific analysis that demonstrates that impacts would be less than significant. Additionally, it should be noted that the project is approximately 1,600 feet away from the railroad and not within CARB's 1,000-foot advisory distance of 1,000 feet of a major service and maintenance rail yard.

In April 2017 CARB released a Technical Advisory outlining strategies to reduce air pollution exposure near high volume roadways. The Technical Advisory notes that since publication of the 2005 *Air Quality and Land Use Handbook*, research has demonstrated the public health, climate, financial, and other benefits of compact, infill development along transportation corridors. New research has demonstrated promising strategies to help decrease pollution exposure near their sources. Near-roadway development is a result of a variety of factors, including economic growth, demand for built environment uses, and the scarcity of developable land in some areas. The 2017 Technical Advisory demonstrates that planners, developers, and local governments can pursue infill development while simultaneously reducing exposure to traffic-related pollution by implementing strategies and statewide guidance and policies that promote sustainable communities.

The Technical Advisory strategies to increase dispersion of traffic emissions to reduce impacts to proposed residences located near roadways include solid barriers, vegetation, and indoor high efficiency filtration (summarized in Table 1 of the Technical Advisory). However, as discussed in this assessment, the project would not exceed SLO County APCD thresholds. Therefore, these measures would not be required.

Furthermore, as noted above, the project design places the detention basin and open space between the freeway and the residences to orient the sensitive receptors as far away as possible from the freeway, which directly reduces cancer risk.

⁷ California Department of Transportation, *Traffic Census Program*, <https://dot.ca.gov/programs/traffic-operations/census>

⁸ California Air Resources Board, *Air Quality and Land Use Handbook*, pages ES-3, 5, and 50, April 2005.

4.2 Methodology

This HRA evaluates potential health risks associated with exposure of proposed sensitive receptors to emissions from vehicles traveling along the adjacent US-101 freeway.

Emissions Sources

Traffic volumes on US-101 is from Caltrans annual average daily traffic (AADT) data from 2020. According to Caltrans AADT data US-101 has 56,000 total vehicle AADT adjacent to the project site. Approximately 12.37 percent of total vehicle AADT are trucks. This would result in an estimated 6,927 trucks. Adjacent truck traffic from the Project could result in pollutant concentrations at future onsite sensitive receptors. Emission rates for vehicle running for PM_{2.5} (DPM) was calculated using traffic data and CARB 2021 Emission FACTor model version 1.0.1 (EMFAC)⁹ data for San Luis Obispo County; refer to [Appendix A](#). The emissions rate was calculated using 2022 emissions factors since Project construction would be completed in 2022. This approach is conservative as it assumes no cleaner technology in future years.

Dispersion Modeling

The air dispersion modeling for the operational risk assessment was performed using U.S. EPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. AERMOD regulatory defaults, the “Urban” modeling option for the County, and “Elevated” terrain were used for this analysis. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the Project. Surface and upper air meteorological data is provided by CARB. Surface and upper air meteorological data from the Paso Robles Municipal Airport was selected as being the most representative for meteorology based on proximity to the Project site.

The emission sources in the model are line volume sources (comprised of smaller adjacent volume sources) for the north-bound US-101 trucks, south-bound US-101 trucks, north-bound US-101 vehicles and south-bound US-101 vehicles. Heavy duty vehicle emissions were assigned a release height of 10 feet (3.11 meters), a plume height of 20.4 feet (6.22 meters). A release height of 10 feet is the average stack height for trucks and the plume height is based on U.S. EPA guidance for vehicle volume sources. For the vehicles a release height of 3.6 feet (1.1 meters) and plume height of 7.25 feet (2.21 meters).

AERMOD was run to obtain the peak 1-hour, 24-hour and annual (period) average concentration in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) at the future onsite sensitive receptors (as shown on [Figure 4](#)). The annual average concentrations were used to calculate the Maximum Individual Cancer Risk (MICR), the maximum chronic HI, as well as peak hourly concentrations to calculate the health impact from substances with acute non-cancer health effects. To achieve these goals, a receptor grid was placed over the Project site to cover the zone of impact. Due to the size of the Project site, nearby sensitive receptors were modeled with a 35-meter (114.83-foot) grid spacing. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the Project. The modeling and analysis was prepared in accordance with the CEQA Air Quality Handbook from SLOAPCD (2012) and CAPCOA Modeling Guidance (2012).

⁹ California Air Resources Board, *EMFAC 2021 Web Database*, www.arb.ca.gov/emfac/2021/, accessed November 2021.

The cancer risk calculations were based on applying age sensitivity weighting factors for each emissions period modeled. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual. Only the risk associated with the worst-case location of the proposed Project was assessed. Risk levels were calculated according to the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, *Air Toxics Hot Spots Program Risk Assessment Guidelines* (February 2015).

Note that the concentration estimate developed using this methodology is conservative and is not a specific prediction of the actual concentrations that would occur at the Project site at any given point in time. Actual 1-hour and annual average concentrations are dependent on many variables, including specific distances during time periods of adverse meteorology. A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on these worst-case exposure duration scenarios. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual. Only the risk associated with the worst-case location of the Project was assessed.

Risk and Hazard Assessment

Cancer Risk. Based on the OEHHA methodology, residential inhalation cancer risk from annual average DPM and benzene concentrations are calculated by multiplying the daily inhalation dose, cancer potency factor, age sensitivity factor (ASF), frequency of time spent at home, and exposure duration divided by averaging time, yielding the excess cancer risk. These factors are discussed in more detail below. It is important to note that exposure duration is based on continual heavy truck operations along nearby roadways. Exposure through inhalation (Dose-air) is a function of breathing rate, exposure frequency, and concentration of substance in the air. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

$$\text{Dose-air} = C_{\text{air}} * (\text{BR}/\text{BW}) * A * \text{EF} * 10^{-6}$$

Where:

Dose-air	=	dose through inhalation (mg/kg/day)
C_{air}	=	air concentration ($\mu\text{g}/\text{m}^3$) from air dispersion model
(BR/BW)	=	daily breathing rate normalized to body weight (L/kg bodyweight-day)
A	=	inhalation absorption factor (unitless)
EF	=	exposure frequency (approximately 350 days per year for residential)
10^{-6}	=	conversion factor (micrograms to milligrams, liters to cubic meters)

OEHHA developed ASFs to consider the increased sensitivity to carcinogens during early-life exposure. In the absence of chemical-specific data, OEHHA recommends a default ASF presented in [Table 1: Default Age Sensitivity Factors, Fraction of Time at Home, and Daily Breathing Rates](#). Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. OEHHA recommends the FAH values presented in [Table 1](#).

Table 1: Default Age Sensitivity Factors, Fraction of Time at Home, and Daily Breathing Rates

Age	Default Age Sensitivity Factor ¹ (ASF)	Fraction of Time at Home (FAH)	Daily Breathing Rate (L/kg BW-day ²)
Third trimester	10	85%	361
0 to 2 years	10	85%	1,090
Ages 2 through 15 years	3	72%	745
Ages 16 and greater	1	73%	335

1. Accounts for potential increased sensitivity to carcinogens during childhood.
2. 95th percentile daily breathing rate normalized to body weight (L/kg body weight-day)
Source: California Office of Environmental Health Hazard Assessment, *Air Toxics Program Guidance Manual for the Preparation of Health Risk Assessments*, February 2015.

To estimate the cancer risk, the dose is multiplied by the cancer potency factor, the ASF, the exposure duration divided by averaging time, and the frequency of time spent at home (for residents only):

$$\text{Risk}_{\text{inh-res}} = (\text{Dose}_{\text{air}} * \text{CPF} * \text{ASF} * (\text{ED}/\text{AT}) * \text{FAH})$$

Where:

Risk _{inh-res}	=	residential inhalation cancer risk (potential chances per million)
Dose _{air}	=	daily dose through inhalation (mg/kg-day)
CPF	=	inhalation cancer potency factor (mg/kg-day ⁻¹)
ASF	=	age sensitivity factor for a specified age group (unitless)
ED	=	exposure duration (in years) for a specified age group
AT	=	averaging time of lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

Chronic Non-Cancer Hazard. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

$$\text{Hazard Quotient} = C_i / \text{REL}_i$$

Where:

C _i	=	Concentration in the air of substance i (annual average concentration in µg/m ³)
REL _i	=	Chronic noncancer Reference Exposure Level for substance i (µg/m ³)

Acute Non-Cancer Hazard. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts. The equation is as follows:

$$\text{Acute HQ} = \text{Maximum Hourly Air Concentration (µg/m}^3\text{)} / \text{Acute REL (µg/m}^3\text{)}$$

Health Risk Computation

A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 30-year exposure scenario using CARB's Risk Assessment Stand Alone Tool (RAST). Health risk were analyzed at the point of maximum impact and are a conservative estimate. The pollutant concentrations are then used to estimate the long-term cancer health risk to an individual as well as the non-cancer chronic health index.

The off-site impacts would occur from the diesel trucks on the adjacent freeway. The cancer and chronic health risks are based on the annual average concentration of $PM_{2.5}$. As DPM does not have short-term toxicity values, acute risks were conservatively evaluated using hourly $PM_{2.5}$ concentrations and the REL for acrolein. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the U.S. EPA *Human Health Evaluation Manual* (1991) and the OEHHA Guidance Manual (2015).

5 POTENTIAL HEALTH RISK IMPACTS

CARB identified DPM as a TAC in 1998. Mobile sources (including trucks, buses, automobiles, trains, ships, and farm equipment) are by far the largest source of diesel emissions. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Diesel exhaust is composed of two phases, either gas or particulate – both contribute to the risk. The gas phase is composed of many of the urban TACs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particulate phase has many different types that can be classified by size or composition. The sizes of diesel particulates of greatest health concern are fine and ultrafine particles. These particles may be composed of elemental carbon with adsorbed compounds such as organics, sulfates, nitrates, metals, and other trace elements. Diesel exhaust is emitted from a broad range of on- and off-road diesel engines. As the Project includes sensitive receptors adjacent to US-101 an analysis of health risk impacts from TACs was performed.

5.1 Operational Health Risk Analysis

The Project would include 22 single-family residences which would result in residences that would potentially be exposed to health risks due to the proximity to high volume roadways.

Vehicle DPM emissions were estimated using emission factors for coarse particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) generated with the EMFAC developed by CARB. EMFAC is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to project changes in future emissions from on-road mobile sources. EMFAC, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment.

The $PM_{2.5}$ and total organic gases (TOG) for one nearby freeway (US-101) was modeled in AERMOD. Based on the AERMOD outputs, the highest expected annual average diesel $PM_{2.5}$ emission concentrations from diesel truck traffic at the Project site would be $0.038 \mu\text{g}/\text{m}^3$ from US-101. Conservatively assuming no reduction in pollutant concentrations from indoor filters, the exterior $PM_{2.5}$ concentration of $0.038 \mu\text{g}/\text{m}^3$ would result in a cancer risk of 26.08 in one million. This conservatively assumes a 30-year outdoor exposure duration at the closest potential receptor, 95th percentile breathing rates, and no cleaner emissions in future years (i.e., the analysis does not take credit for vehicle fleet turnover and the incorporation of cleaner vehicles over the exposure duration).

The outdoor cancer risk (which does not account for any indoor filtration required by building code) would not exceed the San Luis Obispo (SLO) County Air Pollution Control District (APCD) CEQA health risk threshold of 89 in one million. This threshold applies to sources which are not otherwise directly regulated and represents the health risk caused by ambient concentration of toxics in San Luis Obispo County.¹⁰

CCR Title 24 Part 6 requires new development to use MERV 13 air filtration on space conditioning systems and ventilation systems that provide outside air to the occupiable space of a dwelling. According to the U.S. EPA's *Exposure Factor Handbook* (2011), on average, people spend 90 percent of their time indoors. As residents are not always indoors, the filtration's overall effectiveness accounts for the time spent

¹⁰ SLO County APCD, *CEQA Air Quality Handbook*, 2012.

outdoors, which equates to approximately three hours per day. It is noted that this is a conservative assumption for this Project, as all the time spent outdoors would not occur at the Project site. The Project's MERV 13 air filtration systems have an average particle size removal efficiency of approximately 75 percent for 0.3 to 1.0 $\mu\text{g}/\text{m}^3$ (DPM) and 90 percent for 1.0 to 10 $\mu\text{g}/\text{m}^3$ (PM_{10} and $\text{PM}_{2.5}$) based on ASHRAE Standard 52.2. The filters would be installed in residential units prior to occupancy, and maintenance with filters of the same value would be included in the Project's operation and maintenance manual. Based on the particle removal efficiency and the percentage of time indoors, MERV 13 filters would reduce exposure to particulates by approximately 70 percent.

For this Project, annual average $\text{PM}_{2.5}$ emission factors were generated by running EMFAC for vehicles in San Luis Obispo County. EMFAC generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of vehicle speed, temperature, and relative humidity.

Based on the AERMOD outputs, the Project's MERV 13 air filtration systems would reduce the highest expected annual average diesel $\text{PM}_{2.5}$ emission concentrations from traffic on US-101 to the future onsite sensitive receptors to 0.0115 $\mu\text{g}/\text{m}^3$ in the opening year. The highest expected hourly TOG emission concentrations from automobile traffic at the Project site would be 0.11 $\mu\text{g}/\text{m}^3$ (no reduction was applied to TOG concentrations). The calculations conservatively assume no cleaner technology with lower emissions in future years. As shown in [Table 2: Operational Risk Assessment Results](#), the highest calculated carcinogenic risk resulting from the Project is 10. per million residents, which is below the threshold of 89 per million. Acute and chronic hazards also would be below the threshold of 1.0.

Table 2: Operational Risk Assessment Results

Exposure Scenario	Pollutant Concentration ($\mu\text{g}/\text{m}^3$)	Maximum Cancer Risk (Risk per Million)	Chronic Noncancer Hazard	Acute Noncancer Hazard
US-101 ($\text{PM}_{2.5}$) ³	0.0115	7.82	0.0017	0.00
US-101 (TOG)	0.1110	1.77	0.0024	0.0012
Total	0.1215	9.59	0.0041	0.0012
<i>Threshold</i>	<i>NA</i>	<i>89 in one million</i>	<i>1.0</i>	<i>1.0</i>
Exceed Threshold?	No	No	No	No
1. Refer to Appendix A: Modeling Data . 2. The maximum cancer would be experienced at the single-family residences nearest to the freeway based on worst-case exposure durations for the Project, 95 th percentile breathing rates, and 30-year averaging time. 3. Includes MERV 13 filters required by current building code.				

The pollutant concentrations modeled in AERMOD represent the exposure levels outdoors. The analysis conservatively does not include indoor exposure adjustments for residents. However, the typical person spends the majority of time indoors rather than remaining outdoors in the same location for 24 hours a day.¹¹ Therefore, the AERMOD outdoor pollutant concentrations are not necessarily representative of actual exposure at the Project site and tend to overestimate exposure. The risk calculations are based on the pollutant concentration at the worst-case location and conservatively assume: no cleaner technology or lower emissions in future years, and 95th percentile breathing rates. [Table 2](#) shows the cancer risk at the Project site would be less than significant.

¹¹ California Air Resources Board Research Division and University of California, Berkeley, *Activity Patterns of California Residents*, May 1991. The study indicates that on average, adults and adolescents in California spent almost 15 hours per day inside their homes, and 6 hours in other indoor locations, for a total of 21 hours (87% of the day). Approximately two hours per day were spent in transit, and just over one hour per day was spent in outdoor locations.

Conclusion

As described above, impacts related to cancer risk would be less than significant. Additionally, non-carcinogenic hazards are calculated to be within acceptable limits. Therefore, impacts related to health risk from the Project would be less than significant.

Appendix A

Modeling Data

Traffic Volumes

From	AADT	Percent Trucks	Truck ADT	Other Vehicle ADT
US 101	56000	12.37%	6,927	49,073

Source: Caltrans Traffic Data Branch, 2020 Annual Average Daily Truck Traffic Volumes, <https://dot.ca.gov/programs/traffic-operations/census>

2023

Freeway Emissions	Speed (mph)	Trips (veh/day)	Emission Factor (g/mi)	Length (mi)	Emissions (g/day)	Emission Rate (g/sec)	Total Emission Rate (g/sec)
NB 65 MPH Truck Traffic	65	3,464	2.61E-02	0.51	4.58E+01	5.30E-04	5.30E-04
SB 65 MPH Truck Traffic	65	3,464	2.61E-02	0.51	4.64E+01	5.37E-04	5.37E-04
NB 65 MPH Auto Traffic	65	24,536	3.45E-02	0.51	4.30E+02	4.97E-03	4.97E-03
SB 65 MPH Auto Traffic	65	24,536	3.45E-02	0.51	4.35E+02	5.03E-03	5.03E-03

Source: EMFAC2021 (v1.0.1) Emission Rates

Region Type: Sub-Area

Region: San Luis Obispo (SCC)

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	miles/day Total VMT	gr/miles PM2.5_RUNEX	gr/day Weighted	gr/miles TOG_RUNEX	gr/day Weighted
San Luis Obispo (SCC)	2022	HHDT	Aggregate	65	Gasoline	17.523452	0.005382805	0.094325327	3.114457049	54.57603909
San Luis Obispo (SCC)	2022	HHDT	Aggregate	65	Diesel	41519.953	0.033625185	1396.1161	0.023700272	984.0341975
San Luis Obispo (SCC)	2022	HHDT	Aggregate	65	Natural Ga	632.4834	0	0	1.46752718	928.1865789
San Luis Obispo (SCC)	2022	LDA	Aggregate	65	Gasoline	1526365.8	0.00219507	3350.479106	0.018181213	27751.18172
San Luis Obispo (SCC)	2022	LDA	Aggregate	65	Diesel	12574.359	0.001259187	15.83346574	0.031785815	399.6862499
San Luis Obispo (SCC)	2022	LDA	Aggregate	65	Electricity	127.72126	0.017101622	2.184240662	0	0
San Luis Obispo (SCC)	2022	LDA	Aggregate	65	Plug-in Hyt	19610.304	0	0	0.002518129	49.38127712
San Luis Obispo (SCC)	2022	LDT1	Aggregate	65	Gasoline	191741.34	0.00132722	254.4829088	0.06026762	11555.79415
San Luis Obispo (SCC)	2022	LDT1	Aggregate	65	Diesel	115.4162	0.002238806	0.258394426	0.379103976	43.75473937
San Luis Obispo (SCC)	2022	LDT1	Aggregate	65	Electricity	0.6805602	0.259434192	0.176560578	0	0
San Luis Obispo (SCC)	2022	LDT1	Aggregate	65	Plug-in Hyt	36.562025	0	0	0.002517972	0.092062151
San Luis Obispo (SCC)	2022	LDT2	Aggregate	65	Gasoline	845236.83	0.000864417	730.6372143	0.020677763	17477.60689
San Luis Obispo (SCC)	2022	LDT2	Aggregate	65	Diesel	4337.2989	0.001284692	5.572092296	0.012341719	53.52972272
San Luis Obispo (SCC)	2022	LDT2	Aggregate	65	Electricity	2.7896904	0.005826053	0.016252884	0	0
San Luis Obispo (SCC)	2022	LDT2	Aggregate	65	Plug-in Hyt	2028.8462	0	0	0.00251805	5.108735976
San Luis Obispo (SCC)	2022	MCY	Aggregate	65	Gasoline	17671.66	0.001052735	18.60358053	1.855372461	32787.51095
San Luis Obispo (SCC)	2022	MDV	Aggregate	65	Gasoline	618070.93	0.001246091	770.1728957	0.035198359	21755.0824
San Luis Obispo (SCC)	2022	MDV	Aggregate	65	Diesel	19797.257	0.025363327	502.1243018	0.012894523	255.2761902
San Luis Obispo (SCC)	2022	MDV	Aggregate	65	Electricity	2.8154538	0.00104692	0.002947554	0	0
San Luis Obispo (SCC)	2022	MDV	Aggregate	65	Plug-in Hyt	1673.4081	0.022848098	38.23419178	0.00251813	4.213859418
San Luis Obispo (SCC)	2022	MH	Aggregate	65	Gasoline	3119.8158	0.00181359	5.658067148	0.103622862	323.2842403
San Luis Obispo (SCC)	2022	MH	Aggregate	65	Diesel	1499.0326	0.001354578	2.030556008	0.073491558	110.1662382
San Luis Obispo (SCC)	2022	MHDT	Aggregate	65	Gasoline	3097.3632	0.00905194	28.03714547	0.177450554	549.6288072
San Luis Obispo (SCC)	2022	MHDT	Aggregate	65	Diesel	9303.3265	0	0	0.030352901	282.3829494
San Luis Obispo (SCC)	2022	OBUS	Aggregate	65	Gasoline	1558.6048	0.001354469	2.1110819	0.124714948	194.3813103
San Luis Obispo (SCC)	2022	OBUS	Aggregate	65	Diesel	639.77113	0.001179131	0.754374053	0.02418781	15.47466277
San Luis Obispo (SCC)	2022	OBUS	Aggregate	65	Natural Ga	0.0001646	0.150739826	2.48118E-05	0.301419754	4.96138E-05
San Luis Obispo (SCC)	2022	SBUS	Aggregate	65	Gasoline	138.93516	0.000949389	0.131903489	0.12058197	16.75307535
San Luis Obispo (SCC)	2022	SBUS	Aggregate	65	Diesel	236.87062	0.014466506	3.42669028	0.059959754	14.20270426
San Luis Obispo (SCC)	2022	UBUS	Aggregate	65	Gasoline	6.7728206	0	0	0.014011186	0.09489525
San Luis Obispo (SCC)	2022	UBUS	Aggregate	65	Diesel	130.78425	0.000603953	0.078987482	0.045108066	5.89942444

DPM (Trucks)

0.0260992 gr/miles

TOG (All Other Vehicles)

0.0345357 gr/miles

Toxic Air Contaminant Concentrations 2022

INDEX	POLID	Pollutant	Percentage	µgr/m3	µgr/m3	µgr/m3	µgr/m3
			Mass Fraction	AERMOD Annual	Annual MER Concentration	Aermod Hourly	Acute Concentration
1	75070	Acetaldehyde	2.80E-03	0.42832	1.20E-03	2.18444	6.12E-03
2	107028	Acrolein	1.30E-03		5.57E-04		2.84E-03
3	71432	Benzene	2.83E-02		1.21E-02		6.18E-02
4	106990	1,3-Butadiene	5.50E-03		2.36E-03		1.20E-02
5	100414	Ethyl benzene	1.17E-02		5.01E-03		2.56E-02
6	50000	Formaldehyde	1.58E-02		6.77E-03		3.45E-02
7	110543	Hexane	3.14E-02		1.34E-02		6.86E-02
8	67561	Methanol	1.20E-03		5.14E-04		2.62E-03
9	78933	Methyl Ethyl Ketone	2.00E-04		8.57E-05		4.37E-04
10	91203	Naphthalene	5.00E-04		2.14E-04		1.09E-03
11	115071	Propylene	3.06E-02		1.31E-02		6.68E-02
12	100425	Styrene	1.20E-03		5.14E-04		2.62E-03
13	108883	Toluene	7.46E-02		3.20E-02		1.63E-01
14	1330207	Xylenes	5.38E-02		2.30E-02		1.18E-01

HARP 2 Risk Summary

INDEX	POLID/CAS	Pollutant	Cancer		Chronic		Acute	
			CONC	INH_RISK	RESP	CONC	RESP	
1	9901	DieselEvhPM	3.83E-02	2.61E-05	7.65E-03	2.16E-01	0.00E+00	
2	75070	Acetaldehyde	1.20E-03	7.44E-09	8.57E-06	6.12E-03	1.30E-05	
3	107028	Acrolein	5.57E-04	0.00E+00	1.59E-03	2.84E-03	1.14E-03	
4	71432	Benzene	1.21E-02	7.50E-07	0.00E+00	6.18E-02	0.00E+00	
5	106990	1,3-Butadiene	2.36E-03	8.78E-07	0.00E+00	1.20E-02	0.00E+00	
6	100414	Ethyl Benzene	5.01E-03	2.70E-08	0.00E+00	2.56E-02	0.00E+00	
7	50000	Formaldehyde	6.77E-03	8.81E-08	7.52E-04	3.45E-02	0.00E+00	
8	110543	Hexane	1.34E-02	0.00E+00	0.00E+00	6.86E-02	0.00E+00	
9	67561	Methanol	5.14E-04	0.00E+00	0.00E+00	2.62E-03	0.00E+00	
10	78933	Methyl Ethyl Ketone	8.57E-05	0.00E+00	0.00E+00	4.37E-04	3.36E-08	
11	91203	Naphthalene	2.14E-04	1.59E-08	2.38E-05	1.09E-03	0.00E+00	
12	115071	Propylene	1.31E-02	0.00E+00	4.37E-06	6.68E-02	0.00E+00	
13	100425	Styrene	5.14E-04	0.00E+00	0.00E+00	2.62E-03	1.25E-07	
14	108883	Toluene	3.20E-02	0.00E+00	0.00E+00	1.63E-01	3.26E-05	
15	1330207	Xylenes	2.30E-02	0.00E+00	3.29E-05	1.18E-01	5.36E-06	
		Total with DPM	1.49E-01	2.78E-05	1.01E-02		1.19E-03	
		Total without DPM	1.11E-01	1.77E-06	2.41E-03	5.66E-01	1.19E-03	
		Risk per Million (DPM)		26.08				
		Risk per Million (TOG)		1.77				

	Hourly	24-hour	Period	
Non-MERV	0.21568		0.08527	0.03825
With MERV	0.064704		0.025581	0.011475

HARP 2 Risk Summary (MERV13)

INDEX	POLID/CAS	Pollutant	Outdoor		Cancer	Chronic	Acute	
			CONC	INH_RISK	RESP	CONC	RESP	
1	9901	DieselExhPM	1.15E-02	7.82E-06	1.68E-03	6.47E-02	0.00E+00	
		Total with DPM	0.01148	0.00001	0.00168		0.00000	
		Risk per Million (DPM)		7.82				

```
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.0.1
** Lakes Environmental Software Inc.
** Date: 10/5/2022
** File: C:\Lakes\AERMOD View\SLO HRA\SLO HRA\Revised Run\SLO HRA_DPM_REV\SLO
HRA_DPM_REV.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\SLO HRA\SLO HRA\Revised Run\SLO
HRA_DPM_REV\SLO
  MODELOPT DFAULT CONC
  AVERTIME 1 24 PERIOD
  URBANOPT 283111 San_Luis_Obispo_Population
  POLLUTID PM_2.5
  RUNORNOT RUN
  ERRORFIL "SLO HRA_DPM_REV.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC 101 Trucks NB
** PREFIX
** Length of Side = 8.50
** Configuration = Adjacent
```

** Emission Rate = 0.00053
 ** Vertical Dimension = 6.22
 ** SZINIT = 2.89
 ** Nodes = 2
 ** 708191.303, 3938070.417, 243.94, 3.11, 3.95
 ** 707725.634, 3937400.074, 255.05, 3.11, 3.95

** -----

LOCATION	VOLUME	708188.878	3938066.927	244.29
LOCATION L0000772	VOLUME	708188.878	3938066.927	244.29
LOCATION L0000773	VOLUME	708184.029	3938059.946	244.53
LOCATION L0000774	VOLUME	708179.179	3938052.965	244.84
LOCATION L0000775	VOLUME	708174.330	3938045.984	244.99
LOCATION L0000776	VOLUME	708169.480	3938039.003	245.00
LOCATION L0000777	VOLUME	708164.631	3938032.022	245.00
LOCATION L0000778	VOLUME	708159.781	3938025.041	245.00
LOCATION L0000779	VOLUME	708154.932	3938018.060	245.00
LOCATION L0000780	VOLUME	708150.082	3938011.080	245.00
LOCATION L0000781	VOLUME	708145.233	3938004.099	245.00
LOCATION L0000782	VOLUME	708140.384	3937997.118	245.01
LOCATION L0000783	VOLUME	708135.534	3937990.137	245.00
LOCATION L0000784	VOLUME	708130.685	3937983.156	245.00
LOCATION L0000785	VOLUME	708125.835	3937976.175	245.00
LOCATION L0000786	VOLUME	708120.986	3937969.194	245.00
LOCATION L0000787	VOLUME	708116.136	3937962.213	244.94
LOCATION L0000788	VOLUME	708111.287	3937955.232	244.71
LOCATION L0000789	VOLUME	708106.438	3937948.251	244.48
LOCATION L0000790	VOLUME	708101.588	3937941.271	244.25
LOCATION L0000791	VOLUME	708096.739	3937934.290	244.01
LOCATION L0000792	VOLUME	708091.889	3937927.309	243.78
LOCATION L0000793	VOLUME	708087.040	3937920.328	243.55
LOCATION L0000794	VOLUME	708082.190	3937913.347	243.32
LOCATION L0000795	VOLUME	708077.341	3937906.366	243.08
LOCATION L0000796	VOLUME	708072.491	3937899.385	242.70
LOCATION L0000797	VOLUME	708067.642	3937892.404	242.24
LOCATION L0000798	VOLUME	708062.793	3937885.423	241.77
LOCATION L0000799	VOLUME	708057.943	3937878.442	241.30
LOCATION L0000800	VOLUME	708053.094	3937871.462	240.81
LOCATION L0000801	VOLUME	708048.244	3937864.481	240.18
LOCATION L0000802	VOLUME	708043.395	3937857.500	239.55
LOCATION L0000803	VOLUME	708038.545	3937850.519	238.92
LOCATION L0000804	VOLUME	708033.696	3937843.538	238.31
LOCATION L0000805	VOLUME	708028.847	3937836.557	237.88
LOCATION L0000806	VOLUME	708023.997	3937829.576	237.52
LOCATION L0000807	VOLUME	708019.148	3937822.595	237.29
LOCATION L0000808	VOLUME	708014.298	3937815.614	237.06

LOCATION	L0000809	VOLUME	708009.449	3937808.633	237.00
LOCATION	L0000810	VOLUME	708004.599	3937801.653	237.00
LOCATION	L0000811	VOLUME	707999.750	3937794.672	237.00
LOCATION	L0000812	VOLUME	707994.901	3937787.691	237.00
LOCATION	L0000813	VOLUME	707990.051	3937780.710	237.00
LOCATION	L0000814	VOLUME	707985.202	3937773.729	237.00
LOCATION	L0000815	VOLUME	707980.352	3937766.748	237.00
LOCATION	L0000816	VOLUME	707975.503	3937759.767	237.00
LOCATION	L0000817	VOLUME	707970.653	3937752.786	237.17
LOCATION	L0000818	VOLUME	707965.804	3937745.805	238.52
LOCATION	L0000819	VOLUME	707960.954	3937738.824	240.38
LOCATION	L0000820	VOLUME	707956.105	3937731.844	242.28
LOCATION	L0000821	VOLUME	707951.256	3937724.863	244.10
LOCATION	L0000822	VOLUME	707946.406	3937717.882	244.52
LOCATION	L0000823	VOLUME	707941.557	3937710.901	244.93
LOCATION	L0000824	VOLUME	707936.707	3937703.920	245.56
LOCATION	L0000825	VOLUME	707931.858	3937696.939	246.29
LOCATION	L0000826	VOLUME	707927.008	3937689.958	246.75
LOCATION	L0000827	VOLUME	707922.159	3937682.977	246.94
LOCATION	L0000828	VOLUME	707917.310	3937675.996	246.97
LOCATION	L0000829	VOLUME	707912.460	3937669.015	246.86
LOCATION	L0000830	VOLUME	707907.611	3937662.035	246.67
LOCATION	L0000831	VOLUME	707902.761	3937655.054	246.57
LOCATION	L0000832	VOLUME	707897.912	3937648.073	246.78
LOCATION	L0000833	VOLUME	707893.062	3937641.092	247.14
LOCATION	L0000834	VOLUME	707888.213	3937634.111	247.65
LOCATION	L0000835	VOLUME	707883.363	3937627.130	248.52
LOCATION	L0000836	VOLUME	707878.514	3937620.149	249.33
LOCATION	L0000837	VOLUME	707873.665	3937613.168	250.03
LOCATION	L0000838	VOLUME	707868.815	3937606.187	250.35
LOCATION	L0000839	VOLUME	707863.966	3937599.206	250.62
LOCATION	L0000840	VOLUME	707859.116	3937592.226	250.80
LOCATION	L0000841	VOLUME	707854.267	3937585.245	250.91
LOCATION	L0000842	VOLUME	707849.417	3937578.264	250.94
LOCATION	L0000843	VOLUME	707844.568	3937571.283	250.98
LOCATION	L0000844	VOLUME	707839.719	3937564.302	251.24
LOCATION	L0000845	VOLUME	707834.869	3937557.321	251.45
LOCATION	L0000846	VOLUME	707830.020	3937550.340	251.57
LOCATION	L0000847	VOLUME	707825.170	3937543.359	251.62
LOCATION	L0000848	VOLUME	707820.321	3937536.378	251.74
LOCATION	L0000849	VOLUME	707815.471	3937529.397	251.93
LOCATION	L0000850	VOLUME	707810.622	3937522.417	252.23
LOCATION	L0000851	VOLUME	707805.772	3937515.436	252.55
LOCATION	L0000852	VOLUME	707800.923	3937508.455	252.98

LOCATION L0000853	VOLUME	707796.074	3937501.474	253.37
LOCATION L0000854	VOLUME	707791.224	3937494.493	253.68
LOCATION L0000855	VOLUME	707786.375	3937487.512	253.91
LOCATION L0000856	VOLUME	707781.525	3937480.531	254.09
LOCATION L0000857	VOLUME	707776.676	3937473.550	254.25
LOCATION L0000858	VOLUME	707771.826	3937466.569	254.41
LOCATION L0000859	VOLUME	707766.977	3937459.588	254.57
LOCATION L0000860	VOLUME	707762.128	3937452.608	254.73
LOCATION L0000861	VOLUME	707757.278	3937445.627	254.89
LOCATION L0000862	VOLUME	707752.429	3937438.646	255.06
LOCATION L0000863	VOLUME	707747.579	3937431.665	255.22
LOCATION L0000864	VOLUME	707742.730	3937424.684	255.38
LOCATION L0000865	VOLUME	707737.880	3937417.703	255.43
LOCATION L0000866	VOLUME	707733.031	3937410.722	255.39
LOCATION L0000867	VOLUME	707728.181	3937403.741	255.28

** End of LINE VOLUME Source ID = SLINE1

** -----

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE2

** DESCRSRC 101 Trucks SB

** PREFIX

** Length of Side = 8.50

** Configuration = Adjacent

** Emission Rate = 0.000537

** Vertical Dimension = 6.22

** SZINIT = 2.89

** Nodes = 3

** 708169.324, 3938086.901, 244.15, 3.11, 3.95

** 707985.255, 3937803.928, 237.00, 3.11, 3.95

** 707700.908, 3937406.943, 255.71, 3.11, 3.95

** -----

LOCATION L0000675	VOLUME	708167.007	3938083.338	244.25
LOCATION L0000676	VOLUME	708162.372	3938076.213	244.55
LOCATION L0000677	VOLUME	708157.737	3938069.088	244.77
LOCATION L0000678	VOLUME	708153.102	3938061.963	244.92
LOCATION L0000679	VOLUME	708148.467	3938054.838	245.00
LOCATION L0000680	VOLUME	708143.833	3938047.713	245.01
LOCATION L0000681	VOLUME	708139.198	3938040.587	245.16
LOCATION L0000682	VOLUME	708134.563	3938033.462	245.32
LOCATION L0000683	VOLUME	708129.928	3938026.337	245.47
LOCATION L0000684	VOLUME	708125.293	3938019.212	245.53
LOCATION L0000685	VOLUME	708120.659	3938012.087	245.47
LOCATION L0000686	VOLUME	708116.024	3938004.961	245.35
LOCATION L0000687	VOLUME	708111.389	3937997.836	245.12

LOCATION	L0000688	VOLUME	708106.754	3937990.711	245.00
LOCATION	L0000689	VOLUME	708102.119	3937983.586	245.00
LOCATION	L0000690	VOLUME	708097.484	3937976.461	245.00
LOCATION	L0000691	VOLUME	708092.850	3937969.335	245.00
LOCATION	L0000692	VOLUME	708088.215	3937962.210	244.94
LOCATION	L0000693	VOLUME	708083.580	3937955.085	244.71
LOCATION	L0000694	VOLUME	708078.945	3937947.960	244.47
LOCATION	L0000695	VOLUME	708074.310	3937940.835	244.23
LOCATION	L0000696	VOLUME	708069.675	3937933.709	243.99
LOCATION	L0000697	VOLUME	708065.041	3937926.584	243.76
LOCATION	L0000698	VOLUME	708060.406	3937919.459	243.52
LOCATION	L0000699	VOLUME	708055.771	3937912.334	243.28
LOCATION	L0000700	VOLUME	708051.136	3937905.209	242.95
LOCATION	L0000701	VOLUME	708046.501	3937898.084	242.36
LOCATION	L0000702	VOLUME	708041.866	3937890.958	241.73
LOCATION	L0000703	VOLUME	708037.232	3937883.833	241.10
LOCATION	L0000704	VOLUME	708032.597	3937876.708	240.47
LOCATION	L0000705	VOLUME	708027.962	3937869.583	239.84
LOCATION	L0000706	VOLUME	708023.327	3937862.458	239.22
LOCATION	L0000707	VOLUME	708018.692	3937855.332	238.69
LOCATION	L0000708	VOLUME	708014.057	3937848.207	238.24
LOCATION	L0000709	VOLUME	708009.423	3937841.082	237.91
LOCATION	L0000710	VOLUME	708004.788	3937833.957	237.67
LOCATION	L0000711	VOLUME	708000.153	3937826.832	237.43
LOCATION	L0000712	VOLUME	707995.518	3937819.706	237.19
LOCATION	L0000713	VOLUME	707990.883	3937812.581	237.00
LOCATION	L0000714	VOLUME	707986.248	3937805.456	237.00
LOCATION	L0000715	VOLUME	707981.366	3937798.500	237.00
LOCATION	L0000716	VOLUME	707976.417	3937791.589	237.00
LOCATION	L0000717	VOLUME	707971.467	3937784.679	237.00
LOCATION	L0000718	VOLUME	707966.518	3937777.769	237.00
LOCATION	L0000719	VOLUME	707961.568	3937770.859	237.15
LOCATION	L0000720	VOLUME	707956.618	3937763.948	237.66
LOCATION	L0000721	VOLUME	707951.669	3937757.038	238.48
LOCATION	L0000722	VOLUME	707946.719	3937750.128	239.99
LOCATION	L0000723	VOLUME	707941.770	3937743.218	241.84
LOCATION	L0000724	VOLUME	707936.820	3937736.307	243.62
LOCATION	L0000725	VOLUME	707931.871	3937729.397	245.30
LOCATION	L0000726	VOLUME	707926.921	3937722.487	246.73
LOCATION	L0000727	VOLUME	707921.971	3937715.577	247.32
LOCATION	L0000728	VOLUME	707917.022	3937708.666	248.00
LOCATION	L0000729	VOLUME	707912.072	3937701.756	248.74
LOCATION	L0000730	VOLUME	707907.123	3937694.846	249.57
LOCATION	L0000731	VOLUME	707902.173	3937687.935	249.50

LOCATION L0000732	VOLUME	707897.224	3937681.025	249.14
LOCATION L0000733	VOLUME	707892.274	3937674.115	248.94
LOCATION L0000734	VOLUME	707887.324	3937667.205	248.89
LOCATION L0000735	VOLUME	707882.375	3937660.294	249.11
LOCATION L0000736	VOLUME	707877.425	3937653.384	249.59
LOCATION L0000737	VOLUME	707872.476	3937646.474	250.11
LOCATION L0000738	VOLUME	707867.526	3937639.564	250.44
LOCATION L0000739	VOLUME	707862.577	3937632.653	250.77
LOCATION L0000740	VOLUME	707857.627	3937625.743	251.10
LOCATION L0000741	VOLUME	707852.678	3937618.833	251.43
LOCATION L0000742	VOLUME	707847.728	3937611.923	251.76
LOCATION L0000743	VOLUME	707842.778	3937605.012	252.04
LOCATION L0000744	VOLUME	707837.829	3937598.102	252.06
LOCATION L0000745	VOLUME	707832.879	3937591.192	252.11
LOCATION L0000746	VOLUME	707827.930	3937584.281	252.24
LOCATION L0000747	VOLUME	707822.980	3937577.371	252.44
LOCATION L0000748	VOLUME	707818.031	3937570.461	252.64
LOCATION L0000749	VOLUME	707813.081	3937563.551	252.70
LOCATION L0000750	VOLUME	707808.131	3937556.640	252.74
LOCATION L0000751	VOLUME	707803.182	3937549.730	252.85
LOCATION L0000752	VOLUME	707798.232	3937542.820	253.06
LOCATION L0000753	VOLUME	707793.283	3937535.910	253.39
LOCATION L0000754	VOLUME	707788.333	3937528.999	253.72
LOCATION L0000755	VOLUME	707783.384	3937522.089	254.05
LOCATION L0000756	VOLUME	707778.434	3937515.179	254.38
LOCATION L0000757	VOLUME	707773.484	3937508.269	254.64
LOCATION L0000758	VOLUME	707768.535	3937501.358	254.82
LOCATION L0000759	VOLUME	707763.585	3937494.448	254.92
LOCATION L0000760	VOLUME	707758.636	3937487.538	254.95
LOCATION L0000761	VOLUME	707753.686	3937480.627	255.03
LOCATION L0000762	VOLUME	707748.737	3937473.717	255.30
LOCATION L0000763	VOLUME	707743.787	3937466.807	255.49
LOCATION L0000764	VOLUME	707738.837	3937459.897	255.61
LOCATION L0000765	VOLUME	707733.888	3937452.986	255.67
LOCATION L0000766	VOLUME	707728.938	3937446.076	255.84
LOCATION L0000767	VOLUME	707723.989	3937439.166	256.00
LOCATION L0000768	VOLUME	707719.039	3937432.256	256.17
LOCATION L0000769	VOLUME	707714.090	3937425.345	256.33
LOCATION L0000770	VOLUME	707709.140	3937418.435	256.32
LOCATION L0000771	VOLUME	707704.190	3937411.525	256.25

** End of LINE VOLUME Source ID = SLINE2

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM L0000772	0.000005521	3.11	3.95	2.89
-------------------	-------------	------	------	------

SRCPARAM L0000861	0.000005521	3.11	3.95	2.89
SRCPARAM L0000862	0.000005521	3.11	3.95	2.89
SRCPARAM L0000863	0.000005521	3.11	3.95	2.89
SRCPARAM L0000864	0.000005521	3.11	3.95	2.89
SRCPARAM L0000865	0.000005521	3.11	3.95	2.89
SRCPARAM L0000866	0.000005521	3.11	3.95	2.89
SRCPARAM L0000867	0.000005521	3.11	3.95	2.89

** -----

** LINE VOLUME Source ID = SLINE2

SRCPARAM L0000675	0.000005536	3.11	3.95	2.89
SRCPARAM L0000676	0.000005536	3.11	3.95	2.89
SRCPARAM L0000677	0.000005536	3.11	3.95	2.89
SRCPARAM L0000678	0.000005536	3.11	3.95	2.89
SRCPARAM L0000679	0.000005536	3.11	3.95	2.89
SRCPARAM L0000680	0.000005536	3.11	3.95	2.89
SRCPARAM L0000681	0.000005536	3.11	3.95	2.89
SRCPARAM L0000682	0.000005536	3.11	3.95	2.89
SRCPARAM L0000683	0.000005536	3.11	3.95	2.89
SRCPARAM L0000684	0.000005536	3.11	3.95	2.89
SRCPARAM L0000685	0.000005536	3.11	3.95	2.89
SRCPARAM L0000686	0.000005536	3.11	3.95	2.89
SRCPARAM L0000687	0.000005536	3.11	3.95	2.89
SRCPARAM L0000688	0.000005536	3.11	3.95	2.89
SRCPARAM L0000689	0.000005536	3.11	3.95	2.89
SRCPARAM L0000690	0.000005536	3.11	3.95	2.89
SRCPARAM L0000691	0.000005536	3.11	3.95	2.89
SRCPARAM L0000692	0.000005536	3.11	3.95	2.89
SRCPARAM L0000693	0.000005536	3.11	3.95	2.89
SRCPARAM L0000694	0.000005536	3.11	3.95	2.89
SRCPARAM L0000695	0.000005536	3.11	3.95	2.89
SRCPARAM L0000696	0.000005536	3.11	3.95	2.89
SRCPARAM L0000697	0.000005536	3.11	3.95	2.89
SRCPARAM L0000698	0.000005536	3.11	3.95	2.89
SRCPARAM L0000699	0.000005536	3.11	3.95	2.89
SRCPARAM L0000700	0.000005536	3.11	3.95	2.89
SRCPARAM L0000701	0.000005536	3.11	3.95	2.89
SRCPARAM L0000702	0.000005536	3.11	3.95	2.89
SRCPARAM L0000703	0.000005536	3.11	3.95	2.89
SRCPARAM L0000704	0.000005536	3.11	3.95	2.89
SRCPARAM L0000705	0.000005536	3.11	3.95	2.89
SRCPARAM L0000706	0.000005536	3.11	3.95	2.89
SRCPARAM L0000707	0.000005536	3.11	3.95	2.89
SRCPARAM L0000708	0.000005536	3.11	3.95	2.89
SRCPARAM L0000709	0.000005536	3.11	3.95	2.89

SRCPARAM L0000754	0.000005536	3.11	3.95	2.89
SRCPARAM L0000755	0.000005536	3.11	3.95	2.89
SRCPARAM L0000756	0.000005536	3.11	3.95	2.89
SRCPARAM L0000757	0.000005536	3.11	3.95	2.89
SRCPARAM L0000758	0.000005536	3.11	3.95	2.89
SRCPARAM L0000759	0.000005536	3.11	3.95	2.89
SRCPARAM L0000760	0.000005536	3.11	3.95	2.89
SRCPARAM L0000761	0.000005536	3.11	3.95	2.89
SRCPARAM L0000762	0.000005536	3.11	3.95	2.89
SRCPARAM L0000763	0.000005536	3.11	3.95	2.89
SRCPARAM L0000764	0.000005536	3.11	3.95	2.89
SRCPARAM L0000765	0.000005536	3.11	3.95	2.89
SRCPARAM L0000766	0.000005536	3.11	3.95	2.89
SRCPARAM L0000767	0.000005536	3.11	3.95	2.89
SRCPARAM L0000768	0.000005536	3.11	3.95	2.89
SRCPARAM L0000769	0.000005536	3.11	3.95	2.89
SRCPARAM L0000770	0.000005536	3.11	3.95	2.89
SRCPARAM L0000771	0.000005536	3.11	3.95	2.89

** -----

URBANSRC ALL
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED "SLO_HRA_DPM_REV.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE ..\..\723965.SFC

PROFFILE ..\..\723965.PFL

SURFDATA 93209 2009

UAIRDATA 93214 2009

PROFBASE 246.9 METERS

ME FINISHED

```
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
  RECTABLE ALLAVE 1ST
  RECTABLE 1 1ST
  RECTABLE 24 1ST
** Auto-Generated Plotfiles
  PLOTFILE 1 ALL 1ST "SLO HRA_DPM_REV.AD\01H1GALL.PLT" 31
  PLOTFILE 24 ALL 1ST "SLO HRA_DPM_REV.AD\24H1GALL.PLT" 32
  PLOTFILE PERIOD ALL "SLO HRA_DPM_REV.AD\PE00GALL.PLT" 33
  SUMMFILE "SLO HRA_DPM_REV.sum"
OU FINISHED
**
*****
** Project Parameters
*****
** PROJCTN  CoordinateSystemUTM
** DESCPTN  UTM: Universal Transverse Mercator
** DATUM    World Geodetic System 1984
** DTMRGN   Global Definition
** UNITS    m
** ZONE     10
** ZONEINX  0
**
```

```

**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 11.0.1
** Lakes Environmental Software Inc.
** Date: 10/5/2022
** File: C:\Lakes\AERMOD View\SLO HRA\SLO HRA\SLO HRA TOG\SLO HRA TOG.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\SLO HRA\SLO HRA\SLO HRA TOG\SLO HRA TOG.isc
  MODELOPT DFAULT CONC
  AVERTIME 1 24 PERIOD
  URBANOPT 283111 San_Luis_Obispo_Population
  POLLUTID TOG
  RUNORNOT RUN
  ERRORFIL "SLO HRA TOG.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC 101 Autos NB
** PREFIX
** Length of Side = 7.10
** Configuration = Adjacent
** Emission Rate = 0.00497
** Vertical Dimension = 2.21
** SZINIT = 1.03
** Nodes = 2
** 708191.303, 3938070.417, 243.23, 1.10, 3.30
** 707725.634, 3937400.074, 255.54, 1.10, 3.30
** -----
  LOCATION L000483      VOLUME   708189.277 3938067.502 245.28

```

LOCATION	L0000484	VOLUME	708185.227	3938061.671	245.44
LOCATION	L0000485	VOLUME	708181.176	3938055.839	245.59
LOCATION	L0000486	VOLUME	708177.125	3938050.008	245.70
LOCATION	L0000487	VOLUME	708173.075	3938044.177	245.79
LOCATION	L0000488	VOLUME	708169.024	3938038.346	245.86
LOCATION	L0000489	VOLUME	708164.973	3938032.515	245.94
LOCATION	L0000490	VOLUME	708160.922	3938026.684	246.00
LOCATION	L0000491	VOLUME	708156.872	3938020.853	246.05
LOCATION	L0000492	VOLUME	708152.821	3938015.022	246.07
LOCATION	L0000493	VOLUME	708148.770	3938009.191	246.09
LOCATION	L0000494	VOLUME	708144.720	3938003.360	246.10
LOCATION	L0000495	VOLUME	708140.669	3937997.528	246.11
LOCATION	L0000496	VOLUME	708136.618	3937991.697	246.11
LOCATION	L0000497	VOLUME	708132.567	3937985.866	246.09
LOCATION	L0000498	VOLUME	708128.517	3937980.035	246.04
LOCATION	L0000499	VOLUME	708124.466	3937974.204	245.99
LOCATION	L0000500	VOLUME	708120.415	3937968.373	245.93
LOCATION	L0000501	VOLUME	708116.365	3937962.542	245.87
LOCATION	L0000502	VOLUME	708112.314	3937956.711	245.78
LOCATION	L0000503	VOLUME	708108.263	3937950.880	245.65
LOCATION	L0000504	VOLUME	708104.213	3937945.048	245.51
LOCATION	L0000505	VOLUME	708100.162	3937939.217	245.36
LOCATION	L0000506	VOLUME	708096.111	3937933.386	245.20
LOCATION	L0000507	VOLUME	708092.060	3937927.555	245.03
LOCATION	L0000508	VOLUME	708088.010	3937921.724	244.70
LOCATION	L0000509	VOLUME	708083.959	3937915.893	244.37
LOCATION	L0000510	VOLUME	708079.908	3937910.062	244.03
LOCATION	L0000511	VOLUME	708075.858	3937904.231	243.67
LOCATION	L0000512	VOLUME	708071.807	3937898.400	243.32
LOCATION	L0000513	VOLUME	708067.756	3937892.569	242.92
LOCATION	L0000514	VOLUME	708063.705	3937886.737	242.51
LOCATION	L0000515	VOLUME	708059.655	3937880.906	242.10
LOCATION	L0000516	VOLUME	708055.604	3937875.075	241.66
LOCATION	L0000517	VOLUME	708051.553	3937869.244	241.22
LOCATION	L0000518	VOLUME	708047.503	3937863.413	240.78
LOCATION	L0000519	VOLUME	708043.452	3937857.582	240.34
LOCATION	L0000520	VOLUME	708039.401	3937851.751	239.91
LOCATION	L0000521	VOLUME	708035.351	3937845.920	239.47
LOCATION	L0000522	VOLUME	708031.300	3937840.089	239.03
LOCATION	L0000523	VOLUME	708027.249	3937834.257	238.61
LOCATION	L0000524	VOLUME	708023.198	3937828.426	238.34
LOCATION	L0000525	VOLUME	708019.148	3937822.595	238.10
LOCATION	L0000526	VOLUME	708015.097	3937816.764	237.86
LOCATION	L0000527	VOLUME	708011.046	3937810.933	237.64
LOCATION	L0000528	VOLUME	708006.996	3937805.102	237.46
LOCATION	L0000529	VOLUME	708002.945	3937799.271	237.40
LOCATION	L0000530	VOLUME	707998.894	3937793.440	237.40
LOCATION	L0000531	VOLUME	707994.843	3937787.609	237.40
LOCATION	L0000532	VOLUME	707990.793	3937781.778	237.41
LOCATION	L0000533	VOLUME	707986.742	3937775.946	237.41

LOCATION L0000534	VOLUME	707982.691	3937770.115	237.46
LOCATION L0000535	VOLUME	707978.641	3937764.284	237.83
LOCATION L0000536	VOLUME	707974.590	3937758.453	238.39
LOCATION L0000537	VOLUME	707970.539	3937752.622	239.16
LOCATION L0000538	VOLUME	707966.489	3937746.791	240.14
LOCATION L0000539	VOLUME	707962.438	3937740.960	241.32
LOCATION L0000540	VOLUME	707958.387	3937735.129	242.49
LOCATION L0000541	VOLUME	707954.336	3937729.298	243.64
LOCATION L0000542	VOLUME	707950.286	3937723.466	244.77
LOCATION L0000543	VOLUME	707946.235	3937717.635	245.88
LOCATION L0000544	VOLUME	707942.184	3937711.804	246.98
LOCATION L0000545	VOLUME	707938.134	3937705.973	247.54
LOCATION L0000546	VOLUME	707934.083	3937700.142	247.58
LOCATION L0000547	VOLUME	707930.032	3937694.311	247.73
LOCATION L0000548	VOLUME	707925.981	3937688.480	248.00
LOCATION L0000549	VOLUME	707921.931	3937682.649	248.37
LOCATION L0000550	VOLUME	707917.880	3937676.818	248.82
LOCATION L0000551	VOLUME	707913.829	3937670.987	248.68
LOCATION L0000552	VOLUME	707909.779	3937665.155	248.34
LOCATION L0000553	VOLUME	707905.728	3937659.324	248.21
LOCATION L0000554	VOLUME	707901.677	3937653.493	248.29
LOCATION L0000555	VOLUME	707897.627	3937647.662	248.59
LOCATION L0000556	VOLUME	707893.576	3937641.831	249.24
LOCATION L0000557	VOLUME	707889.525	3937636.000	249.83
LOCATION L0000558	VOLUME	707885.474	3937630.169	249.94
LOCATION L0000559	VOLUME	707881.424	3937624.338	250.08
LOCATION L0000560	VOLUME	707877.373	3937618.507	250.30
LOCATION L0000561	VOLUME	707873.322	3937612.676	250.68
LOCATION L0000562	VOLUME	707869.272	3937606.844	251.21
LOCATION L0000563	VOLUME	707865.221	3937601.013	251.65
LOCATION L0000564	VOLUME	707861.170	3937595.182	251.85
LOCATION L0000565	VOLUME	707857.119	3937589.351	252.01
LOCATION L0000566	VOLUME	707853.069	3937583.520	252.17
LOCATION L0000567	VOLUME	707849.018	3937577.689	252.29
LOCATION L0000568	VOLUME	707844.967	3937571.858	252.41
LOCATION L0000569	VOLUME	707840.917	3937566.027	252.51
LOCATION L0000570	VOLUME	707836.866	3937560.196	252.62
LOCATION L0000571	VOLUME	707832.815	3937554.364	252.76
LOCATION L0000572	VOLUME	707828.765	3937548.533	252.93
LOCATION L0000573	VOLUME	707824.714	3937542.702	253.14
LOCATION L0000574	VOLUME	707820.663	3937536.871	253.37
LOCATION L0000575	VOLUME	707816.612	3937531.040	253.61
LOCATION L0000576	VOLUME	707812.562	3937525.209	253.86
LOCATION L0000577	VOLUME	707808.511	3937519.378	254.11
LOCATION L0000578	VOLUME	707804.460	3937513.547	254.40
LOCATION L0000579	VOLUME	707800.410	3937507.716	254.69
LOCATION L0000580	VOLUME	707796.359	3937501.885	254.97
LOCATION L0000581	VOLUME	707792.308	3937496.053	255.24
LOCATION L0000582	VOLUME	707788.257	3937490.222	255.43
LOCATION L0000583	VOLUME	707784.207	3937484.391	255.56

LOCATION	VOLUME				
L0000584	707780.156	3937478.560	255.67		
L0000585	707776.105	3937472.729	255.77		
L0000586	707772.055	3937466.898	255.86		
L0000587	707768.004	3937461.067	255.95		
L0000588	707763.953	3937455.236	256.00		
L0000589	707759.903	3937449.405	256.04		
L0000590	707755.852	3937443.573	256.07		
L0000591	707751.801	3937437.742	256.10		
L0000592	707747.750	3937431.911	256.13		
L0000593	707743.700	3937426.080	256.15		
L0000594	707739.649	3937420.249	256.22		
L0000595	707735.598	3937414.418	256.29		
L0000596	707731.548	3937408.587	256.36		
L0000597	707727.497	3937402.756	256.43		

** End of LINE VOLUME Source ID = SLINE1

**

** Line Source Represented by Adjacent Volume Sources

** LINE VOLUME Source ID = SLINE2

** DESCRSRC 101 Trucks SB

** PREFIX

** Length of Side = 7.10

** Configuration = Adjacent

** Emission Rate = 0.00503

** Vertical Dimension = 2.21

** SZINIT = 1.03

** Nodes = 3

** 708169.324, 3938086.901, 243.71, 1.10, 3.30

** 707985.255, 3937803.928, 240.23, 1.10, 3.30

** 707700.908, 3937406.943, 257.49, 1.10, 3.30

**

LOCATION	VOLUME				
L0000905	708167.389	3938083.925	245.43		
L0000906	708163.517	3938077.974	245.57		
L0000907	708159.646	3938072.022	245.70		
L0000908	708155.774	3938066.070	245.82		
L0000909	708151.903	3938060.119	245.92		
L0000910	708148.031	3938054.167	246.02		
L0000911	708144.160	3938048.215	246.08		
L0000912	708140.288	3938042.264	246.14		
L0000913	708136.417	3938036.312	246.18		
L0000914	708132.545	3938030.361	246.23		
L0000915	708128.674	3938024.409	246.26		
L0000916	708124.803	3938018.457	246.27		
L0000917	708120.931	3938012.506	246.26		
L0000918	708117.060	3938006.554	246.25		
L0000919	708113.188	3938000.602	246.24		
L0000920	708109.317	3937994.651	246.23		
L0000921	708105.445	3937988.699	246.20		
L0000922	708101.574	3937982.748	246.14		
L0000923	708097.702	3937976.796	246.07		
L0000924	708093.831	3937970.844	246.01		

LOCATION	L0000925	VOLUME	708089.960	3937964.893	245.94
LOCATION	L0000926	VOLUME	708086.088	3937958.941	245.87
LOCATION	L0000927	VOLUME	708082.217	3937952.989	245.72
LOCATION	L0000928	VOLUME	708078.345	3937947.038	245.55
LOCATION	L0000929	VOLUME	708074.474	3937941.086	245.37
LOCATION	L0000930	VOLUME	708070.602	3937935.135	245.18
LOCATION	L0000931	VOLUME	708066.731	3937929.183	244.98
LOCATION	L0000932	VOLUME	708062.859	3937923.231	244.68
LOCATION	L0000933	VOLUME	708058.988	3937917.280	244.31
LOCATION	L0000934	VOLUME	708055.117	3937911.328	243.93
LOCATION	L0000935	VOLUME	708051.245	3937905.376	243.54
LOCATION	L0000936	VOLUME	708047.374	3937899.425	243.14
LOCATION	L0000937	VOLUME	708043.502	3937893.473	242.72
LOCATION	L0000938	VOLUME	708039.631	3937887.521	242.27
LOCATION	L0000939	VOLUME	708035.759	3937881.570	241.82
LOCATION	L0000940	VOLUME	708031.888	3937875.618	241.33
LOCATION	L0000941	VOLUME	708028.016	3937869.667	240.82
LOCATION	L0000942	VOLUME	708024.145	3937863.715	240.31
LOCATION	L0000943	VOLUME	708020.273	3937857.763	239.86
LOCATION	L0000944	VOLUME	708016.402	3937851.812	239.43
LOCATION	L0000945	VOLUME	708012.531	3937845.860	239.02
LOCATION	L0000946	VOLUME	708008.659	3937839.908	238.61
LOCATION	L0000947	VOLUME	708004.788	3937833.957	238.21
LOCATION	L0000948	VOLUME	708000.916	3937828.005	237.97
LOCATION	L0000949	VOLUME	707997.045	3937822.054	237.78
LOCATION	L0000950	VOLUME	707993.173	3937816.102	237.63
LOCATION	L0000951	VOLUME	707989.302	3937810.150	237.51
LOCATION	L0000952	VOLUME	707985.430	3937804.199	237.42
LOCATION	L0000953	VOLUME	707981.308	3937798.418	237.36
LOCATION	L0000954	VOLUME	707977.174	3937792.646	237.35
LOCATION	L0000955	VOLUME	707973.039	3937786.874	237.36
LOCATION	L0000956	VOLUME	707968.905	3937781.102	237.38
LOCATION	L0000957	VOLUME	707964.771	3937775.330	237.44
LOCATION	L0000958	VOLUME	707960.636	3937769.558	237.70
LOCATION	L0000959	VOLUME	707956.502	3937763.786	238.80
LOCATION	L0000960	VOLUME	707952.368	3937758.014	239.96
LOCATION	L0000961	VOLUME	707948.233	3937752.242	241.19
LOCATION	L0000962	VOLUME	707944.099	3937746.469	242.49
LOCATION	L0000963	VOLUME	707939.965	3937740.697	243.85
LOCATION	L0000964	VOLUME	707935.830	3937734.925	245.02
LOCATION	L0000965	VOLUME	707931.696	3937729.153	246.13
LOCATION	L0000966	VOLUME	707927.562	3937723.381	247.29
LOCATION	L0000967	VOLUME	707923.427	3937717.609	248.52
LOCATION	L0000968	VOLUME	707919.293	3937711.837	249.82
LOCATION	L0000969	VOLUME	707915.159	3937706.065	250.82
LOCATION	L0000970	VOLUME	707911.024	3937700.293	251.00
LOCATION	L0000971	VOLUME	707906.890	3937694.521	251.04
LOCATION	L0000972	VOLUME	707902.755	3937688.748	251.19
LOCATION	L0000973	VOLUME	707898.621	3937682.976	251.45
LOCATION	L0000974	VOLUME	707894.487	3937677.204	251.82

LOCATION L0000975	VOLUME	707890.352	3937671.432	251.90
LOCATION L0000976	VOLUME	707886.218	3937665.660	251.94
LOCATION L0000977	VOLUME	707882.084	3937659.888	251.86
LOCATION L0000978	VOLUME	707877.949	3937654.116	251.85
LOCATION L0000979	VOLUME	707873.815	3937648.344	251.89
LOCATION L0000980	VOLUME	707869.681	3937642.572	252.01
LOCATION L0000981	VOLUME	707865.546	3937636.799	252.22
LOCATION L0000982	VOLUME	707861.412	3937631.027	252.38
LOCATION L0000983	VOLUME	707857.278	3937625.255	252.46
LOCATION L0000984	VOLUME	707853.143	3937619.483	252.57
LOCATION L0000985	VOLUME	707849.009	3937613.711	252.69
LOCATION L0000986	VOLUME	707844.875	3937607.939	252.86
LOCATION L0000987	VOLUME	707840.740	3937602.167	253.03
LOCATION L0000988	VOLUME	707836.606	3937596.395	253.17
LOCATION L0000989	VOLUME	707832.472	3937590.623	253.31
LOCATION L0000990	VOLUME	707828.337	3937584.851	253.44
LOCATION L0000991	VOLUME	707824.203	3937579.078	253.57
LOCATION L0000992	VOLUME	707820.069	3937573.306	253.70
LOCATION L0000993	VOLUME	707815.934	3937567.534	253.85
LOCATION L0000994	VOLUME	707811.800	3937561.762	254.03
LOCATION L0000995	VOLUME	707807.666	3937555.990	254.24
LOCATION L0000996	VOLUME	707803.531	3937550.218	254.46
LOCATION L0000997	VOLUME	707799.397	3937544.446	254.71
LOCATION L0000998	VOLUME	707795.263	3937538.674	254.95
LOCATION L0000999	VOLUME	707791.128	3937532.902	255.20
LOCATION L0001000	VOLUME	707786.994	3937527.129	255.38
LOCATION L0001001	VOLUME	707782.859	3937521.357	255.55
LOCATION L0001002	VOLUME	707778.725	3937515.585	255.74
LOCATION L0001003	VOLUME	707774.591	3937509.813	255.92
LOCATION L0001004	VOLUME	707770.456	3937504.041	256.08
LOCATION L0001005	VOLUME	707766.322	3937498.269	256.23
LOCATION L0001006	VOLUME	707762.188	3937492.497	256.36
LOCATION L0001007	VOLUME	707758.053	3937486.725	256.47
LOCATION L0001008	VOLUME	707753.919	3937480.953	256.55
LOCATION L0001009	VOLUME	707749.785	3937475.181	256.61
LOCATION L0001010	VOLUME	707745.650	3937469.408	256.65
LOCATION L0001011	VOLUME	707741.516	3937463.636	256.69
LOCATION L0001012	VOLUME	707737.382	3937457.864	256.74
LOCATION L0001013	VOLUME	707733.247	3937452.092	256.80
LOCATION L0001014	VOLUME	707729.113	3937446.320	256.85
LOCATION L0001015	VOLUME	707724.979	3937440.548	256.90
LOCATION L0001016	VOLUME	707720.844	3937434.776	256.95
LOCATION L0001017	VOLUME	707716.710	3937429.004	256.99
LOCATION L0001018	VOLUME	707712.576	3937423.232	257.10
LOCATION L0001019	VOLUME	707708.441	3937417.460	257.22
LOCATION L0001020	VOLUME	707704.307	3937411.687	257.35

** End of LINE VOLUME Source ID = SLINE2

** Source Parameters **

** LINE VOLUME Source ID = SLINE1

SRCPARAM L0000483	0.0000432174	1.10	3.30	1.03
-------------------	--------------	------	------	------

SRCPARAM	L0000584	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000585	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000586	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000587	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000588	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000589	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000590	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000591	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000592	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000593	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000594	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000595	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000596	0.0000432174	1.10	3.30	1.03
SRCPARAM	L0000597	0.0000432174	1.10	3.30	1.03

**

** LINE VOLUME Source ID = SLINE2

SRCPARAM	L0000905	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000906	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000907	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000908	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000909	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000910	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000911	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000912	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000913	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000914	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000915	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000916	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000917	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000918	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000919	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000920	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000921	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000922	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000923	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000924	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000925	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000926	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000927	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000928	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000929	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000930	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000931	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000932	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000933	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000934	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000935	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000936	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000937	0.0000433621	1.10	3.30	1.03
SRCPARAM	L0000938	0.0000433621	1.10	3.30	1.03

SRCPARAM L0000989	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000990	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000991	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000992	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000993	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000994	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000995	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000996	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000997	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000998	0.0000433621	1.10	3.30	1.03
SRCPARAM L0000999	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001000	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001001	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001002	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001003	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001004	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001005	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001006	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001007	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001008	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001009	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001010	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001011	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001012	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001013	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001014	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001015	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001016	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001017	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001018	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001019	0.0000433621	1.10	3.30	1.03
SRCPARAM L0001020	0.0000433621	1.10	3.30	1.03

** -----

URBANSRC ALL
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING
INCLUDED "SLO HRA TOG.rou"

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING
SURFFILE ..\723965.SFC
PROFFILE ..\723965.PFL
SURFDATA 93209 2009
UAIRDATA 93214 2009
PROFBASE 246.9 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING
RECTABLE ALLAVE 1ST
RECTABLE 1 1ST
RECTABLE 24 1ST

** Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST "SLO HRA TOG.AD\01H1GALL.PLT" 31
PLOTFILE 24 ALL 1ST "SLO HRA TOG.AD\24H1GALL.PLT" 32
PLOTFILE PERIOD ALL "SLO HRA TOG.AD\PE00GALL.PLT" 33
SUMMFILE "SLO HRA TOG.sum"

OU FINISHED

**

** Project Parameters

** PROJCTN CoordinateSystemUTM
** DESCPTN UTM: Universal Transverse Mercator
** DATUM World Geodetic System 1984
** DTMRGN Global Definition
** UNITS m
** ZONE 10
** ZONEINX 0

**

*HARP - HRACalc v22094 10/20/2022 3:10:57 PM - Cancer Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\SLO HRA\Revised 2022\PM2.5_MERV_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK	WATER_RISK	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISK
1			9901	DieselExhPM	0.011475	7.82E-06	30YrCancerHighEnd_Inh_FAH3to70	*	7.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
									PIG_RISK	CHICKEN_RISK	EGG_RISK	1ST_DRIVER	2ND_DRIVER	PASTURE_CONC	FISH_CONC	WATER_CONC	
									0.00E+00	0.00E+00	0.00E+00	NA	NA	0.00E+00	0.00E+00	0.00E+00	

*HARP - HRACalc v22094 10/20/2022 3:10:57 PM - Acute Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\SLO HRA\Revised 2022\PM2.5_MERV_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL						
1			9901	DieselExhPM	0.064704	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00						
							RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL				
							0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00				

*HARP - HRACalc v22094 10/20/2022 3:10:57 PM - Chronic Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\SLO HRA\Revised 2022\PM2.5_MERV_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRQ/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL
1			9901	DieselExhPM	0.011475	NonCancerChronicHighEnd_Inh	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
DETAILS							INH_CONC	SOIL_DOSE	DERMAL_DOSE	MMILK_DOSE	WATER_DOSE	FISH_DOSE	CROP_DOSE	BEEF_DOSE	DAIRY_DOSE	PIG_DOSE	CHICKEN_DOSE	EGG_DOSE		
*							1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
1ST_DRIVER							2ND_DRIVER	3RD_DRIVER	PASTURE_CONC	FISH_CONC	WATER_CONC									
INHALATION							NA	NA	0.00E+00	0.00E+00	0.00E+00									

*HARP - HRACalc v22094 10/5/2022 9:35:58 AM - Cancer Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\SLO HRA\Revised 2022\PM2.5_Rev_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK	WATER_RISK	FISH_RISK	CROP_RISK	
1			9901	DieselExhPM	0.03825	2.61E-05	30YrCancerDerived_Inh_FAH3to70	*	2.61E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
									BEEF_RISK	DAIRY_RISK	PIG_RISK	CHICKEN_RISK	EGG_RISK	1ST_DRIVER	2ND_DRIVER	PASTURE_CONC
									0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	INHALATION		0.00E+00
									FISH_CONC	WATER_CONC						
									0.00E+00	0.00E+00						

*HARP - HRACalc v22094 10/5/2022 9:35:58 AM - Acute Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\SLO HRA\Revised 2022\PM2.5_Rev_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DE\RES	SKIN
1			9901	DieselExhPM	0.21568	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
								EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL
								0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*HARP - HRACalc v22094 10/5/2022 9:35:58 AM - Chronic Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\SLO HRA\Revised 2022\PM2.5_Rev_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL			
1			9901	DieselExhPM	0.03825	NonCancerChronicDerived_Inh	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
DETAILS							INH_CONC	SOIL_DOSE	DERMAL_DOSE	MMILK_DOSE	WATER_DOSE	FISH_DOSE	CROP_DOSE	BEEF_DOSE	DAIRY_DOSE	PIG_DOSE	CHICKEN_DOSE	EGG_DOSE					
*							3.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
							1ST_DRIVER	2ND_DRIVER	3RD_DRIVER	PASTURE_CONC	FISH_CONC	WATER_CONC											
							INHALATION				0.00E+00	0.00E+00	0.00E+00										

*HARP - HRACalc v22094 10/19/2022 11:10:22 PM - Acute Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\SLO HRA\Revised 2022\TOG_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVE	RESP
1			75070	Acetaldehyde	0.00612	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-05
10			91203	Naphthalene	0.00109	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11			115071	Propylene	0.0668	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
12			100425	Styrene	0.00262	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-07	1.25E-07
13			108883	Toluene	0.163	NonCancerAcute	0.00E+00	3.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.26E-05
14			1330207	Xylenes	0.118	NonCancerAcute	0.00E+00	5.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-06
2			107028	Acrolein	0.00284	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03
3			71432	Benzene	0.0618	NonCancerAcute	0.00E+00	0.00E+00	2.29E-03	0.00E+00	0.00E+00	2.29E-03	0.00E+00
4			106990	1,3-Butadiene	0.012	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-05	0.00E+00
5			100414	Ethyl Benzene	0.0256	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6			50000	Formaldehyde	0.0345	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7			110543	Hexane	0.0686	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8			67561	Methanol	0.00262	NonCancerAcute	0.00E+00	9.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9			78933	MEK	0.000437	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-08

SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL
0.00E+00	1.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	1.25E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	3.26E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	5.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	1.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.29E-03	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	6.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	3.36E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

6 REFERENCES

1. California Air Pollution Control Officers Association, *Health Risk Assessment for Proposed Land Use Projects*, July 2009.
2. California Air Resources Board Research Division and University of California, Berkeley, *Activity Patterns of California Residents*, May 1991.
3. California Air Resources Board, *EMFAC 2021 Web Database*, Available at: www.arb.ca.gov/emfac/2021/, November 2021.
4. California Air Resources Board, *Overview: Diesel Exhaust & Health*, available at: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>, accessed November 2021.
5. California Air Resources Board, *Meteorological Files*, Available at: <https://ww3.arb.ca.gov/toxics/harp/metfiles2.htm>, accessed November 2021.
6. California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October 2000.
7. California Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, August 2003.
8. California Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidance Manual for Preparation of Health Risk Assessments*, February 2015.
9. California Office of Environmental Health Hazard Assessment, *CalEnviroScreen 4.0*, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>, accessed November 2021.
10. Caltrans, *Traffic Census Program*, <https://dot.ca.gov/programs/traffic-operations/census>
11. Health Effects Institute, *Advanced Collaborative Emissions Study (ACES): Lifetime Cancer and Non-Cancer Assessment in Rats Exposed to New-Technology Diesel Exhaust*, January 2015.
12. Lakes Environmental, *AERMOD View Gaussian Plume Air Dispersion Model*, Version 10.0.0
13. Ralph Propper, et al., *Ambient and Emission Trends of Toxic Air Contaminants in California*, Environmental Science and Technology, September 2015.
14. San Luis Obispo County Air Pollution Control District, *Rules and Regulations*, <https://www.slocleanair.org/rules-regulations/apcd-rules--regulations.php>
15. SLO APCD, *Land Use & CEQA*, <https://www.slocleanair.org/rules-regulations/land-use-ceqa.php>
16. United States Environmental Protection Agency, *Exposure Factors Handbook: 2011 Edition*, September 2011.

APPENDIX D

Biological Resources Assessment

**301 NORTH MAIN STREET, TEMPLETON,
SAN LUIS OBISPO COUNTY, CALIFORNIA**

(Assessor's Parcel Number 040-201-033)

BIOLOGICAL RESOURCES ASSESSMENT



Prepared for:

The Mittry Farms Trust
P.O. Box 338
Sultana, California 93666

Prepared by:



Kevin Merk Associates, LLC
P.O. Box 318
San Luis Obispo, California 93406

October 19, 2022

AUTHENTICITY AND SIGNATURE PAGE

As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visits associated with this report.



Kevin Merk
Principal Biologist

10/19/22
Date

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY.....	ii
1.0 INTRODUCTION.....	1
1.1 Project Description	1
1.2. Regulatory Overview	4
2.0 METHODS.....	8
3.0 RESULTS.....	9
3.1 Existing Conditions	10
3.2 Soils.....	10
3.3 Hydrologic Features, Wetlands and Riparian Habitats.....	12
3.4 Habitat Classification	13
3.5 Special-status Biological Resources	15
4.0 IMPACT ANALYSIS AND RECOMMENDED MITIGATION.....	24
4.1 Direct and Indirect Effects.....	25
4.2 Cumulative Effects.....	34
5.0 CONCLUSIONS	35
6.0 REFERENCES.....	35

LIST OF FIGURES

Figure 1 – Site Location Map	2
Figure 2 – Aerial Overview Map	3
Figure 3 – Soils Map	11
Figure 4 – Habitat Map	14
Figure 5 – CNDDDB Plant Occurrences Map.....	16
Figure 6 – CNDDDB Animal Occurrences and Critical Habitat Map	17

LIST OF TABLES

Table 1 – Erosion Control Native Seed Mix.....	31
--	----

APPENDICES

- Appendix A – Site Plans
- Appendix B – List of Plants and Animals Observed Onsite During the Site Visits
- Appendix C – Photo Plate
- Appendix D – Special-status Biological Resources Summary

EXECUTIVE SUMMARY

Kevin Merk Associates, LLC conducted this biological resources assessment (BRA) for a proposed residential subdivision located at 301 North Main Street, in the unincorporated community of Templeton, San Luis Obispo County, California (Assessor's Parcel Number 040-201-033 ["property"]). The property is zoned Commercial Retail (C-R) and is within the Templeton Urban Reserve Line. The approximately 10-acre parcel is currently used for livestock grazing/staging, and is undeveloped. The project proposes to subdivide the existing parcel into 22 residential lots with a gated private drive (total development footprint 6.55 acres). A landscaped open space buffer (2.44 acres) would be along the west and south sides of the property incorporating an unnamed ephemeral stream. Two retention basins (1.03 acres) would be along the east side of the development. One large valley oak (*Quercus lobata*) tree would be retained and has been incorporated into the project design, and one valley oak that is in poor health and one dead pine tree would be removed.

The property is disturbed by cattle grazing and may have been previously farmed. The property was characterized as having one habitat type, Non-native Grassland, which was dominated by non-native weedy species, grazed to low height and had bare soils where cattle congregate. An ephemeral stream was vegetated by upland grassland species and there were no wetland or riparian habitats on or adjacent to the site. There was no evidence of flow in the drainage, but due to its connection with the Salinas River and the presence of a defined bed and bank, it would likely be under jurisdiction of the United States Army Corps of Engineers and Regional Water Quality Control Board under the Clean Water Act as a Non-wetland Other Waters of the United States and State of California. The California Department of Fish and Wildlife would also claim jurisdiction over the stream course. The extent of the federal and state jurisdictional area is within the top of bank and was delineated on project plans for avoidance and developing the required setback from residences. The County of San Luis Obispo requires a 50-foot setback from the top of bank, and the project maintains an approximate 60-foot buffer from the limits of the stream channel. No encroachment is proposed on the stream at this time, but should the limits of grading change requiring impacts to the ephemeral stream, permitting from the regulatory agencies would be required. Best Management Practices are also recommended to avoid or minimize sediment and/or pollutants from entering surface waters during construction.

The property has low habitat value for special-status plants and animals because it is a heavily grazed grassland with few resources. No special-status plant species were found during the field surveys, and none are expected to occur due to the disturbed conditions of the site. Most of the surrounding area has been developed for various uses; thus, the site does not abut larger open space areas of intact native habitats. The onsite drainage is an ephemeral swale that may rarely contain water and as such would not provide habitat for aquatic species. Special-status bird and bat species are likely to forage over the site on occasion, but habitat loss of approximately 6.55 acres of disturbed grassland would be less than significant under CEQA due to the site's small size, degraded quality of the habitat, location, and lack of significant habitat features such as woodland or aquatic resources.

Individuals of special-status animal species that could be present onsite on a transitory basis and for which the effects of project activities are expected to be less than significant include American peregrine falcon (*Falco peregrinus anatum*), bald eagle (*Haliaeetus leucocephalus*), Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), great blue heron (*Ardea herodias*), Lawrence's goldfinch (*Spinus lawrencei*), Lewis's woodpecker (*Melanerpes lewis*), loggerhead shrike (*Lanius ludovicianus*), merlin (*Falco columbarius*), northern harrier (*Circus*

cyaneus), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), prairie falcon (*Falco mexicanus*), rufous hummingbird (*Selasphorus rufus*), sharp-shinned hawk (*Accipiter striatus*), tricolored blackbird (*Agelaius tricolor*) and western red bat (*Lasiurus blossevillii*).

California horned lark (*Eremophila alpestris actia*), grasshopper sparrow (*Ammodramus savannarum*), purple martin (*Progne subis*), white-tailed kite (*Elanus leucurus*) and yellow-billed magpie (*Pica nuttallii*), as well as common species protected under the Migratory Bird Treaty Act and California Fish and Game Code, could nest in the trees or grassland habitat. Special-status bat species could roost in the foliage of the valley oak trees (hoary bat [*Lasiurus cinereus*]), in cavities in the trees (pallid bat [*Antrozous pallidus*]), or under the North Main Street bridge (Townsend's big-eared bat [*Corynorhinus townsendii*], Yuma myotis [*Myotis yumanensis*]) adjacent to the site. Roosting bats could be directly affected by tree removal and/or indirectly affected by construction noise if they roost under the bridge. Mitigation for these species includes preconstruction surveys and avoidance of active bird nests or communal roosts; exclusion of bat roosts; and, biological monitoring as needed should nesting/roosting be observed onsite in proximity to construction. Oak tree mitigation shall be conducted at a 4:1 (number replaced to number removed) ratio for one oak tree removed and 2:1 for indirect impacts to the one valley oak to be retained. In-kind mitigation planting will occur as part of the applicant's proposed native landscaping in open space with monitoring for at least seven years to confirm establishment. Additional protective measures are prescribed for the oak tree that will be retained.

The proposed project is generally infill development in an area where agricultural lands have been envisioned within the *Templeton Community Plan* to be converted to residential uses. The project would protect an ephemeral stream within an open space area, which would provide connectivity for wildlife movement, even though the site has low potential as a wildlife corridor. The planting of native trees in open space areas may increase the habitat value for birds and bats common to the area. The two retention basins would reduce effects of stormwater runoff into the onsite stream and also provide additional opportunity for landscaping with native and/or drought tolerant vegetation. With the incorporation of the mitigation measures described herein, there would be no significant effects on biological resources. Because there would be no significant effects of the project, it would not contribute to cumulative effects of other projects in the area. This evaluation determined that none of the criteria that would meet a mandatory finding of significance under the California Environmental Quality Act (CEQA) would be triggered. Mitigation measures for the six additional impacts evaluated under CEQA are described herein, and would bring project effects below a level of significance.

1.0 INTRODUCTION

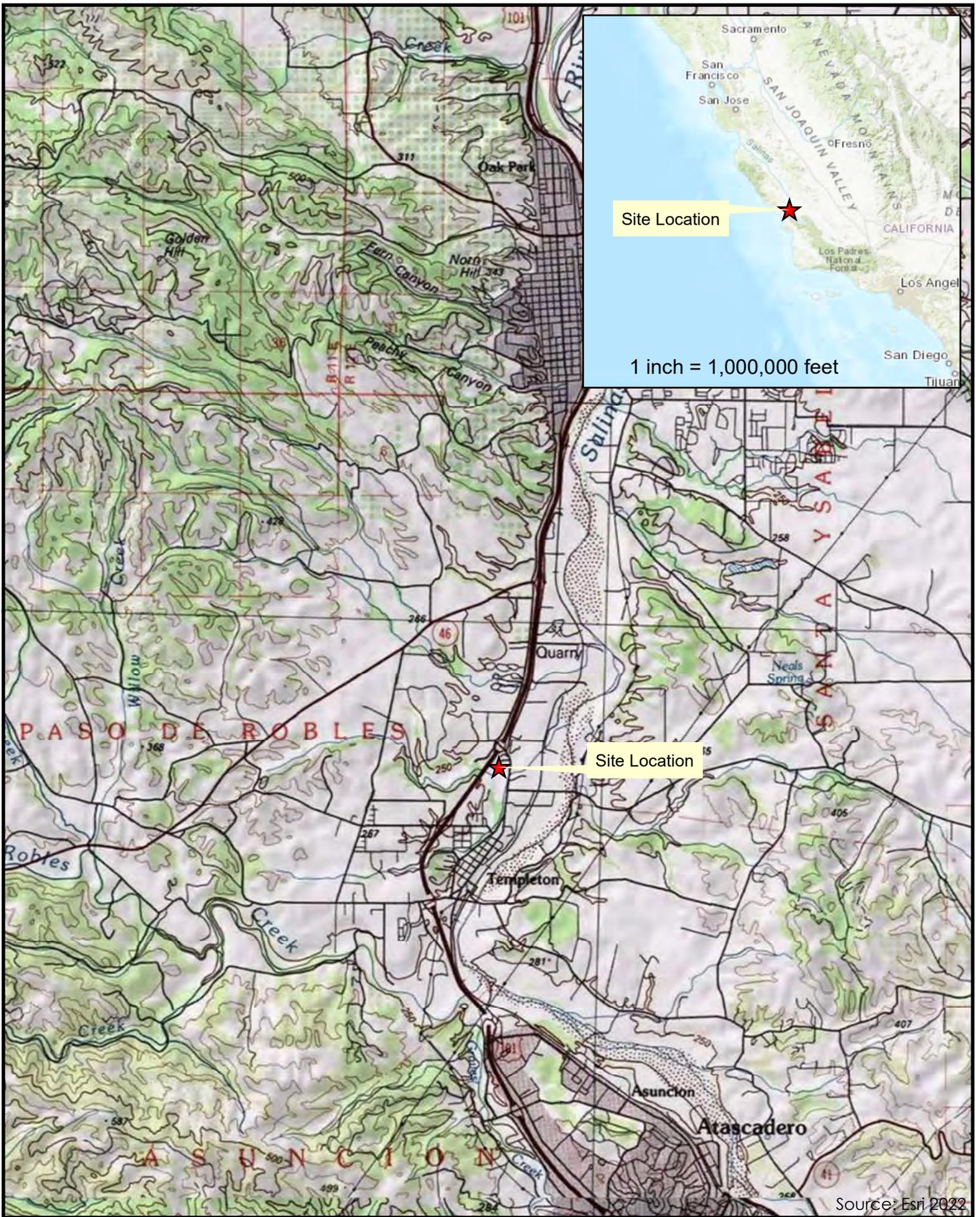
Kevin Merk Associates, LLC (KMA) conducted this biological resources assessment (BRA) for a proposed residential subdivision located at 301 North Main Street, in the unincorporated town of Templeton, California ("project"). The project site is on an approximately 10-acre parcel assigned Assessor's Parcel Number (APN) 040-201-033 ("site" or "property") and is in northern San Luis Obispo County outside of the Coastal Zone. The property is on the Templeton United States Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 1; T 27 S, R 12 E; 35.562197° N, -120.702430° W). It is zoned Commercial Retail (C-R) and lies within the North County Planning Area, Salinas Sub Area, within the Templeton Urban Reserve Line.

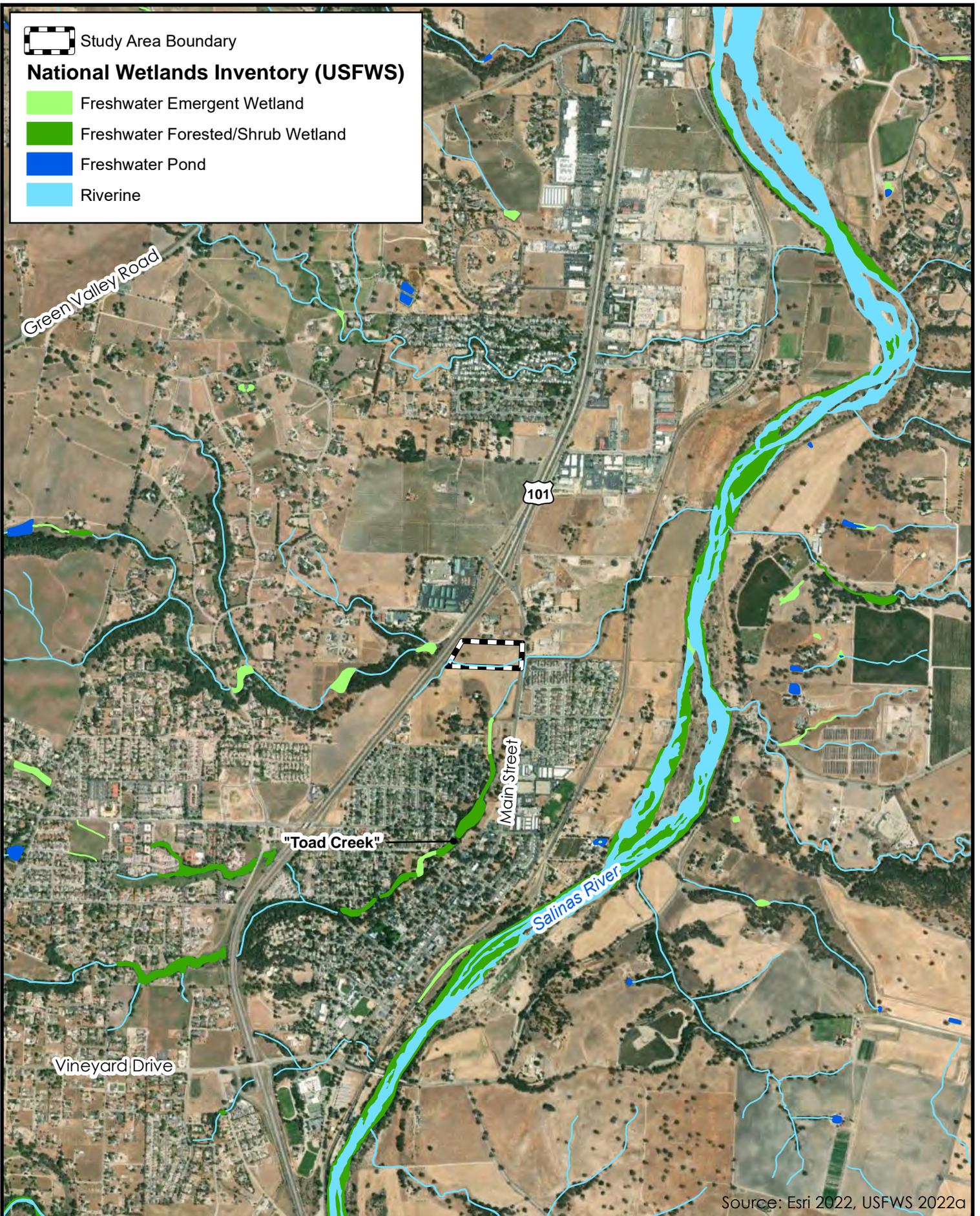
The property is currently used for livestock grazing and staging, and is undeveloped. It lies beyond the northern extent of urban development in the downtown area of Templeton and immediately south of the San Luis Obispo County Sheriff's office. It is bordered on the west by Highway 101 and on the east by North Main Street. Agricultural land uses lie immediately adjacent to the south and north-northeast and a residential subdivision is to the southeast. The greater surrounding area has a mixture of urban, suburban, rural residential, commercial, industrial and agricultural land uses. The Salinas River is located approximately 0.5 mile to the east (Figure 2).

The purpose of this BRA is to assist Mittry Farms Trust with technical biological resources information for the County of San Luis Obispo's (County's) review of the project under the California Environmental Quality Act (CEQA). This BRA evaluates the site's existing environmental conditions to determine whether special-status biological resources (plants, animals, designated critical habitat and sensitive natural communities) and potentially jurisdictional drainages or wetlands may be present onsite and could be adversely affected by the project. Recommended mitigation measures are provided to avoid or reduce the level of project impacts under CEQA.

1.1 Project Description

The project proposes to subdivide the existing parcel into 22 residential lots that would range in size from 10,039 to 18,664 square feet (see Preliminary Grading Plan in Appendix A; Aloha Ke Akua Engineering Company, August 25, 2022). The residential parcels would total approximately 5.39 acres and the remaining property would be roadway, sidewalks, open space and landscaping, including two drainage basins. A gated private drive would access North Main Street on the east and end at a cul-de-sac at the west end, comprising 1.16 acres. Sidewalks would be along either side of the private drive. A landscaped open space buffer is planned on the west side of the subdivision adjacent to Highway 101 and along the south side of the property surrounding an unnamed ephemeral stream. There would be two retention basins within a landscaped buffer area on the east side of the development adjacent to North Main Street, which would total 1.03 acres. Retaining walls would be along the northern and southern edges of the residential lots. One large valley oak (*Quercus lobata*) tree would be retained and has been incorporated into the project design, and one valley oak that is in poor health and one dead pine tree would be removed. The existing zoning for Commercial Retail (C-R) is requested to be expanded under a General Plan Amendment to include Residential Single-family use.





1.2 Regulatory Overview

1.2.1 Compliance with the California Environmental Quality Act

The CEQA defines a *significant effect on the environment* as “a substantial, or potentially substantial, adverse change in the environment.” Projects that may have significant effects are required to be analyzed in an Environmental Impact Report (EIR). Under CEQA Section 15065, a project’s effects on biotic resources would have a mandatory finding of significance if the project would do any of the following:

- Have potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare or threatened species.
- Have the potential to achieve short-term goals to the disadvantage of long-term environmental goals.
- Have possible environmental effects that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Prior to the public review of an environmental document, if a project proponent agrees to mitigation measures or project modifications that would avoid any significant effect or mitigate to a level below significance, and EIR would not be required. In addition to the criteria listed above that trigger mandatory findings of significance, *Appendix G of the CEQA Guidelines, Section IV Biological Resources*, includes six additional impacts to consider when analyzing the significance of project effects. A project’s effects on biological resources could be deemed significant if the project would do the following:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

If the project proponent agrees to mitigation measures or project modifications that would avoid all significant effects or would mitigate the significant effect(s) to a point below the level of significance, an EIR would not be required. The project proponent would be bound to implement

the mitigation measures to reduce the project effects to below a level of significance. Mitigation is not required for effects that are less than significant.

1.2.2 Special-status Species

For the purpose of this BRA, special-status species are those plants and animals listed, or Candidates for listing, as Threatened or Endangered by the USFWS under the federal Endangered Species Act (FESA); federal Birds of Conservation Concern (USFWS 2021); those listed as Threatened or Endangered under the California Endangered Species Act (CESA); animals designated as “Species of Special Concern,” “Fully Protected,” or “Watch List” by the CDFW; plants considered Endangered or Rare under the California Native Plant Protection Act; and, animals considered sensitive that do not have a specific listing status but which are recorded in the California Natural Diversity Database (CNDDDB; CDFW 2022a) and/or CDFW's (2022b) *Special Animals* list.

FESA provisions protect federally listed species and their habitats from unlawful take, which is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” Under these regulations, “harm” may include significant habitat modification or degradation that kills or injures wildlife. Candidate species are not afforded legal protection under FESA; however, Candidate species typically receive special attention during the CEQA environmental review process. CESA provides for the protection and preservation of native species of plants and animals that are experiencing a significant decline which if not halted would lead to a threatened or endangered designation. Habitat degradation or modification is not expressly included in the definition of take under CESA.

Rare plants are those defined as having a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, 2B, 3 or 4 (CDFW 2022c). Rank 4 species are a watch list, and typically do not meet CEQA's rarity definition (Section 15380), but are included here because they may be of local concern. The CRPR definitions are as follows:

- *Rank 1A: Presumed extirpated in California and either rare or extinct elsewhere.* These species are presumed extirpated because they have not been recorded in the wild in California for many years.
- *Rank 1B: Rare, threatened or endangered in California and elsewhere.* Plants that are rare throughout their range and the majority in this rank are endemic to California.
- *Rank 2A: Presumed extirpated in California, but more common elsewhere.* These species are presumed extirpated because they have not been recorded in the wild in California for many years, but they are common outside of the state.
- *Rank 2B: Rare, threatened or endangered in California, but more common elsewhere.* Plants that have ranges that extend into California, where they are rare, but are common in areas outside of the state.
- *Rank 3: Plants needing more information - A review list.* Information necessary to assign the species to one of the lists or reject them is lacking. Most species in this rank are taxonomically unresolved.
- *Rank 4: Plants of limited distribution - A watch list.* Species of limited distribution or infrequent occurrence throughout their range in California but which their vulnerability to extirpation appears low at this time and should be monitored.

Additionally, the CRPR system further assigns threat codes as a decimal extension to the rank, ranging from 1 to 3. CRPR 3 species do not have a threat code due to insufficiency of information needed to assign it, and CRPR 1A and 2A also do not have threat codes because they not know to currently occur in California. The threat code extensions are as follows:

- *.1: Seriously threatened in California.* More than 80% of occurrences are threatened and there is high degree and immediacy of threat.
- *.2: Moderately threatened in California.* Approximately 20 to 80% of occurrences are threatened and there is a moderate degree of immediacy of threat.
- *.3: Not very threatened in California.* Less than 20% of occurrences are threatened and there is a low degree and immediacy of threat, or no current threats are known.

CDFW (2022b) maintains a list of Species of Special Concern for those animal species in which declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as special concern is to halt or reverse their decline early enough to secure their long-term viability. Species of Special Concern may receive special attention during environmental review, but do not have statutory protection. FESA and CESA emphasize early consultation to avoid impacts on Threatened and Endangered species. As part of the consultation process, project proponents are directed to develop appropriate mitigation plans to offset project effects on listed species and their habitats.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state regulations. These birds of prey are protected in California under the California Fish and Game Code Section 3503.5. Disturbance that causes nest abandonment or loss of reproductive effort is considered take by CDFW. Eagles are protected under the federal Bald and Golden Eagle Protection Act. The federal Migratory Bird Treaty Act (MBTA) applies to many bird species, including common species, and prohibits killing, possessing, or trading in migratory birds, including whole birds, parts of birds, bird nests, and eggs. The act restricts construction disturbance during the nesting season that could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Under California Fish and Game Code Section 3503, it is also unlawful to take, possess or needlessly destroy the nest or eggs of any bird.

1.2.3 Designated Critical Habitat

Critical habitat is designated for species listed under FESA, and are areas that contain the physical or biological features which are essential to the conservation of those species and may need special management or protection. A 2018 Supreme Court ruling further defined critical habitat as those areas that provide habitat for the relevant species, exempting areas that are not currently occupied. Critical habitat designations affect only federal agency actions or federally funded or permitted activities. Activities by private landowners are not affected if there is no federal nexus, but biological studies generally address project effects on designated critical habitat when present at the project site.

1.2.4 Sensitive Natural Communities

Sensitive natural communities are those native plant communities listed in the CNDDDB (CDFW 2022a) as rare or of limited distribution. They are evaluated using NatureServe's Heritage Methodology to assign global and state ranks based on rarity and threat, and these ranks are reviewed and adopted by CDFW's (2022d) *Vegetation Classification and Mapping Program* (VegCAMP). Evaluation with the state (S) level results in ranks ranging from 1 (very rare or

threatened) to 5 (demonstrably secure). Those with ranks of S1 to S3 are to be addressed in the environmental review process under CEQA (CDFW 2022d).

1.2.5 Jurisdictional Wetlands and Other Waters

Section 404 of the Clean Water Act established a program to regulate the discharge of dredged and fill material into "waters of the United States", which are regulated by the United States Army Corps of Engineers (USACE). Specifically, waters of the United States include traditional navigable waters (TNWs); wetlands; tributaries to navigable waters of the United States, including adjacent wetlands, lakes and ponds; interstate waters and their tributaries; and, other features such as intermittent streams or tributaries that are hydrologically connected to a TNW. A TNW is defined as a water body that is or has been used to support interstate or foreign commerce or is navigable-in-fact. The USACE defines wetlands as having three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. In nontidal waters of the United States, USACE jurisdiction extends to the Ordinary High Water Mark (OHWM), which is defined as "the line on the shore established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation or the presence of litter and debris." Identification of the OHWM is conducted by examining physical evidence of surface flow in the stream channel. Wetlands under USACE jurisdiction are defined as meeting three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. Non-wetland "other waters of the United States" are drainages with defined OHWM and a "significant nexus" to a TNW, interstate water, or the territorial seas.

The State Water Resources Control Board (SWRCB) regulates discharges of fill and dredged material under the Clean Water Act Section 401, the Porter-Cologne Water Quality Control Act (Water Code 13000 et seq.), and the California Wetlands Conservation Policy (Executive Order W-59-93). The 401 Water Quality Certification and Wetlands Program protects "waters of the state", which is defined under the Water Code as natural wetlands, wetlands created by the modification of a surface water of the state, certain artificial wetlands, riparian areas, and headwaters. Most projects are regulated through the state by the Regional Water Quality Control Board (RWQCB) that oversees the area in which the project is located.

California Fish and Game Code Section 1602 requires that CDFW be notified of any proposed activity that may affect any river, stream or lake by: 1) substantially diverting or obstructing the natural flow; 2) substantially changing or using any material from the bed, channel or bank; or, 3) depositing or disposing of debris, waste, or other materials. The notification requirement applies to ephemeral and perennial drainages, including streams, desert washes, and watercourses with subsurface flow, and may apply to projects conducted within flood plains of a regulated water body. The CDFW jurisdictional limits are generally the outer edge of riparian vegetation, or the top of bank, whichever is farther. Projects that would impact CDFW jurisdictional areas are required to complete a notification form and submit a fee, in order to obtain a Lake and Streambed Alteration Agreement (LSAA).

Projects within the boundaries of jurisdictional wetlands or waters would typically require a Section 404 permit from the USACE, a Section 401 Water Quality Certification or WDR from the appropriate RWQCB, and a LSAA from CDFW, depending on the location of project impacts within each agency's jurisdiction. Any projects requiring a Section 404 permit must first obtain a Section 401 permit. Impacts on waters of the state that do not require a Section 404 permit may require a Waste Discharge Requirement (WDR) instead of a 401 Certification pursuant to California Water Code Section 13260(a). Additionally, if any species protected under FESA may be present in the

project area, the Section 404 permitting pursuant to Fish and Wildlife Coordination Act requires authorization under the USFWS and/or National Marine Fisheries Service (NOAA Fisheries), as appropriate.

2.0 METHODS

This investigation followed the County's (2016) *Guidelines for Biological Resources Assessments*. KMA conducted a desktop review of natural resources databases, maps, literature and online sources to identify special-status biological resources documented from the region that could be present on the property. Online imagery was employed in coordination with field surveys to define the current extent of onsite and adjacent biotic conditions. Time-series and street view aerial photography (Google Earth 2022) was reviewed to obtain information on the history of land use on the site and abutting properties.

KMA's Principal Biologist Kevin Merk conducted an initial field survey of the site on April 7, 2022 to assess site conditions. The survey was conducted from 0930 to 1030 hours, and the weather was clear, air temperature was 62 degrees Fahrenheit (° F) and winds were calm. The study area was considered to be the limits of the parcel and was assessed in entirety. A second survey was conducted on May 11, 2022 from 0930 to 1000 hours under generally clear sky with temperature in the mid-70's and wind approximately five miles per hour (mph) from the west. All plant and animal species observed during the surveys were recorded. Plant taxonomy followed the Jepson Flora Project (2022) and additional information on common names was from *Information on Wild California Plants* (Calflora 2022). Nomenclature for animals is reported as it appears in the CNDDDB (CDFW 2022a) or as updates are available (California Herps 2022). No focused surveys for animals were conducted, but those seen incidentally during the reconnaissance surveys were recorded. Photographs were taken to document existing site conditions.

The *Web Soil Survey* (Natural Resources Conservation Service [NRCS] 2022) was used to identify the soil mapping units present within the study area. The *National Wetlands Inventory* (NWI) was examined to evaluate the extent of any identified wetlands on the site and in the vicinity (USFWS 2022a). USGS topographic maps were also reviewed for information on hydrologic and topographic features.

Habitat types, representing land use and plant communities, were mapped on ESRI (2022) aerial imagery. Land use types followed *A Guide to Wildlife Habitats in California*, which is updated through the California Wildlife Habitat Relationships (CWHR) System (CDFW 2022e). Designation of plant communities generally followed Holland's (1986) *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Sawyer et al.'s (2009) *Manual of California Vegetation* and *VegCAMP* (CDFW 2022e) were also referenced. Plant communities were determined as to whether or not they met the criteria of sensitive natural communities. A photo plate was prepared of representative photographs of habitat types within the study area.

A query of the CNDDDB was conducted to identify occurrence records of special-status biological resources (plants, animals and sensitive natural communities) documented within the vicinity of the project site. This search included the quadrangle in which the site occurs and the abutting quadrangles: Templeton, Adelaida, Paso Robles, Estrella, Creston, Santa Margarita, Atascadero, Morro Bay North, and York Mountain. CNDDDB records of special-status plant and animal occurrences within a five-mile buffer from the study area were mapped. Those species that occur in the Salinas River valley between San Miguel and Santa Margarita were considered to be within the project vicinity and were listed in Appendix D. Species that are restricted to other

biogeographical settings, such as mountainous areas of the Santa Lucia Range, La Panza Range and coastal habitats, were excluded. Based upon KMA's knowledge of the local area and other sources of species occurrence records (particularly observations recorded in Calflora [2022] and The Cornell Lab of Ornithology [2022a]), additional special-status biological resources that have been documented in the project vicinity were included. For the list of special-status species identified in the search, local distribution and ecological information was obtained from a variety of online and published sources (Jennings and Hayes 1994, Bolster 1998, Moyle et al. 2015, Thompson et al. 2016, Audubon 2022, Calflora 2022, California Native Plant Society [CNPS] 2022, California Herps 2022, The Cornell Lab of Ornithology 2022a, 2022b; CDFW 2022e). Designated critical habitat for plant and animal species listed under FESA was identified and mapped based upon information provided in *Environmental Conservation Online System* (USFWS 2022b).

Within the list compiled of special-status species known from the project vicinity, an evaluation of those species with potential to occur in the study area was performed based upon the suitability of habitat conditions on the property and the local distribution (geographical and elevational ranges) and specific requirements (plant communities and soils) of the species considered. We relied on existing information and known occurrence records in the region, along with our observations from other locations in the surrounding area, to make determinations for the probability of occurrence of each special-status species within the study area. If any special-status species had been observed during the site surveys, they would have been listed as "Present" in Appendix D. Those species considered as "Potential" met the following requirements: records in the site vicinity, appropriate plant community and/or soil associations onsite, and within the elevational range of the species. If any one of these elements was not met or considered to be marginal for the site, but the other elements were present, that species was considered "Unlikely". If onsite environmental conditions were clearly inappropriate, the particular plant was not observed during the surveys, or the species has a limited distribution that does not overlap the site, those species were considered "Not Expected". If the onsite conditions met the requirements of any lifestage or particular life history use (i.e., foraging) while other aspects were inappropriate for certain functions (i.e., breeding), these species were considered to have Potential to occur and the likelihood of their occurrence onsite is summarized in the table and analyzed fully with regard to species ecology in the text. The surveys covered the blooming period of each of the plant species determined to have potential to occur onsite. Plant species that were determined in the background review to have "Potential" to occur onsite were changed to "Unlikely" because they were not found during the surveys.

We determined whether special-status plant and animal species, designated critical habitat, sensitive natural communities and potential jurisdictional drainages could or do occur on or the site. Potential impacts of the proposed project were evaluated for each of these biological resource issues, including the six additional impacts in CEQA Appendix G. Compliance with County regulations pertaining to biological resources is also detailed. An evaluation of significance as defined under CEQA is provided for each potential impact, and mitigation is proposed to reduce any potentially significant impact to a level below the significance threshold.

3.0 RESULTS

A list of plant and animal species observed during the surveys is provided in Appendix B. A plate of photographs taken during the site visits to characterize habitat types and onsite conditions is provided in Appendix C. Appendix D is a summary of the special-status species, designated critical habitat and sensitive plant communities recorded within the site vicinity, and KMA's evaluation of their potential presence onsite. Figure 1 is a site location map and Figure 2 is an aerial overview map with wetland habitats recorded in the NWI in the site vicinity. Figure 3 is a soils map and

Figure 4 is a habitat map of the study area delineating each of the habitat types. Figure 5 shows the locations of special-status plant species recorded in the CNDDDB within five miles of the study area. Figure 6 shows occurrences of special-status animal species recorded in the CNDDDB and designated critical habitat within five miles of the study area. No sensitive natural communities were reported in the CNDDDB within five miles of the site, but those in the nine-quadrangle CNDDDB search as well as those known to occur in the area were evaluated as to whether they are present onsite.

3.1 Existing Conditions

The property is located within the upper upland floodplain of the Salinas River at the base of the foothills that flank the Santa Lucia Mountain Range to the west. The surrounding natural landscape is low rolling grassland with scattered, stately valley oak trees and bands of riparian scrub along ephemeral drainages that empty into the river. Most of the area has been developed for agriculture, ranchettes, urban development within the community of Templeton, Highway 101, and industrial uses to the east of the highway. The area has a Mediterranean climate with cool, moist winters and hot, dry summers. The average maximum temperature in Paso Robles is 76 °F and the average minimum temperature is 41 °F. The average annual precipitation is 15.21 inches and falls mainly between November and March (Western Regional Climate Center 2022; Paso Robles 1/1/1894 to 6/10/2016).

The subject property is undeveloped, has been used for cattle grazing and staging for over two decades, and appears to have been farmed prior to or during that time based upon time-series aerial photography (Google Earth 2022). Cattle were present onsite at the time of the surveys, and the property is surrounded by barbed wire fencing. Areas where cattle congregate had bare soils and grassland vegetation was grazed to a very low height. A well is present that provides water for livestock that is pumped to watering tanks, which were overflowing at the time of the surveys and had created a muddy area disturbed by cows. There are no roads on the property and access is off North Main Street via gates in the perimeter fence. Some farm debris (old water pipe, pallets, rubble, etc.) was onsite, primarily in the eastern section. An ephemeral stream channel passes through the southern portion of the property and is described in Section 3.3. The site is heavily grazed open grassland with two mature valley oak trees; one of these trees was in poor health. The property is of low slope with the highest point in the northwestern corner with an elevation of 796 feet (243 meters) above mean sea level (msl) sloping gradually toward the drainage along the southern property line with an elevation is 754 feet (230 meters) above msl. The ephemeral stream exits the property along its eastern boundary and flows under a small bridge at North Main Street. A large portion of the property is within the floodplain of the ephemeral stream and a Flood Hazard Area combining designation is mapped on approximately two-thirds of the site (County 2017a).

3.2 Soils

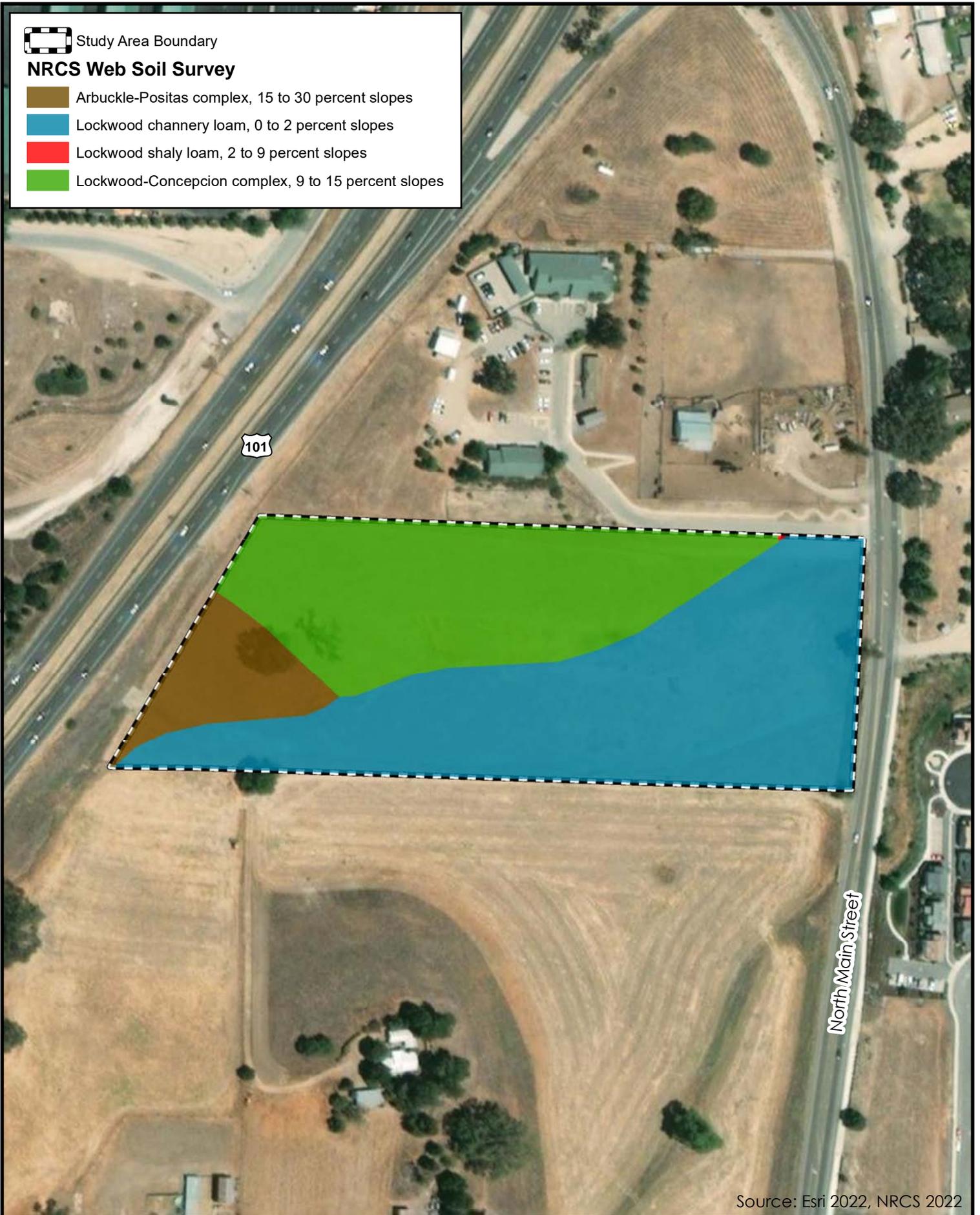
Four soil types were mapped within the study area in the *Web Soil Survey*. The southeastern half of the site is Lockwood channery loam, 0 to 2 percent slopes (Figure 3). This soil is found on terraces and alluvial fans is alluvium derived from acid shale (NRCS 2022). The northwestern portion of the property is Lockwood-Concepcion complex, 9 to 15 percent slopes (Figure 3). This soil unit occurs on terraces and is alluvium derived from sedimentary rock (NRCS 2022). Both of these two soils are channery loam with an underlying layer of clay. The western portion of the site has Arbuckle-Positas complex, 15 to 30 percent slopes (Figure 3). These soils are formed on terraces and are alluvium derived from mixed rock sources (NRCS 2022). A very small area in the northeastern edge



Study Area Boundary

NRCS Web Soil Survey

- Arbuckle-Positas complex, 15 to 30 percent slopes
- Lockwood channery loam, 0 to 2 percent slopes
- Lockwood shaly loam, 2 to 9 percent slopes
- Lockwood-Concepcion complex, 9 to 15 percent slopes



Source: Esri 2022, NRCS 2022



1 inch = 200 feet

of the site is Lockwood shaly loam, 2 to 9 percent slopes (Figure 3). Each of these soil units are well-drained and are not considered to be hydric soils in this region.

Observations in the field were consistent with the mapped units of loamy soils with channery rocks and gravel.

3.3 Hydrologic Features, Wetlands and Riparian Habitats

An unnamed tributary of the Salinas River passes through the study area from the southwestern corner and drains to the east passing through the southern portion of the site. The portions of the drainage up- and downstream from the study area are mapped on the 1948 USGS quadrangle as a broken blue-line, or an intermittent/ephemeral stream. However, the topographic map does not show the segment of the drainage on the subject property. The drainage in its present location is mapped in the NWI as riverine habitat (Figure 2). Riverine systems are aquatic habitats contained within a channel that periodically or continuously have moving water, and that are not dominated by trees, shrubs, or emergent vegetation (Cowardin et al. 1992). The type of subsystem in the study area is Intermittent, which means it contains flowing water for only part of the year, and it has an Unconsolidated Bottom (Cowardin et al. 1992).

It originates from several branches in the low hills between Highway 46 and Bethel Road and flows in a generally easterly direction. Immediately downstream from the study area it is joined by another unnamed tributary from the south that is locally known as "Toad Creek" (Figure 2). Thereafter, it flows through modified channel around a former livestock market and agricultural fields, emptying into the Salinas River east of Cow Meadow Place. The Salinas River flows in a northwesterly direction and discharges into the Pacific Ocean at the Monterey Bay to the southwest of Castroville.

The drainage enters the site from under Highway 101 where it daylights from four 36-inch culverts with a headwall (see photographs in Appendix C). On the western (upstream) side of the property, the channel area below the top of banks was about 30 feet in width. It tapers down to approximately 15 feet wide (from top of bank to top of bank) through the middle of the property. It widens out again before leaving the site under a bridge at North Main Street on the east side of the property (Figure 4). It had a low flow channel (ordinary high water mark) that was three to five feet wide with mostly bare soils. Due to drought conditions (and possibly upstream impoundments), no evidence of flow was observed in the stream channel and no flow indicators were observed in available Google Earth imagery. The streambanks were gently sloping and swale-like, but there were some areas of eroded banks likely due to livestock trampling. There were no wetland plants within the channel and the plant species composition did not differ from the surrounding upland grassland vegetation. No willows or other riparian vegetation were present on or adjacent to the site.

As defined in the Navigable Waters Protection Rule (effective on June 22, 2020), "ephemeral" drainages are defined as those features that "flow only in direct response to precipitation, including streams, swales, gullies, rills and pools." In contrast, "intermittent streams" typically flow for a longer period and have continuous flow during some months of the year but no flow during dry months. Further, "intermittent" flows are more than just in direct response to precipitation, and are a related to seasonal input from the accumulation of several weeks or months of precipitation that result in an elevated groundwater table. Observations in the field suggested that the onsite drainage more closely resembled an ephemeral stream. The position of the stream reach in the watershed may also influence its highly ephemeral nature. Except for high flow events, when the

upper branches have water, it may go underground when the drainage meets the mostly level Salinas River floodplain and soils in this area are well-drained alluvium.

Although the onsite drainage does not flow year-round and is non-navigable, it has a defined bed and bank and a hydrologic connection to the Salinas River, which is a TNW. Because the drainage has a significant nexus with a TNW, it may potentially be under jurisdiction of the USACE under the Clean Water Act as a Non-wetland Other Waters of the United States. The extent of the federal jurisdictional area is within the OHWM. The area below the top of bank would also be under the jurisdiction of the RWQCB under Section 401 of the Clean Water Act and under CDFW jurisdiction pursuant to California Fish and Game Code Section 1600 et seq.

In the central part of the site, outside of the drainage channel, pooled water and muddy soils were present from the cattle water trough overflowing. This area was devoid of vegetation from cattle trampling. Shallow water (1-2 inches deep) was present during both of the site surveys and persisted until at least late-May. It was observed incidentally to have dried up in the summer coinciding with when cattle were moved off the property. There was also a roadside ditch along North Main Street that sloped to the south. It was vegetated by upland grassland species and did not contain wetland vegetation. These areas are not expected to be jurisdictional and subject to the regulatory authority of the USACE, RWQCB, or CDFW.

3.4 Habitat Classification

There was only one habitat type in the study area, which was non-native grassland. Two valley oak trees are shown on Figure 4, but are more of a component of grassland habitat and historic oak savannah rather than representing a distinct woodland community. One of the oak trees was in poor health with a high proportion of dead branches and very little live canopy. A dead, planted pine (*Pinus* sp.) tree was just outside of the fence line on the property's eastern border and the canopy of a black walnut (*Juglans* sp.) tree planted offsite to the south partially overhung the property. The ephemeral stream was vegetated by upland grassland species, as described above in Section 3.3. The stream's centerline and top of bank are mapped in Figure 4. Photographs characterizing the habitat onsite are provided in Appendix C.

The non-native grassland onsite was heavily grazed by cattle and this disturbance regime for so many years has favored non-native, weedy species such as hare barley (*Hordeum murinum* ssp. *leporinum*), red-stemmed filaree (*Erodium cicutarium*), summer mustard (*Hirschfeldia incana*) and sheep sorrel (*Rumex acetosella*). It was grazed down to low height and had at least 25% bare ground in upper areas and a greater percentage of bare ground in the drainage feature. The understory of the oak trees was also bare ground and leaf litter due to cattle congregating in the shade. The habitat onsite corresponds to the Non-native Grassland community described by Holland (1986) and the Wild Oats and Annual Brome Grasslands semi-natural alliance (CDFW 2022b).



 Study Area Boundary
 Non-native Grassland
 Valley Oak Tree
Drainage Features
 Ephemeral Stream
 Top of Bank

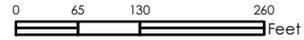
Source: Esri 2022



KEVIN MERK ASSOCIATES



1 in = 200 ft



0 65 130 260 Feet

301 North Main Street, Templeton, CA
Mitty Farms Trust

Figure 4
Habitat Map

3.5 Special-status Biological Resources

The CNDDDB search produced a number of records of special status plants and animals in the project region (please refer to Figures 5 and 6). The subject property is in an agricultural and urban area, and as a result has low habitat value for special-status plants or animals because it is disturbed from years of grazing and farming pressure. Cattle trampling, and likely historic farming, has resulted in a high proportion of bare ground and it is dominated by non-native, weedy species. Although the onsite drainage is a mapped stream, its current configuration is an ephemeral swale that may rarely contain water. No wetland or riparian vegetation is present and the plant species composition does not differ from the surrounding upland grassland. The two valley oak trees may be used for nesting or roosting of bird and bat species in the area, but they are not significant features on their own because valley oak trees are common in this area. In addition, many of the native cavity dwelling birds, such as the acorn woodpecker (*Melanerpes formicivorus*), have been adversely impacted by European starlings (*Sturnus vulgaris*) that utilize cavities in oak trees for nest sites.

3.5.1 Special-status Plants

No special-status plant species were found during the field surveys. The nine-quadrangle CNDDDB search produced a large number of rare plant species that are restricted to coastal areas or higher elevations of the Santa Lucia Mountain Range; because these species would not occur in the setting in which the study area is located, they were excluded from the evaluation. Of the rare plants that have been documented from the site vicinity, we identified only one that is associated with grassland habitat and loam or clay soils — San Luis Obispo owl's-clover (*Castilleja densiflora* var. *obispoensis*). This is an annual species that may be able to persist under some disturbance regimes, such as if it can flower and produce seeds before cattle are brought onsite or at a lower grazing intensity in combination with higher seasonal rainfall than was present during the current surveys. In addition, most of the grassland areas in Templeton have been dry farmed for hay in the past, and the tilling of soils reduces the potential for rare plants to occur onsite. The two field surveys were conducted during the blooming period of this species and it was not found. Therefore, it is not expected to occur onsite. No other rare plants were observed onsite during the spring growing season, and the surveys were conclusive in that no special-status plant species are present on the property.

3.5.2 Special-status Animals

No special-status animal species or their sign (i.e., scat, tracks or nests) were observed on the property during the site visits. The few wildlife species observed onsite (see Appendix B) were common species that tolerate agricultural and urban land uses. The habitat value of the site is relatively low because it is a fragmented grassland lacking significant resources. Due to highly ephemeral conditions, the stream does not provide a source of water or wetland or riparian vegetation. The evaluation determined that one amphibian, twenty-two bird, and five mammal species have potential to use the site at some point in time. No special-status invertebrates were considered to have potential to occur because there are few that are known to occur in the vicinity and moreover because grazing eliminates flowering native plants that are used as food sources, leading to low species diversity of low-quality, non-native plant species. No special-status fish species have potential to occur because the drainage onsite is too ephemeral to support fish. Similarly, there is insufficient water in the ephemeral stream to support aquatic amphibians and reptiles, with one exception (western spadefoot) due to pooled water observed near the cattle trough. The bird and mammal species determined to have potential to occur mainly would be

transients while moving through the area or could use the two valley oak trees. Each of the species that were determined to have potential to occur onsite are described in further detail below.

The **American peregrine falcon** (*Falco peregrinus anatum*) is a CDFW Fully Protected species for nesting and a federal Bird of Conservation Concern. This species occurs in coastal areas and also uses inland wetlands and riparian habitats. Their breeding habitat is high cliffs, dunes or mounds, but they also use buildings in urban areas and cavities in trees or snags (CDFW 2022e, The Cornell Lab of Ornithology 2022b). Their diet is varied, and they prey largely on birds from the marine and terrestrial environments. They will also prey on bats, small mammals and invertebrates (CDFW 2022e, The Cornell Lab of Ornithology 2022b). Although they have declined substantially, they still breed along the coast from Santa Barbara northward (CDFW 2022e). They also occur in the Central Valley in winter, and migrating individuals from other areas occur along the coast (CDFW 2022e). This species has been observed at numerous locations near the property (The Cornell Lab of Ornithology 2022a). They could forage onsite or occur as a transient while moving through the area, but there is no suitable habitat for nesting on or near the site.

The **bald eagle** (*Haliaeetus leucocephalus*) is a state Endangered species for nesting and wintering habitats and is a CDFW Fully Protected species. They are also a federal Bird of Conservation Concern. Their primary prey is fish, but they also feed on small mammals, amphibians, reptiles and carrion (The Cornell Lab of Ornithology 2022b). They usually consume fish larger than 7.5 inches (200 millimeters) total length, and may consume dead fish from spawning or angling stress, as well as waterfowl during the winter and early spring (cited in Jackman and Jenkins 2004). They are usually in close proximity to (within 1 mile of) large bodies of water, rivers, estuaries or flooded fields with large trees or other perches nearby (CDFW 2022e). Nests are on ledges on cliffs, trees on cliffs, deciduous trees along rivers, and live conifer trees greater than 100 feet (30 meters) tall (Jackman and Jenkins 2004). In central California, they also use foothill pine (*Pinus sabiniana*), cottonwood (*Populus* sp.), oaks (*Quercus* sp.) and eucalyptus (*Eucalyptus* sp.) (Jackman and Jenkins 2004). Optimal nesting habitat is characterized by 1) a large foraging area with high fish production; 2) mature trees for nest sites; and 3) minimal human disturbance (Peterson 1986). They roost communally in winter in dense conifer stands away from human disturbance (CDFW 2022e). Courtship activity, which may begin as early as January, includes nesting building, nest maintenance, vocalizing, copulation, and territory defense (Jackman and Jenkins 2004). Egg laying is generally mid-February to the end of March. Eggs require a minimum of 35 days to hatch and fledging is after 12 weeks (Jackman and Jenkins 2004). There are numerous observations of this species from the Salinas River valley close to and surrounding the site (The Cornell Lab of Ornithology 2022a). There is a chance that individuals may fly over the site and could forage in the study area due to the open nature of the site, however, this may be unlikely given the high level of human presence in the area. Still, bald eagles may fly over the site and perch in the large oak trees. The proximity of the Salinas River increases the chance that they could occur at some point in time. Nesting is not expected due to the high degree of human activity from the highway and urban development.

The **California horned lark** (*Eremophila alpestris actia*) is on the CDFW Watch List. It occurs in open habitats such as agricultural areas and grassland, and prefers areas with sparse vegetation or patches of bare ground. Nests are placed on the ground in open areas, sparse vegetation, or next to a grass clump or other object (Audubon 2022). This subspecies is resident year-round in coastal counties from Eureka to Baja California, and inland through the San Joaquin Valley (CDFW 2022e). There are records of this species in eBird from the Salinas River valley surrounding the site (The Cornell Lab of Ornithology 2022a). The grazed grassland habitat onsite is highly suitable for

foraging, and to a lesser degree for nesting given the small size and intensive cattle use.

Cooper's hawk (*Accipiter cooperii*) is on the CDFW Watch List for nesting. This is a woodland species that prefers dense stands of coast live oak, riparian forest, and mixed coniferous forests near a source of water, but also can occur in suburban habitats with tall trees. They prey on birds, small mammals, reptiles and amphibians. There are numerous observations of this species throughout the Salinas River valley and residential areas nearby (The Cornell Lab of Ornithology 2022a). They could forage onsite periodically and occur as a transient due more highly suitable habitat in the surrounding area, but woodland required for nesting does not occur onsite.

The **ferruginous hawk** (*Buteo regalis*) is on the CDFW Watch List for wintering sites, and it occurs in this area during the winter. They use lower elevation open grassland habitats, and also occur in sagebrush, desert scrub, and edges of pinyon-juniper (CDFW 2022e). Roosting is in open areas on a lone tree or utility pole. They prey on rabbits, ground squirrels, mice, amphibians and reptiles (CDFW 2022e). This species has been recorded wintering in the Salinas River valley (CDFW 2022a) and there are sightings from the surrounding area (The Cornell Lab of Ornithology 2022a). There is a chance that they could forage onsite during the winter, but they do not nest in this area.

The **golden eagle** (*Aquila chrysaetos*) is considered a Fully Protected species by CDFW and is on the Watch List for nesting and wintering. They are also a federal Bird of Conservation Concern. Golden eagles are long-lived, slowly reproducing species that require high adult survival for population stability (Driscoll 2010). They mature into adults during their fifth summer and can live 20 to 40 years (cited in Driscoll 2010). They prey on small to medium-sized small mammals such as hares, rabbits, ground squirrels, birds, badgers, fish and carrion (The Cornell Lab of Ornithology 2022b). Black-tailed jackrabbits are the primary prey in many areas of the western United States and ground squirrels are the main part of their diet in central California (cited in Driscoll 2010). Nesting is in open to semi-open habitats, usually on cliffs, but large trees or structures such as electrical towers may also be used (The Cornell Lab of Ornithology 2022b). High quality breeding habitat contains: 1) nesting substrate that offers protection from weather and predators; 2) sufficient prey populations to sustain the pair throughout the year; 3) updrafts and thermals for soaring and hunting; and 4) isolation from human disturbance and development (Driscoll 2010). Once a pair has established a breeding territory, they typically use that area each year. They build several alternate nests within their territory that they move between in different years (Driscoll 2010). The nests are flat or bowl-shaped platforms made of sticks that are lined with soft material (cited in Pagel et al. 2010). Eagles will abandon nests due to increased human activity and development or from events that affect prey populations (cited in Driscoll 2010). For a month or two before eggs are laid, eagle pairs are conspicuous when they perform courtship flights, undulating flights, vocalizations, and carry sticks to construct new nests or repair existing nests (Driscoll 2010). They may begin laying eggs in January but most begin in mid-February and ends by August 31 (Pagel et al. 2010). The incubation period is 45 days and fledging is between 8 and 10 weeks (Driscoll 2010). This species has been recorded throughout the Salinas River corridor and surrounding foothills (The Cornell Lab of Ornithology 2022a). They could forage onsite and roost or perch on the valley oak trees. but are unlikely to nest due to the exposed nature of the site.

The **grasshopper sparrow** (*Ammodramus savannarum*) is a CDFW Species of Special Concern for nesting, which is almost exclusively in grassland habitats. Other types of open habitats with patches of bare ground and little shrub cover, such as pastures and agricultural fields, may also be used (The Cornell Lab of Ornithology 2022b). They nest on the ground at the base of clumps of grass and prey on grasshoppers and other invertebrates, where there are patches of bare ground (The Cornell Lab of Ornithology 2022b). There are only a few observations from the Salinas River

valley and they are more common near the coast in this county (The Cornell Lab of Ornithology 2022a). However, the grassland habitat onsite with patches of bare ground is highly suitable for foraging and nesting, and there is a chance that they could occur.

The **great blue heron** (*Ardea herodias*) does not have a specific listing status but is considered a sensitive species by CDFW for nesting colonies, which are located in large trees among forests near bodies of water. This species is associated with wetland habitats, but it is occasionally seen foraging in grasslands or agricultural fields away from water. There are numerous sightings from the general area surrounding the site (The Cornell Lab of Ornithology 2022a). Individuals could occur onsite periodically while foraging, but nesting colonies would not utilize the site due absence of nesting habitat and the distance from any lakes, ponds or wetlands.

Lawrence's goldfinch (*Spinus lawrencei*) is a federal Bird of Conservation Concern, is considered a sensitive species for nesting and may be a species of local concern, but does not have specific listing status (CDFW 2022e). This species occurs near sources of freshwater in open oak woodlands, chaparral, coastal scrub, riparian and weedy field habitats. They are also common in suburbs and on ranches. Outside of the breeding season, they use deserts, fields, orchards, gardens and parks (The Cornell Lab of Ornithology 2022b). Nests are usually in oaks or sycamores near water. This species is migratory, and they occur in the central coast and central valley in the breeding season (The Cornell Lab of Ornithology 2022b). There are numerous records from the surrounding area, particularly with developed lands (The Cornell Lab of Ornithology 2022a). They could forage onsite periodically while moving through the area but there is no dense vegetation for nesting.

Lewis's woodpecker (*Melanerpes lewis*) is a federal Bird of Conservation Concern and is considered a sensitive species by CDFW for nesting. They inhabit oak savannah, deciduous woodlands, and coniferous forest, requiring open habitats with scattered trees and snags with cavities for nesting. They do not create their own holes but use those made by other woodpeckers or natural crevices in decaying trees. During the non-breeding season, they are nomadic and frequent riparian woodlands, orchards and oak woodlands (The Cornell Lab of Ornithology 2022b). Individuals eat insects, nuts and fruits and store acorns and other foods in the crevices of cottonwood trees for the fall and winter (The Cornell Lab of Ornithology 2022b). They do not nest in this area but occur only during the winter (The Cornell Lab of Ornithology 2022b). There are records of this species from throughout the Salinas River valley, including in developed areas (The Cornell Lab of Ornithology 2022a). They could occur onsite periodically as a transient during the fall and winter but do not nest in this area.

The **loggerhead shrike** (*Lanius ludovicianus*) is a CDFW Species of Special Concern for nesting. This species occurs in variety of relatively open habitats with low vegetation and well-spaced shrubs or trees, such as coastal scrub, grasslands, agricultural fields, pastures, riparian areas, desert scrub, savannas, prairies, golf courses, and along roadsides. They prefer areas where there are objects to perch on such as fences, trees or shrubs (Audubon 2022). Nests are placed in dense and sometimes thorny trees or shrubs and brush piles (Audubon 2022). They prey on insects, amphibians, reptiles and small mammals, and may impale their prey on sharp objects. There are numerous observations of this species throughout the surrounding area (The Cornell Lab of Ornithology 2022a). They could forage onsite but there is no dense vegetation for nesting.

The **merlin** (*Falco columbarius*) is on the CDFW Watch List for wintering. They are a small falcon that preys on songbirds and shorebirds (The Cornell Lab of Ornithology 2022b), and also small mammals and insects (CDFW 2022e). They occur in this area in winter, when they occupy coastal areas, grasslands, savannas, woodlands, lakes, wetlands, and edges of coniferous forest (CDFW

2022e). There are numerous records in the vicinity of the site (The Cornell Lab of Ornithology 2022a). They could occur as a transient and forage onsite, but they do not nest in this region.

The **northern harrier** (*Circus cyaneus*) is a CDFW Species of Special Concern for nesting. This species prefers wide open country with wetlands but they also occur in rolling grasslands or desert shrubland. Nests are placed on the ground in dense clumps of vegetation, usually in marshes, but occasionally they nest in dry open fields (Audubon 2022). They occur year-round along the coast within the county (The Cornell Lab of Ornithology 2022b). There are numerous observations from the Salinas River valley surrounding the site (The Cornell Lab of Ornithology 2022a). They could forage on the site periodically and may perch on the oak trees. They would not nest onsite due to lack of wetland habitat and human presence in surrounding area.

Nuttall's woodpecker (*Picoides nuttallii*) is a federal Bird of Conservation Concern at the regional scale. They occupy riparian and oak woodland habitats, where they forage by drilling for sap or gleaning from trunks or branches. They feed primarily on adult and larval insects, and also consume berries, nuts and fruits (CDFW 2022e). Nesting is in cavities that they excavate in riparian trees. They occur in this area year-round (CDFW 2022e). There are numerous observations of this species from areas surrounding the site (The Cornell Lab of Ornithology 2022a). They could forage onsite and there is a slight possibility that they could nest in the oak trees but their preferred nesting habitat is riparian.

The **oak titmouse** (*Baeolophus inornatus*) is a federal Bird of Conservation Concern and is considered sensitive by CDFW for nesting. They are year-long residents of montane hardwood-conifer, montane hardwood, oak woodland (blue, valley and coast live), and montane and valley foothill riparian forests along most of the coast of California, foothills of the Sierra Nevada and the northeastern corner of the state (CDFW 2022e). They can be found periodically in residential areas. Nests are in cavities of trees and are often near water. They eat insects, spiders, berries, acorns and seeds (CDFW 2022e). This species is commonly reported throughout the surrounding area (The Cornell Lab of Ornithology 2022a). Although the oak trees onsite do not form a woodland community, individuals could forage onsite periodically due to their abundance in the area and proximity to favored habitats, but they are unlikely to nest outside of woodland habitats.

The **prairie falcon** (*Falco mexicanus*) is on the CDFW Watch List for nesting. This species forages in open grasslands, savannah, rangeland, scrublands, and agricultural areas, including feed lots (CDFW 2022e). They prey on small mammals, birds and reptiles. Nesting habitat is generally cliff ledges on rock formations overlooking open areas (CDFW 2022e). In San Luis Obispo County, they occur year-round in inland areas away from the coast (CDFW 2022e). There are several records from the Salinas River valley (The Cornell Lab of Ornithology 2022a). Transient individuals could forage onsite but there is no suitable nesting habitat on or near the site.

The **purple martin** (*Progne subis*) is a CDFW Species of Special Concern for nesting. This species occurs in valley foothill, montane hardwood-conifer, pine, and redwood forests, and riparian woodland. During migration, they are also found in grasslands, meadows, and freshwater emergent wetlands (CDFW 2022e). They breed in multi-layered forests and open woodland with snags, and sometimes in residential areas, where they use old woodpecker cavities or human-made structures. They are migratory and spend the winter in South America, nesting from April to August in California (CDFW 2022e). This species occurs in the summer within the Salinas Valley and northwestern mountainous areas of San Luis Obispo County. There are numerous recent records from Atascadero (The Cornell Lab of Ornithology 2022a), and a nesting colony has been documented in Atascadero Creek for at least the past 20 years (CDFW 2022a). Individuals could

occur in the study area on a periodic basis while moving to and from nearby breeding sites and they may forage onsite. They potentially could nest in the dead pine tree or valley oaks, but observations are highly localized in Atascadero.

The **rufous hummingbird** (*Selasphorus rufus*) is a federal Bird of Conservation Concern and is considered sensitive for nesting by CDFW. This species occurs in riparian areas, open woodlands, scrub, chaparral, mountain meadows, gardens and orchards (CDFW 2022e). They breed in coniferous forests north of California from Oregon through Alaska and east to Montana (The Cornell Lab of Ornithology 2022b). They feed on the nectar of flowering plants, insects, spiders and tree sap (CDFW 2022e). Individuals have been recorded near the property, particularly in developed areas (The Cornell Lab of Ornithology 2022a). They could forage periodically onsite during migration but do not nest in this area.

The **sharp-shinned hawk** (*Accipiter striatus*) is on the CDFW Watch List for nesting. This species generally occurs in semi-open woodlands, margins of open areas, coniferous forests, mixed woodlands and riparian habitats, and dense forest is required for nesting. They prey on birds, and may occur in residential areas preying on birds at bird feeders. During migration, it uses coastlines, lake shores and mountain ridges (Audubon 2022). It does not breed in San Luis Obispo County, and they are an uncommon transient and winter visitor. There are numerous records surrounding the site (The Cornell Lab of Ornithology 2022a). They may forage onsite during migration but they do not nest in this area.

The **tricolored blackbird** (*Agelaius tricolor*) is a state Threatened species and a CDFW Species of Special Concern for nesting colonies. This species nests and roosts colonially in freshwater marshes with dense tules, cattails, or blackberry thickets. They forage in areas with low-growing vegetation such as agricultural fields, grasslands and feedlots. Wintering tricolored blackbirds congregate in large multispecies flocks, often containing red-winged blackbirds (The Tricolored Blackbird Working Group 2007). This species has been observed at several locations in the Salinas River valley (The Cornell Lab of Ornithology 2022a). Individuals could forage or occur as transients in the grassland habitat onsite. However, there is no suitable marsh habitat for roosting or nesting onsite.

The **white-tailed kite** (*Elanus leucurus*) is a CDFW Fully Protected species for nesting sites. This species prefers open areas for foraging, including grasslands, river valleys, oak savanna, agricultural areas, deserts, and marshes (Audubon 2022). They nest in large isolated trees, and occasionally in riparian habitats (CDFW 2022e). During the non-breeding season, they roost communally in trees or tall shrubs at the edges of grasslands (The Cornell Lab of Ornithology 2022b). This species has been recorded at several locations in the vicinity of the property (The Cornell Lab of Ornithology 2022a) including documented breeding in the Salinas Valley (CDFW 2022a). The open grassland onsite is suitable for foraging, and they could nest or roost in the valley oaks.

The **yellow-billed magpie** (*Pica nuttalli*) does not have a specific listing status but is a federal Bird of Conservation Concern and is considered sensitive by CDFW for nesting and communal roosts on the Special Animals List (CDFW 2022b). It is endemic to California (i.e., its range is limited to California), and it is a non-migratory, permanent resident. It inhabits open oak woodland and savannah, riparian, and valley hardwood-conifer. It also occurs in human-modified habitats such as residential and agricultural areas, pastures and orchards. They feed on the ground on insects, invertebrates, trash, carrion, acorns, fruit, grain, nestlings, eggs, earthworms, ticks and live rodents (CDFW 2022e). They nest in small colonies, building stick nests at the tops of trees (Audubon

2022). Shortly before sunset, magpies aggregate and move to a communal roost site in which they spend the night. This species has been recorded at numerous locations surrounding the study area (The Cornell Lab of Ornithology 2022a). They could forage, nest or communal roost onsite in the valley oak trees or dead pine tree.

The **hoary bat** (*Lasiurus cinereus*) does not have a specific status but is recorded in the CNDDDB and is on CDFW's (2022b) list of Special Animals, and therefore is considered sensitive. This species occurs in open habitats or habitat mosaics along woodland edges. They prey on moths and other flying insects (CDFW 2022e). Roost sites are in dense foliage of large trees, and maternity roosts are woodlands/forests with medium to large trees. They winter along the coast and in southern California, and breed inland and in northern parts of the state. During migration, males are found in foothills, deserts and mountains, and females in lowlands and coastal valleys (CDFW 2022e). There were no records of this species in the CNDDDB in the vicinity, but the study area is within its year-round range (CDFW 2022e). Unless roost sites are found, bat species require specialized survey techniques for their detection and may be more common in the area than indicated by available records. Individuals could forage over the site and roost in the valley oak trees.

The **pallid bat** (*Antrozous pallidus*) is a CDFW Species of Special Concern. This species forages in a variety of dry, open habitats such as grassland, deserts, woodland, shrubland and coniferous forest. Maternity and winter roosting sites are cavities or caves in rock features, large trees or buildings, and these structures must substantially moderate temperature. Day roosts are in caves, crevasses, mines and occasionally hollow trees or buildings. Night roosts are in more open areas such as porches or agricultural buildings. They forage on beetles, moths, spiders, scorpions and Jerusalem crickets (CDFW 2022e). There are only a few records in the vicinity (CDFW 2022a), but the entire state except the highest elevations in the Sierra Nevada are within the species' year-round range (CDFW 2022e). Suitable foraging habitat is present onsite and they could roost in the valley oak trees or pine tree if cavities are present.

Townsend's big-eared bat (*Corynorhinus townsendii*) is a CDFW Species of Special Concern. This species occurs in a variety of habitats, including dry upland areas, semidesert, coniferous forest, and riparian woodland. They prefer foraging along the edges of riparian vegetation and they drink water from ponds. They roost in caves, mines, abandoned buildings and under bridges (Gruver and Keinath 2006). They are considered to widespread throughout California except for high elevations in the Sierra Nevada and occur in the region in which the study area is located throughout the year (CDFW 2022e). A solitary wintering individual was found on Santa Margarita Ranch (Occurrence No. 119; CDFW 2022a). This species could forage over the site and potentially could roost under the adjacent bridge for North Main Street.

The **western red bat** (*Lasiurus blossevillii*) are CDFW Species of Special Concern. It forages over grasslands, shrublands, woodlands, oak savannah, riparian forests, and orchards (CDFW 2022e, Central Coast Bat Survey 2022). They roost individually in the foliage of trees and occasionally in shrubs, taking shelter on the underside of leaves, twigs or branches (Central Coast Bat Survey 2022). Both night and maternity roost sites are usually near streams, where they use riparian corridors with large sycamores, oak/riparian, cottonwoods, walnut, and larger willows or urban areas with large-leafed trees (Central Coast Bat Survey 2022). This species migrates between summer and winter ranges. They winter in the central coast, where they hibernate, but they could also occur in this area during the summer (CDFW 2022e). There were no records in the CNDDDB from the vicinity, but this species' year-round range includes all of San Luis Obispo County (CDFW 2022e). This species may forage over the site due to the proximity of the Salinas River, but they would not roost because riparian habitat does not occur onsite.

The **Yuma myotis** (*Myotis yumanensis*) does not have a specific listing status but is considered sensitive by the CDFW (2022b). This species forages in open forests and woodlands, usually over water sources such as ponds and streams (CDFW 2022e). They prey on flying insects as well as ants. They roost in buildings, mines, caves, crevices and under bridges (CDFW 2022e). This species is considered to be common and widespread throughout all but the deserts of California, and they are known to occur year-round in the county (CDFW 2022e). They could forage onsite and night roost in the valley oak trees. Roosting could also occur under the adjacent bridge for North Main Street.

3.5.3 Designated Critical Habitat

Designated critical habitat for the south-central California coast Distinct Population Segment (DPS) steelhead (*Oncorhynchus mykiss irideus* pop. 9) is present in the Salinas River and its major tributaries, but does not extend into the ephemeral stream that passes through the site (Figure 6). No other designated critical habitat is within 5 miles of the property.

3.5.4 Migratory Birds and Raptors

Special-status and common bird species protected under the MBTA and California Fish and Game Code could nest in the two valley oak trees, dead pine tree and black walnut along the perimeter, or grassland habitat on the property. Although bald and golden eagles may forage onsite, as detailed in Section 3.5.2 above, they are unlikely to nest due to the high degree of human disturbance associated with the highway and surrounding residential/urban development.

3.5.5 Sensitive Natural Communities

No sensitive natural communities were recorded in the CNDDDB as occurring within five miles of the site, but several were within the greater nine-quadrangle search, and we evaluated others known to occur in the region (Appendix D). None of these communities occurs within the study area. The grassland onsite would be considered the Non-native Grassland community or Wild Oats and Annual Brome Grasslands semi-natural alliance, and since it is dominated by non-native species, it would not be considered a sensitive natural community. No wetland habitat is present in the ephemeral stream, but the stream itself would be considered to be a jurisdictional area under the regulatory authority of the USACE (Clean Water Act), CDFW (California Fish and Game Code) and RWQCB (see Section 3.3) and County-required setbacks have been provided as part of the proposed project (see Section 4.1.5).

4.0 **IMPACT ANALYSIS AND RECOMMENDED MITIGATION**

The types of project effects (or impacts) described below follow the guidelines in CEQA *Appendix G* to aid in the environmental review process conducted by the County. Direct effects are caused by a project at the same time and place, and occur as a direct result of project activities. Indirect effects are caused by a project, but occur at a different time or place, such as in an adjacent area and occurring incidental to project activities. Cumulative effects are those that result from when the effects of the subject project combine with effects from other unrelated projects to compound environmental harm. Mitigation measures to reduce impacts of future construction to a level below significance under CEQA are provided below.

4.1 Direct and Indirect Effects

The project proposes to create 22 single-family residential lots with an open space buffer along the western, southern and eastern sides of the parcel (Appendix A). A total of 6.55 acres of grassland habitat, one valley oak tree that is in poor health and one dead pine tree would be directly affected and lost by creation of the residential parcels and construction of the private drive. The open space buffer areas (total 2.44 acres) and two retention basins (total 1.03 acres) would be landscaped, and maintained in a park-like setting. Landscape plans were not available at the time of preparation of this BRA, but it is our understanding from communications with the applicant that native oak trees and other appropriate native species would be planted in the open space areas. KMA has worked with the applicant during the planning stages of site development to retain the one healthy valley oak tree and keep the limits of grading in disturbed upland areas of the site. The ephemeral stream will be avoided, and the proposed retention basin in the eastern part of the site will be developed to avoid any disturbance to its bed or banks. Please refer to the preliminary grading plan provided in Appendix A.

Indirect effects could result from increasing human presence in the area, but these effects are considered to be below the level of significance under CEQA considering the scale of the project, and the intensive grazing and use of the property. Increased runoff from impervious surfaces is expected to be mitigated through the construction of the retention basins and landscaping with native species will result in increased biodiversity and habitat structure than what currently exists onsite (see Section 4.1.5).

4.1.1 Potential Adverse Effects on Candidate, Sensitive or Special-status Species

A suite of special-status plant and animal species that are known to occur in the site vicinity were evaluated to determine their potential to occur in the study area. Not all species with potential to occur onsite may be directly or indirectly affected by the project. Evaluating the level of significance of effects under CEQA involves an assessment of how a particular species may use the site, what features may be used, and when they would occur relative to when project activities take place.

No special-status plant species were found during the site visits, and none are expected to occur in the proposed development area due to the disturbed conditions of the site. A target list of rare plant species was developed during this evaluation for which potentially suitable habitat is present and the site falls within the species' local distribution. Field surveys were conducted during the blooming period (i.e., the time that they are the most readily identifiable) of these species, and none were found onsite. Grazing pressure has favored weedy, non-native grasses that outcompete native species, and intensive grazing may directly remove perennial species and small shrubs. Therefore, the surveys were considered to be conclusive in that no special-status plant species are present onsite.

Many of the special-status animal species with potential to occur onsite are mobile species that would only use the site periodically while foraging or moving through the site, without using the area for breeding or other key life history traits. Species considered to be mobile include foraging birds and bats. Individuals of these mobile species that use the site for foraging or on a transitory basis are expected to move away from any temporary disturbance during construction activities. Although disruption of normal activities would be a temporary "effect", the level of the effect would not be considered to be significant under CEQA as long as they are not injured or killed.

Additionally, construction activities would occur during the day and would not affect nocturnal foraging of bats. Individuals of special-status animal species that could be present onsite on a transitory basis and for which the effects of project activities are expected to be less than significant include: American peregrine falcon, bald eagle, Cooper's hawk, ferruginous hawk, golden eagle, great blue heron, Lawrence's goldfinch, Lewis's woodpecker, loggerhead shrike, merlin, northern harrier, Nuttall's woodpecker, oak titmouse, prairie falcon, rufous hummingbird, sharp-shinned hawk, tricolored blackbird and western red bat. Individuals of less mobile species (i.e., western spadefoot) and particular site uses (bird nests or bat roost sites) could potentially be affected by construction activities at a significant level, as follows.

Special-status avian species (i.e., California horned lark, grasshopper sparrow, purple martin, white-tailed kite and yellow-billed magpie), as well as common species protected under the MBTA and California Fish and Game Code, could nest in the valley oak trees, dead pine tree and grassland habitat onsite. If construction activities take place during the avian nesting season, destruction of nests or disturbance to nesting bird activity that causes nest abandonment could be considered to be a significant impact under CEQA. Because communal roosts of the yellow-billed magpie are considered sensitive by CDFW, construction impacts on roost sites or roosting behavior may also be considered significant. Mitigation to avoid effects on nesting/roosting birds would be required and is described below.

Special-status bat species could roost in the foliage of the valley oak trees (hoary bat), in cavities of the trees (pallid bat), or under the North Main Street bridge (Townsend's big-eared bat, Yuma myotis) adjacent to the site. Roosting bats could be directly affected by the removal of the one oak tree and/or indirectly affected by construction noise if they roost under the bridge or in the tree that will be retained.

Habitat loss of approximately 6.55 acres of disturbed grassland that could be used by common and special-status wildlife species would be less than significant under CEQA due to the site's small size, degraded quality of the habitat, location, and lack of significant habitat features such as woodland or aquatic resources. Buffer areas totaling approximately 3.47 acres will allow for movement opportunities around the subdivision and appropriate landscaping would provide equal or better habitat values for species that currently use the site. For example, there could be a net increase in the amount of potential nesting habitat through tree planting. The buffer area is contiguous with a larger agricultural parcel offsite. Therefore, project effects on habitat loss and wildlife movement are expected to be below the level of significance for wildlife and no mitigation is needed.

Adverse effects on special-status species would be limited to individuals of a few animal species, as follows.

Impact Bio-1. Project construction activities could potentially impact nesting of special-status bird species, as well as common avian species protected under the Migratory Bird Treaty Act and California Fish and Game Code, and/or communal roosts of the yellow-billed magpie that are considered sensitive by CDFW. This is a potentially significant but mitigable impact.

If construction activities are initiated during the nesting season (February 1st to August 31st), impacts on protected nesting birds could occur. Active nests containing eggs and/or young could be killed during tree removal or grading and construction activities in the surrounding grassland habitat. Communal roosts of the yellow-billed magpie could be located in the trees slated for removal or in the large valley oak tree that would remain, but may be in close enough proximity to

work activities that their roosting behavior may be disrupted. To reduce potential project impacts on protected bird species to a level below significance, Mitigation Measure BIO-2 is required. If construction commences outside of the nesting season (September 1st to January 31st), no mitigation for nesting birds would be needed but surveys for magpie roost sites shall still be conducted because they are present in this area year-round.

Mitigation Measure BIO-1: Conduct a preconstruction nesting/roosting bird survey and avoid active nests and/or communal roosts. For any construction scheduled to start between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey for nesting birds within and adjacent to the property. The survey shall be conducted within seven days before the initiation of construction within the nesting season. During this survey, the qualified biologist shall search for birds exhibiting nesting behavior and inspect all potential nest substrates (including grassland habitat) in the impact area. Any nests identified will be monitored to determine if they are active. If no active nests are found, construction may proceed. If an active nest is found within 50 feet (250 feet for raptors) of the construction area, the biologist, in consultation with the County, shall determine the extent of a buffer to be established around the nest. The buffer should be delineated with flagging, and no work shall take place within the buffer area until the young have left the nest, as determined by the qualified biologist. Once nesting has ceased and the young are no longer reliant on the nest, project activities can commence in the buffer zone.

Prior to construction of any phase of the project, at any time of year, a qualified biologist shall survey the project site plus a buffer of 250 feet for communal roosts of the yellow-billed magpie. If any are found and individuals may be affected by tree removal or construction disturbance, the biologist shall consult with County and develop appropriate measures to avoid adverse impacts.

Implementation of these mitigation measures would reduce project effects on protected nesting birds and sensitive communal roost sites to a level below significance.

Impact Bio-2. Tree removal could directly impact roosting bats and/or construction noise and disturbance could indirectly affect bats roosting under an adjacent bridge. This is a potentially significant but mitigable impact.

The proposed project involves the removal of one large valley oak tree and one pine tree. The oak tree is in poor health with many broken limbs and the pine tree is dead, and cavities are present that bats can use for roosting, including maternity roosts by some species. Other bat species can roost in the foliage of the large, healthy valley oak. Removal of the trees could kill roosting bats or cause them to abandon the roost during the day and become disoriented. Bats could also roost under the North Main Street bridge and be in close enough proximity to construction activities that they could abandon the roost site. To reduce potential project impacts on roosting bats to a level below significance, the following mitigation is required.

Mitigation Measure BIO-2a: During the period from April to October prior to construction, conduct a preconstruction survey for roosting bats. Bat surveys shall be timed to their activity period in this region, which is generally April to October. A qualified biologist shall survey the trees to be removed during the day for sign of roosting bats such as guano or prey remains. The biologist shall assess the suitability of potential roost sites and utilize the following to determine if additional surveys are warranted:

1. No roost suitability — no further surveys needed.
2. Low roost suitability — one exit survey at dusk.

3. Moderate roost suitability — two surveys, preferably one exit or emergence at sunset and one re-entry survey at dawn, separated by at least two weeks.
4. High roost suitability — three surveys, with two exit surveys and at least one a re-entry survey, separated by at least one week.

The biologist shall determine the most likely locations for bat roosts, and utilizing an appropriate number of surveyors assigned to each potential roost site, conduct emergence/re-entry surveys, as follows:

1. Bat emergence surveys should be conducted when air temperature is above 50° F, wind is less than 10 mph, and there is no precipitation or dense fog.
2. Emergence surveys should begin 30 minutes before sunset and continue until at least one hour after sunset.
3. Re-entry surveys can be conducted at dawn as bats return to the roost. Re-entry surveys should be from one hour before sunrise to 15 minutes after sunrise.
4. Surveyors should be positioned so that emerging bats will be silhouetted against the sky as they exit or enter the roost. Surveyors should be close enough to observe all bats but not too close to influence their behavior.
5. Lights should not be shown on roosts. Use of infra-red, night vision, or thermal-imaging video camera or spotted scope is recommended but not required.
6. All bats leaving/entering the roost should be counted.

The qualified biologist shall determine whether a maternity roost is present by carefully observing individuals on the roost. If young are present, construction shall be delayed until they have matured and can fly on their own.

If no evidence of roosting bats is found during the surveys, work may proceed. If any evidence of individual roosting bats is found (i.e., no maternity roosts), the biologist shall develop appropriate exclusion techniques and coordinate with the County and CDFW as described in Mitigation Measure BIO-2b.

Mitigation Measure BIO-2b: Conduct exclusion and relocation of bat roost sites that cannot be avoided. If bat roosts are found during the preconstruction survey, the qualified biologist shall work with the County, and CDFW as appropriate, to exclude the bat from using the cavity using netting or another approved method. Temporary roost structures may be erected for displaced bats, and these structures may need to be specific for the species of bat using the roost. Identification of species would require the use of an acoustic monitoring bat detector and analysis software to be performed by a qualified biologist. Replacement roost structures should be installed prior to bat exclusion activities. When it has been determined that no young are present, the biologist shall monitor the roost in the evening when the bats leave to forage and then install bat exclusion netting or another approved medium to prevent bats from re-entering the roost site. The netting shall be inspected the following morning to ensure that no bats have become entangled in the netting and that none remain in the structure. The netting shall remain in place until the tree removal has been completed.

Implementation of these mitigation measures would reduce project effects on special-status bat species to a level below significance.

4.1.2 *Adverse Effects on Riparian Habitat or Sensitive Natural Communities*

No riparian habitat or CDFW sensitive natural communities are located on or immediately adjacent to the property; therefore, there would be no effect of the proposed project on riparian habitat or sensitive natural communities and no mitigation is required. Mitigation for indirect effects of sedimentation or pollutants generated onsite but carried downstream to riparian habitat is described in Mitigation Measures BIO-3a through -3c below.

4.1.3 *Protected Wetlands*

No wetland habitat is present on or near the site, but the ephemeral stream is hydrologically connected to the Salinas River, which supports wetland and riparian habitats. It is our understanding that the limits of grading would not encroach beyond the top of bank of the ephemeral stream; therefore, riverine habitat would not be affected. If any ground disturbing activities take place below the top of bank, permitting and compensatory mitigation may be required, as follows. Compliance with California Fish and Game Code Section 1600 et seq. would need to be obtained through the issuance of a Lake or Streambed Alteration Agreement. Compliance with Sections 404 and 401 of the Clean Water Act would need to be obtained through the USACE and RWQCB. The application process usually requires preparation of a wetland delineation report and detailing the extent of compensatory mitigation for disturbance to jurisdictional areas.

Indirect adverse effects on wetland habitat downstream could occur due to sediment and/or pollutants from the construction site being carried in uncontrolled stormwater runoff into the stream and then into wetland areas offsite in the Salinas River. Best Management Practices (BMPs) would be required as a condition of project permits (including the County) to reduce the chance of erosion, sedimentation or water pollution caused by the project. At minimum, the BMPs should contain the measures specified below.

Impact Bio-3. Project activities would be conducted in close proximity to an ephemeral stream, and uncontrolled stormwater runoff from the project site could potentially result in sediment and/or pollutants entering the water body and downstream reaches, which could degrade offsite wetland and riparian habitat, as well as water quality. This is a potentially significant but mitigable impact.

Development of the subdivision will involve vegetation removal and soil disturbance. Disturbed soils could erode into the unnamed tributary stream to Toad Creek if these areas are not stabilized prior to significant rainfall. Sedimentation is considered to be a type of pollutant in aquatic systems because it decreases water quality through increased turbidity, fills in pools or causes lateral spread of channels, and covers instream vegetation and other aquatic life. Toxic substances from construction equipment such as oil, gas, diesel, and hydraulic fluid could leak or be spilled and be carried in stormwater runoff into the creek. The BMPs outlined below are designed to avoid or minimize project effects during and shortly after construction. To reduce the chance of indirect effects on protected wetland/riparian habitats, water quality and aquatic resources downstream to a level below significance, the following mitigation measures are required.

Mitigation Measure BIO-3a: Avoid ground disturbance below the top of bank of the ephemeral stream. Project plans show the limits of the stream course and the top of bank was delineated in the field

during this investigation. Prior to construction, a qualified biologist shall review project plans to ensure the limits of the stream course are adequately avoided. The biologist shall work with project engineers and surveyors to delineate and mark the top of bank on the north side of the ephemeral stream in proximity to grading and development. Orange protective fencing in combination with silt fence is the recommended method for clearly marking the area to be avoided during construction. If this area cannot be avoided, permitting from the RWQCB and CDFW, and potentially USACE as described above may be required.

Mitigation Measure BIO-3b: Avoid ground disturbing work during the rainy season, if possible. The potential for erosion and sedimentation shall be minimized by scheduling grading and ground disturbance activities to occur outside of the rainy season, which is typically defined as October 15 through April 15, if possible.

Mitigation Measure BIO-3c: Install appropriate erosion and sediment control methods. The following measures should be implemented prior to, during and after the construction phases of the project.

1. A Sediment and Erosion Control Plan may be required by the County, and should be prepared by a qualified engineer. The use of silt fence, straw wattles, erosion control blankets, straw bales, sandbags, fiber rolls and other appropriate techniques should be employed to protect the drainage features on and off the property. Biotechnical approaches using native vegetation shall be used as feasible. All areas with soil disturbance shall have appropriate erosion controls and other stormwater protection BMPs installed to prevent erosion potential. All sediment and erosion control measures shall be installed per the engineer's requirements, and in place prior to October 15. These measures shall be maintained in good operating condition throughout the construction period. Methods that are not biodegradable should be removed after vegetation has become established and following the end of the rainy season (late-spring or summer).
2. Spill kits shall be maintained on the site, and a Spill Response Plan shall be in place.
3. No vehicles or equipment shall be refueled within 50 feet of drainage features unless a bermed and lined refueling area is constructed. No vehicles or construction equipment shall be stored overnight within 100 feet of these areas unless drip pans or ground covers are used. All equipment and vehicles should be checked and maintained on a daily basis to ensure proper operation and to avoid potential leaks or spills. Construction staging areas should attain zero discharge of stormwater runoff into these habitats.
4. No concrete washout shall be conducted on the site outside of an appropriate containment system. Washing of equipment, tools, etc. should not be allowed in any location where the tainted water could enter onsite drainages.
5. The use of chemicals, fuels, lubricants, or biocides shall be in compliance with all local, state, and federal regulations. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other state and federal legislation.
6. All project-related spills of hazardous materials within or adjacent to the project site should be cleaned up immediately.
7. Areas with temporarily disturbed soils shall be restored under the direction of the project engineer in consultation with a qualified biologist as needed. Methods may include recontouring graded areas to blend in with existing natural contours, covering the areas with salvaged topsoil containing native seedbank from the site, and/or applying the native

seed mix shown on the project plans supplemented with species in Table 1. Native seed mix shall be applied to the temporarily disturbed areas outside future development through either direct hand seeding or hydroseeding methods. Seeding with the erosion control native seed mix should be provided on all disturbed soil areas prior to the onset of the rainy season (by October 15).

8. The revegetated areas shall be inspected by the qualified restoration ecologist and SWPPP monitor to ensure that disturbed soils have successfully been stabilized in the short- and long-term. The monitoring visit should include the removal of non-native species that favor disturbed conditions and outcompete native species.

Table 1. Erosion Control Native Seed Mix

Species	Application Rate (lbs./acre)
<i>Bromus carinatus</i> (California brome)	10
<i>Stipa pulchra</i> (purple needlegrass)	5
<i>Trifolium wildenovii</i> (tomcat clover)	5
<i>Vulpia microstachys</i> (six weeks fescue)	5
Total	25

Implementation of the above mitigation measures together with those resulting from regulatory agency permitting would reduce future development impacts on onsite and downstream offsite wetland/riparian habitat to a less than significant level.

4.1.4 Interference with Movement of Native Fish or Wildlife, Wildlife Corridors, and Wildlife Nursery Sites

The stream onsite is too ephemeral to support fish and is located outside of the project impact limits; therefore, there would be no interference with movement of fish. The development has been designed with open space buffers that would allow wildlife movement to pass around the site, contiguous with a larger expanse of undeveloped land offsite. Based upon this design, there would be no significant effects on movement of wildlife or corridors. Additionally, the site is not expected to be used as a wildlife corridor due to the adjacent Highway 101, which is an effective barrier to movement of numerous species, and surrounding development. A small number of birds and invertebrates could breed onsite, but the grassland habitat is dominated by non-native weedy species and there are only two oak trees that could be used for nesting. Therefore, the site does not represent high quality wildlife nursery habitat.

The effects of the proposed project on the movement of native fish or wildlife, wildlife corridors and wildlife nursery sites are expected to be less than significant, and no mitigation is required.

4.1.5 Conflicts with Local Policies or Ordinances, Such as Tree Preservation

The property lies within the within the North County Planning Area, Salinas Sub Area, Atascadero/Templeton Water Planning Area, and is within the Templeton Urban Reserve Line. No Environmentally Sensitive Habitats are mapped within the study area, but an area surrounding the ephemeral stream is considered a Flood Hazard Combining Designation (County 2017a). The property lies outside of the San Joaquin kit fox (*Vulpes macrotis mutica*) habitat mitigation area (County 2007).

Templeton is an unincorporated town and the *Templeton Community Plan* (County 1996) describes goals for land use and transportation. The project is requesting a General Plan Amendment to include Residential Single-family use for this parcel.

The *General Plan Open Space and Conservation Element* (County 2015) details a number of goals to protect biological resources and policies to guide actions toward those goals relevant to this project, as follows:

- The *General Plan* "Policy BR 1.13 Maintain Safe Wildlife Movement" and "Policy 4.1 Protect Stream Resources" call for stream corridors to be protected to preserve wildlife movement, water quality, flood control functions, and fish and wildlife habitat. Additionally, "Policy BR 4.5 Encourage Stream Preservation on Private Lands" encourages landowners to protect and preserve stream corridors in their natural state and restore stream corridors that have been degraded. The design of the project meets this goal by having an open space area surrounding the ephemeral stream that crosses through the property. Landscaping with native species in the open space areas would also benefit wildlife habitat in the area.
- The *General Plan* recommends that stream corridors and their setback areas be protected through easements or dedications. The *Templeton Community Plan* directs the County and the Templeton Community Services District to obtain maintenance easements for streams within the Flood Hazard Area to perform maintenance activities to reduce flooding (County 1996). The stream corridor will be maintained to promote positive drainage and reduce flooding in the Main Street area.
- The *General Plan* "Implementation Strategy BR 4.2.1 Setbacks from Streams and Riparian Vegetation" designates a minimum 50-foot setback for all private development subject to discretionary review. The setback is to be measured from the top of bank or outside the dripline of riparian vegetation, whichever distance is greater, and buildings and structures shall be located outside of the setback. Adjustments to this setback area can be made when there are no feasible alternatives, but cannot be less than 30 feet for compliance with the RWQCB's *Basin Plan*. Grading shall not be permitted within the setback unless there are no feasible alternatives, and any such grading would be subject to erosion control measures (see Mitigation Measure BIO-4c) and subsequent habitat restoration. The top of bank was delineated during the preparation of this BRA, GPS data were provided to the applicant, and this area has been incorporated into the grading plan (Appendix A). The plan shows that the building envelopes will be at least 60 feet away from the top of bank.
- Under "Implementation Strategy BR 4.2.1" if the *General Plan*, measures to direct drainage away from creeks and to use Low Impact Development (LID) techniques are specified. Further, "Policy BR 4.4 Vegetated Treatment Systems (Low Impact Development Techniques)" promotes the use of engineered vegetated treatment systems such as constructed wetlands, vegetated swales, and vegetated filter strips to reduce nonpoint source pollution. The proposed project satisfies this strategy through the construction of two retention basins that will be planted with vegetation and maintained.
- The *General Plan* "Policy 3.1 Native Tree Protection" pertains to "biologically valuable trees, oak woodlands, trees with historical significance, and forest habitats", and "Implementation Strategy 3.1.1" calls for a countywide native tree protection ordinance. San Luis Obispo County's *Oak Woodland Ordinance* (Chapter 22.58, effective May 2017) establishes criteria to regulate clear-cutting of oak woodland and protects "Heritage Oaks" in inland portions of

the county outside of urban or village areas. Covered species are blue oak (*Quercus douglasii*), coast live oak (*Quercus agrifolia*), interior live oak (*Quercus wislizenii*), valley oak, and California black oak (*Quercus kelloggii*). Clear-cutting, which is defined as the removal of 1 acre or more of contiguous oak trees on slopes of at least 30%, is prohibited. No oak woodland is present on the subject property. The one valley oak tree to be removed is of low health, and some encroachment into the critical root zone of the healthy valley oak to be retained may occur. As such, mitigation for the loss of a poor health oak tree and potential impacts to the root zone of the retained oak tree is required to reduce all impacts to oak trees to a less than significant level.

Impact Bio-4. Project construction would result in the removal of one native valley oak tree that is in poor health and indirect impacts from grading in the critical root zone could occur to a valley oak tree that will be retained. This is a potentially significant but mitigable impact.

Project plans (Appendix A) detail that one valley oak tree would be removed and that the building envelope for Lot 13 and the cul-de-sac would slightly encroach under the dripline of the valley oak tree to be retained. Removal of native oak trees and indirect impacts on oak trees by ground disturbance within the critical root zone are subject to mitigation under CEQA. The critical root zone is defined as 1.5 times the distance from the trunk to the outer edge of the canopy, but may vary based upon local topography and other factors. The following mitigation is required to reduce project impacts to oak trees.

Mitigation Measure BIO-4a: *Employ a certified arborist for oak tree trimming and removal.* The applicant shall employ the services of a certified arborist to remove the one oak tree and trim the oak tree to be retained, as necessary for clearance. The arborist shall determine whether "extensive trimming" (i.e., over 25% of the canopy) is required, and if so, the tree would be considered "impacted" and subject to mitigation as described in Mitigation Measure BIO-5c. The arborist shall also be utilized to monitor grading or excavation that may be required in the critical root zone, and properly prune all significant roots that may be encountered.

Mitigation Measure BIO-4b: *Install protective fencing around the critical root zone of the oak tree to be retained or line of encroachment, and avoid disturbance during construction.* Within two weeks prior to the initiation of ground disturbance, protective fencing shall be installed around the outer critical root zone of the oak tree to be retained, or if project activities will encroach into the root zone, the fencing shall delineate the line of allowable encroachment. Effort shall be made to maximize the distance from the protected tree. Tree buffer areas should be shown on all construction plans. The protective fencing shall be orange plastic construction fencing or similar material, and staked into the ground delineating the tree's protective buffer zone. The fencing should be maintained throughout construction and removed only after there is no potential for construction-related impacts to trees. Trenching or placement of fill or structures shall not be located within the critical root zone. Any trenching within the critical root zone of protected trees shall be hand dug where practicable and major roots avoided. For any construction activity that cannot be repositioned outside the critical root zone, Mitigation Measures BIO-4c and -4d are required.

Mitigation Measure BIO-4c: *Monitor earth work in the critical root zone and conduct remedial measures to minimize damage to critical roots.* A qualified arborist should monitor excavation and grading activities within the critical root zone of the one valley oak to be retained. Should large (>1

inch in diameter) roots be encountered during grading near oak trees, the arborist shall cleanly cut the root following standard arboricultural techniques to maintain the health of the specimen. Soils within the critical root zone that have been compacted by construction activities shall be carefully scarified and aerated as soon as possible. Methods may include water jetting, adding a 4- to 6-inch layer of chip mulch, and boring small holes with an auger. The arborist shall advise the appropriate methods for soil aeration and whether fertilizer or other amendments need to be applied.

Mitigation Measure BIO-4d: Implement onsite oak tree mitigation to compensate for project impacts on valley oak trees. The removed tree shall be mitigated at a 4:1 ratio (i.e., 4 trees planted for every tree removed) and impacted trees mitigated at a 2:1 ratio. The project applicant proposes a robust tree planting effort along the open space areas on the west and south sides of the property. Replacement trees shall be the same species removed, of local origin and at least one gallon in size. The trees shall be planted in areas of the property that will not be affected by future development or other site uses (i.e., the open space buffer). A maintenance and monitoring plan shall be prepared that includes details on how container plants will be installed, maintenance techniques and methods to monitor their establishment. An As-built Planting Plan shall be prepared to track the replacement trees. Annual reports detailing monitoring of the mitigation effort shall be prepared by a qualified botanist and submitted to the County by December 31st of each year following planting. All replacement trees shall be maintained and monitored for a minimum of seven years, or as determined by the County, to ensure successful establishment. If replacement trees die or do not successfully establish, then additional trees shall be installed and monitored accordingly to meet the plan's success criteria.

Incorporation of the above mitigation measures would reduce project impacts on oak trees to a less than significant level.

4.1.6 Conflicts with Conservation Plans

No local, regional or state conservation plans have been prepared for the area in which the project is located. There would be no conflicts with conservation plans, and no mitigation is required.

4.2 Cumulative Effects

The project site is located within the urban boundary of the community of Templeton. The site is a 10-acre pasture surrounded on three sides by developed areas, including Highway 101, neighborhoods and the sheriff's station. The proposed project is generally infill development that would add 22 single-family residences, and an ephemeral stream onsite would be protected within an open space area. Other projects known to be planned in the area include residential development of the former Templeton Livestock Market, which could include over 100 new residences on the 17-acre property on the east side of North Main Street opposite from the subject property. Another property that fronts North Main Street has previously applied for a subdivision and general plan amendment. A 40-acre property on Ramada Drive just to the north of the Highway 101 interchange has applied for use as a storage yard for PG&E.

The subject property does not have any significant biological resources, despite the presence of an ephemeral stream, which does not have suitable hydrologic conditions to support aquatic or wetland species. The site is not expected to support breeding populations of special-status species, with the exception of birds and potentially several species of bat. Because the site abuts the highway and is on the edge of urban development, the project site does not represent a significant wildlife corridor and the open space area planned to adjoin undeveloped lands offsite will preserve

connectivity. In the context of the land use in the surrounding area, the project represents infill development in an area that is mostly developed but with a few remaining adjacent agricultural parcels. Although the proposed project will add to the urbanization of the area, it will not contribute significantly to cumulative effects on biological resources due to the low habitat value of the parcel and its proximity to large tracts of undeveloped open space.

5.0 CONCLUSIONS

The approximately 10-acre study area is composed of grazed grassland dominated by non-native species and two large valley oaks. No special-status plant species were found during the site visits and none are expected to occur in the project area due to the disturbed conditions of the site. No CDFW sensitive natural communities occur onsite. The only impacts identified on special-status species are potentially from vegetation removal and ground disturbance activities on nesting birds and roosting bats. These impacts can be avoided or minimized by conducting preconstruction surveys, implementing avoidance measures to protect nesting birds, and excluding roosting bats or taking other measures to provide replacement roost sites. There would be no significant impacts on habitat loss or wildlife corridors. Open space buffer areas have been designed around three sides of the site that would protect habitat connectivity. A setback of at least 60 feet has been designed around an ephemeral drainage, in which landscape planting with native species including native trees to offset the loss of one valley oak tree, and potential indirect impacts on the remaining valley oak tree to be retained. The planting of native trees and shrubs along the open space corridors will in turn provide opportunities for bird nesting and bat roosting once the vegetation becomes established. Mitigation for BMPs to reduce stormwater effects is also specified herein, and is expected to be a component of final project approvals. Two retention basins are incorporated into the plan to reduce effects of stormwater runoff and will also enhance the overall open space portion of the site. This analysis determined that the proposed project does not meet any of the criteria that trigger mandatory findings of significance under CEQA. With the incorporation of the mitigation measures and guidance as described herein, development of the project would not result in significant impacts on biological resources.

6.0 REFERENCES

- Audubon. 2022. Guide to North American Birds. Accessed via: <https://www.audubon.org/bird-guide> in August 2022.
- Baumberger, K.L., M.V. Eitzel, M.E. Kirby, and M.H. Horn. 2019. Movement and habitat selection of the western spadefoot (*Spea hammondi*) in southern California. PLOS ONE 14(10):e0222532.
- Bolster, B.C. (editor). 1998. Draft Terrestrial Mammal Species of Special Concern in California. Contributing authors: P.V. Brylski, P.W. Collins, E.D. Pierson, W.E. Rainey and T.E. Kucera. Prepared for California Department of Fish and Game, Wildlife Management Division, Nongame Bird and Mammal Conservation Program. Contract FG3146WM.
- Calflora. 2022. Information on Wild California Plants for Conservation, Education, and Appreciation. Berkeley, California. Accessed via <http://www.calflora.org/> in August 2022.
- California Department of Fish and Wildlife (CDFW). 2022a. California Natural Diversity Database (CNDDDB). Commercial version dated May 1, 2022. Accessed via: <https://www.wildlife.ca.gov/Data/CNDDDB> in May 2022.
- California Department of Fish and Wildlife (CDFW). 2022b (July). Special Animals List. Biogeographic Data Branch, California Natural Diversity Database, Sacramento, California.

- California Department of Fish and Wildlife (CDFW). 2022c (July). Special Vascular Plants, Bryophytes, and Lichens List. California Natural Diversity Database, Sacramento, California.
- California Department of Fish and Wildlife (CDFW). 2022d. Vegetation Classification and Mapping Program (VegCAMP). Accessed via: <https://www.wildlife.ca.gov/Data/VegCAMP> in August 2022.
- California Department of Fish and Wildlife (CDFW). 2022e. California Wildlife Habitat Relationships (CWHR) System. Accessed via: <https://www.wildlife.ca.gov/data/cwhr> in August 2022.
- California Herps. 2022. A Guide to the Amphibians and Reptiles of California. Accessed via: <http://www.californiaherps.com> in August 2022.
- California Native Plant Society (CNPS). 2022. Inventory of Rare and Endangered Plants of California. Online edition V8-03 0.39. Accessed via: <https://rareplants.cnps.org> in August 2022.
- Central Coast Bat Survey. 2022. Central Coast Bats. Accessed online via: <https://centralcoastbatsurvey.org/> in August 2022.
- Christopher, S.V. 2018. Ecology of the western spadefoot in eastern San Luis Obispo County. Central Coast Chapter of the Wildlife Society Annual Wildlife Symposium, November 9, 2018.
- The Cornell Lab of Ornithology. 2022a. eBird. Accessed via: <https://ebird.org> in August 2022.
- The Cornell Lab of Ornithology. 2022b. All About Birds. Accessed via: <https://www.allaboutbirds.org> in August 2022.
- County of San Luis Obispo (County). 1996 (January 2). Templeton Community Plan. Adopted February 2014.
- County of San Luis Obispo (County). 2007 (December). San Joaquin Kit Fox Standard Mitigation Ratio Areas.
- County of San Luis Obispo (County). 2015 (March). General Plan, Conservation and Open Space Element. Adopted May 11, 2010, amended March 24, 2015. Department of Planning and Building.
- County of San Luis Obispo (County). 2016. Guidelines for Biological Resources Assessments. Department of Planning and Building.
- County of San Luis Obispo (County). 2017a (March 6). Templeton Urban Reserve Line Combining Designations Map. Department of Planning and Building.
- County of San Luis Obispo. 2017b. Oak Woodland Ordinance Fact Sheet. Department of Planning and Building. LNG-1024.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1992. Classification of Wetlands and Deepwater Habitats of the United States. Originally released December 1979. Prepared for U.S. Department of the Interior Fish and Wildlife Service, Washington, D.C. FWS/OBS-79/31.
- Driscoll, D.E. 2010. Protocol for Golden Eagle Occupancy, Reproduction, and Prey Population Assessment. American Eagle Research Institute, Apache Junction, Arizona.
- Google Earth. 2022. Google Earth Pro Version 7.3.4.8642. 12/1985 to 2/6/2021.
- Gruver, J.C. and D.A. Keinath. 2006 (October 25). Townsend's Big-eared Bat (*Corynorhinus townsendii*): A Technical Conservation Assessment. Prepared for the USDA Forest Service, Rocky Mountain Region, Species Conservation Project.

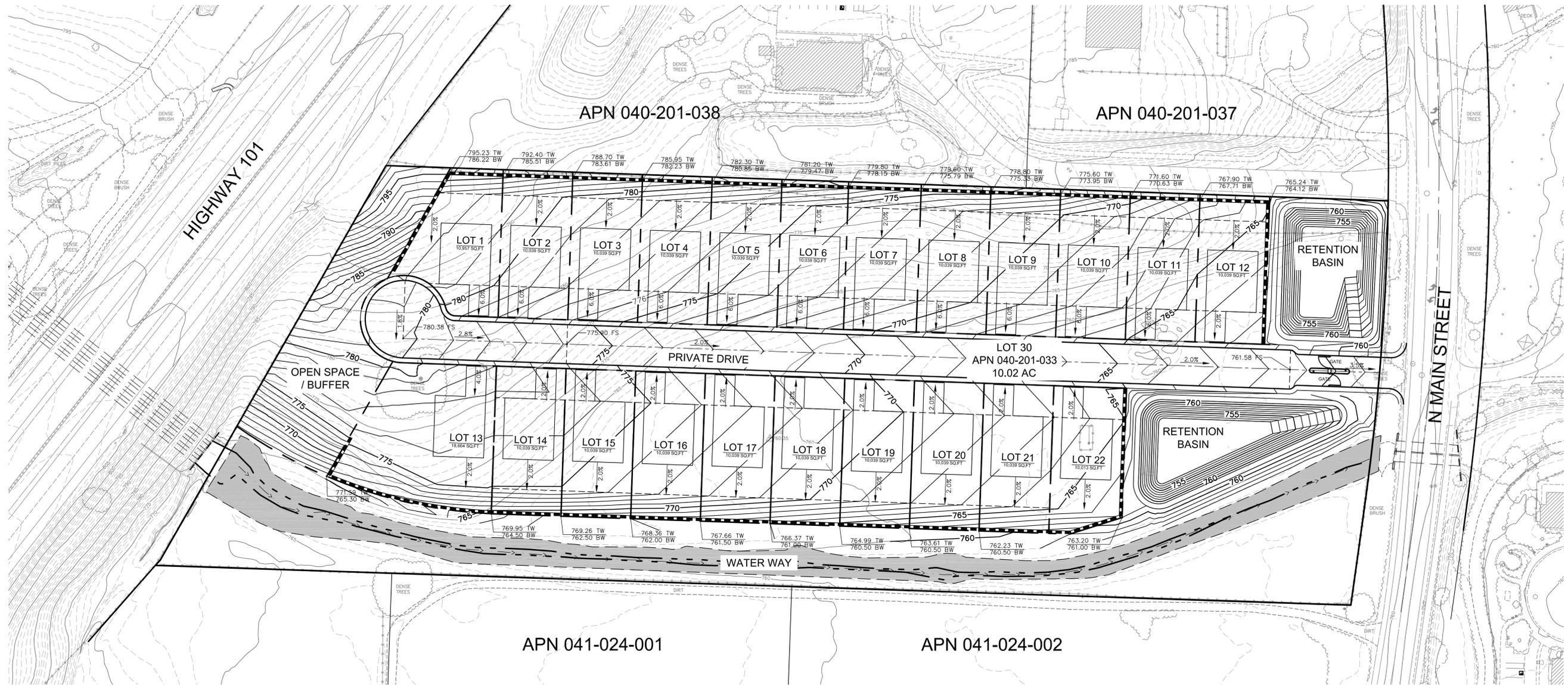
- Hoover, R.F. 1970. *The Vascular Plants of San Luis Obispo County, California*. University of California Press, Berkeley, California.
- Jackman, R.E. and J.M. Jenkins. 2004 (June). Protocol for Evaluating Bald Eagle Habitat and Populations in California. Prepared for U.S. Fish and Wildlife Service, Sacramento, California.
- Jennings, M. R., and M. P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*, 1 November 1994. California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California. 255 pp.
- Jepson Flora Project (editors). 2022. Jepson eFlora. The Jepson Herbarium, University of California, Berkeley. Accessed via: <http://ucjeps.berkeley.edu/eflora/> in August 2022.
- Morey, S.R. 1998. Pool duration influences age and body mass at metamorphosis in the western spadefoot toad: Implications for vernal pool conservation. Pages 86-91 in C.W. Witham, E.T. Bauder, D. Belk, W.R. Ferren, Jr., and R. Ornduff (editors). *Ecology, Conservation and Management of Vernal Pool Ecosystems*, Proceedings from a 1996 conference. California Native Plant Society, Sacramento, California.
- Moyle, P.B., R.M. Quinones, J.V. Katz, and J. Weaver. 2015. *Fish Species of Special Concern in California, Third Edition*. California Department of Fish and Wildlife, Sacramento.
- Natural Resources Conservation Service (NRCS). 2022. Web Soil Survey. National Cooperative Soil Survey, U.S. Department of Agriculture. Accessed via: <http://websoilsurvey.nrcs.usda.gov/> in May 2022.
- Peterson, A. 1986. *Habitat Suitability Index Models: Bald Eagle (Breeding Season)*. U.S. Fish and Wildlife Service Biological Report 82(10.126).
- Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, Second Edition*. California Native Plant Society, Sacramento, California.
- Thompson, R.C., A.N. Wright, and H.B. Shaffer. 2016. *California Amphibian and Reptile Species of Special Concern*. University of California Press, Oakland, California.
- The Tricolored Blackbird Working Group. 2007. *Conservation Plan for the Tricolored Blackbird (Agelaius tricolor)*. Susan Kester (editor). Sustainable Conservation, San Francisco, California.
- United States Fish and Wildlife Service (USFWS). 2021. *Birds of Conservation Concern 2021*. Migratory Bird Program.
- United States Fish and Wildlife Service (USFWS). 2022a. *National Wetlands Inventory*. U.S. Department of the Interior, Washington, D.C. Accessed via: <http://www.fws.gov/wetlands/> in May 2022.
- United States Fish and Wildlife Service (USFWS). 2022b. *Threatened and Endangered Species Active Critical Habitat Report*. ECOS Environmental Conservation Online System. Accessed via: <https://ecos.fws.gov/ecp/report/critical-habitat> in May 2022.
- Western Regional Climate Center. 2022. *Climate Summaries*. Accessed via: <https://wrcc.dri.edu/Climate/summaries.php> in August 2022.

APPENDIX A

Site Plans

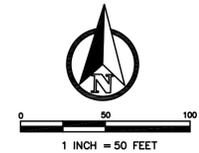


C:\Users\amnak\Desktop\301_North_Main_3_Deliverable\210226_CIVIL_MASTERrev6.dwg 8-26-22 12:59:50 PM amnak



PRELIMINARY GRADING PLAN

SCALE HORIZ 1"=50'



LEGEND:	EXISTING	PROPOSED
PROPERTY LINE	—————	—————
RIGHT-OF-WAY	—————	—————
RETAINING WALL	—————	—————
CONTOURS	—XXX—	—XXX—
FLOWLINE	—>>>—	—>>>—
FINISH GRADE	(XXX FG)	XXX FG
TOP OF WALL	(XXX TW)	XXX TW
BOTTOM OF WALL	(XXX BW)	XXX BW

CONTACT INFORMATION:

OWNER:
THE MITTRY FARMS TRUST
PO BOX 3431
SHELL BEACH, CA 93448

CIVIL ENGINEER:
AKA ENGINEERING COMPANY
PO BOX 3470
SHELL BEACH, CA 93448

ARCHITECT:
LSA ARCHITECTS
171 NAOMI AVENUE
SHELL BEACH, CA 93449

SURVEYOR:
MBS LAND SURVEYS
3559 S HIGUERA STREET
SAN LUIS OBISPO, CA 93401

PROPERTY INFORMATION:

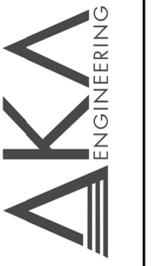
ADDRESS:
301 NORTH MAIN STREET
TEMPLETON, CA 93465

LEGAL DESCRIPTION:
RHO PR PTN LT 30

EXISTING PROPERTY ZONE:
C-R

TOTAL SITE AREA:
10.02 AC (436,869 SF)

PROPOSED DEVELOPMENT AREAS:
RESIDENTIAL PARCELS = 5.39 AC
PRIVATE DRIVEWAY RIGHT-OF-WAY = 1.16 AC
OPEN SPACE = 2.44 AC
BASIN AREA = 1.03 AC



ALOHA KE AKUA
ENGINEERING COMPANY
PO BOX 3470
SHELL BEACH, CA 93448
T 805 888-1952
www.AKAengco.us



THESE PLANS AND SPECIFICATIONS, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AKA ENGINEERING COMPANY AND SHALL NOT BE USED, OTHERWISE OR REPRODUCED WITHOUT THE EXPRESSED WRITTEN AUTHORITY OF AKA ENGINEERING COMPANY.

REVISIONS:	NO.	DATE	DESCRIPTION

APN 040-201-033
301 N MAIN STREET, TEMPLETON, CA
**RESIDENTIAL SUBDIVISION
PRELIMINARY GRADING PLAN**

JOB #: 210226
DATE: 08/25/2022
DRAWN BY: AK
SCALE: 1"=50'

SHEET
C2

APPENDIX B

List of Plants and Animals Observed Onsite During the Site Visits



Appendix B. List of Plants and Animals Observed During the Surveys

Scientific Name	Common Name
Plants	
<i>Amsinckia intermedia</i>	Common fiddleneck
<i>Avena barbata</i> *	Slender wild oat
<i>Erodium cicutarium</i> *	Red-stemmed filaree
<i>Hirschfeldia incana</i> *	Summer mustard
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	Hare barley
<i>Malva neglecta</i> *	Common mallow
<i>Melilotus indica</i>	Sweet cicily
<i>Pinus</i> sp. *	Pine (dead along Main Street)
<i>Polygonum aviculare</i> *	Prostrate knotweed
<i>Quercus lobata</i>	Valley oak
<i>Rumex acetosella</i> *	Sheep sorrel
<i>Rumex pulcher</i> *	Fiddle dock
<i>Silybum marianum</i> *	Milk thistle
Animals	
<i>Bos taurus</i> *	Cattle
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Otospermophilus beecheyi</i>	California ground squirrel
<i>Sturnus vulgaris</i> *	European starling (nesting)

*Non-native species

APPENDIX C

Photo Plate



Appendix C. Photo Plate

Photo 1. Northwesterly view across the property, taken from the southeastern corner. The habitat onsite is grazed non-native grassland dominated by non-native weeds. The only infrastructure is a well and cattle trough seen toward the middle of the photo.



Photo 2. Southeasterly view across the property, taken from near the northwestern corner with Main Street in the distance.



Photo 3. Disturbed ground from cattle concentrating at the water trough and shallow puddles from overflow. No wetland vegetation was present and the area was composed of bare soil and patchy non-native weeds.



Photo 4. Southerly view of the property along Main Street with a dead pine (*Pinus* sp.) tree along the fence line.



Photo 5. Fencing along the northern boundary of the property looking west showing disturbed annual grassland throughout the area with neighboring development to the north. Highway 101 is visible in the distance.



Photo 6. Two valley oak (*Quercus lobata*) trees are present onsite, and the one on the left would be removed for the proposed subdivision. It is in poor health and had limited canopy cover. Also, numerous broken branches were observed laying on the ground around this individual.



Photo 7. The ephemeral stream enters the site from under Highway 101 through these four 36-inch culverts.



Photo 8. The ephemeral stream generally had swale-like topography with an unvegetated low flow channel. It would be considered Riverine habitat, and appears to only flow during rain events once sufficient rainfall has occurred to saturate the ground.



Photo 9. View of the ephemeral stream closer to Main Street showing eroded banks from livestock trampling and bare soils. No wetland vegetation or evidence of recent flow was present.



Photo 10. The ephemeral stream flows under Main Street via a small bridge, ultimately connecting with Toad Creek and then the Salinas River.

APPENDIX D

Special-status Biological Resources Summary



Appendix D. Special-status Biological Resources Summary

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Distribution
PLANTS/LICHENS/BRYOPHYTES						
Eastwood's larkspur	<i>Delphinium parryi</i> ssp. <i>eastwoodiae</i>	—	—	1B.2	Perennial herb; chaparral and valley and foothill grassland generally in serpentine soils; 75-500 meters in elevation; blooms February to March.	Not expected. No suitable soils are present and the site is outside of the species local distribution. Subspecies is endemic to SLO Co., occurring from Morro Bay to the foothills surrounding the city of SLO. The only record in the vicinity is from 1956 and has an imprecise location.
Hardham's evening-primrose	<i>Camissoniopsis hardhamiae</i>	—	—	1B.2	Annual herb; occurs in disturbed or burned areas, chaparral and cismontane woodland on sandy soils or decomposed carbonate; 140-945 meters in elevation; blooms March to May.	Not expected. No suitable habitat or soils are present. Distributed to the east of Santa Margarita and near Lake Nacimiento but there are no records in the Salinas Valley near Templeton.
Kellogg's horkelia	<i>Horkelia cuneata</i> var. <i>sericea</i>	—	—	1B.1	Perennial herb; openings in coniferous forest, maritime chaparral, coastal dunes and coastal scrub on sandy or gravelly soils; 10-200 meters in elevation; blooms April to September.	Not expected. No suitable habitat or soils are present and is associated with old dunes and coastal sand hills. Species has a wide range from Point Reyes to Point Conception in coastal areas. The only record nearby "needs fieldwork".
La Panza mariposa-lily	<i>Calochortus simulans</i>	—	—	1B.3	Perennial bulbiferous herb; chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland on sandy and often granitic soils and sometimes on serpentine; 325-1150 meters in elevation; blooms April through June.	Not expected. The site is slightly outside the local distribution and elevational range of the species, and grazing disturbance would preclude this perennial species. Species is generally distributed in the La Panza Range with other occurrences at Lake Nacimiento and the Santa Lucia Range. Local records are hills around Atascadero and Santa Margarita.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Distribution
Lemmon's jewelflower	<i>Caulanthus lemmonii</i>	—	—	1B.2	Annual herb; pinyon and juniper woodland, and valley and foothill grassland; ranges from 80 to 1,220 meters in elevation; blooms March to May.	Not expected. Grassland habitat onsite has been significantly disturbed and there are no recent records nearby. Species has a wide distribution in inland areas of CA, ranging from west of Tracy to mountainous areas of Ventura Co. Locally from Lake Nacimiento through eastern SLO Co.
Mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	—	—	1B.1	Perennial herb; chaparral, cismontane woodland, and coastal scrub on sandy or gravelly soils; 70- 810 meters in elevation; blooms February to September.	Not expected. No suitable habitat or soils are present. Perennial species that would not persist under current grazing regime. Subspecies has a wide distribution in coastal areas and inland from northern SLO Co. to northern San Diego Co. Records from Templeton and Atascadero are from pre-1960 and "need fieldwork".
Miles' milk-vetch	<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	—	—	1B.2	Annual herb; coastal scrub habitats with clay soils; 20-90 meters in elevation; blooms March to June.	Not expected. No suitable habitat or soils are present. Occurs from Morro Bay to San Luis Obispo with scattered records through western Santa Barbara Co. to near Ventura. One record near Atascadero "needs fieldwork" but otherwise not recorded from this area.
Most beautiful jewelflower	<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	—	—	1B.2	Annual herb; chaparral, cismontane woodland, and valley and foothill grassland on serpentine soils; 94-1000 meters in elevation; blooms March to October.	Not expected. No suitable soils are present and the site is outside of the species' elevational range. Species occurs in the Santa Lucia Range from Ragged Point to the city of SLO. Nearby records have imprecise localities.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Distribution
San Luis Obispo owl's-clover	<i>Castilleja densiflora</i> var. <i>obispoensis</i>	—	—	1B.2	Annual herb; meadows, seeps, and valley and foothill grassland sometimes on serpentine; 10-400 meters in elevation; blooms March to May.	Unlikely. Although grassland habitat is present, it is heavily disturbed by grazing. Was not found during focused surveys conducted during the species' blooming period. Subspecies is endemic to the county occurring throughout the western half. Local records are from the east side of the Salinas River valley from Paso Robles to Santa Margarita.
Santa Lucia dwarf rush	<i>Juncus luciensis</i>	—	—	1B.2	Annual herb; chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, and vernal pools; ranges from 300 to 2,040 meters in elevation; blooms April to July.	Not expected. No suitable habitat or mesic conditions are present, the site is slightly outside the elevational range of the species, and the only nearby record is from 1958 and the locality is imprecise. Species is distributed in the coastal and inland mountain ranges from Monterey Co. to Ventura Co., with disjunct locations in northeastern and southern CA. Locally occurs in the La Panza Range and Camp Roberts.
Santa Margarita manzanita	<i>Arctostaphylos pilosula</i> (= <i>A. wellsii</i>)	—	—	1B.2	Evergreen perennial shrub; occurs in closed-cone coniferous forests, broadleaved upland forest, cismontane woodland, and maritime chaparral sometimes on sandstone; ranges from 75-1100 meters in elevation; blooms December to May.	Not expected. No suitable habitat or soils are present and no manzanita shrubs occur onsite. Species is widely distributed throughout mountainous areas of SLO Co. except the north coast. Local records are in the hills south of Atascadero.
Shining navarretia	<i>Navarretia nigelliformis</i> ssp. <i>radians</i>	—	—	1B.2	Annual herb; cismontane woodland, valley & foothill grassland; usually occurs in vernal pools or wetlands; sometimes in clay; 65-1000 meters in elevation; blooms March to July.	Not expected. Although grassland habitat and clay soils are present, no wetland conditions occur and the site is heavily disturbed by grazing. Recorded in Carrizo Plain, Cholame Valley, and Creston but more common from Paso Robles into eastern Monterey County and the Central Valley. The only record nearby is from 1949 and has an imprecise location.

Common Name	Scientific Name	Fed	CA	CRPR	Ecological Information	Evaluation of Occurrence/ Site Suitability / Distribution
Straight-awned spineflower	<i>Chorizanthe rectispina</i>	—	—	1B.3	Annual herb; openings in chaparral, cismontane woodland, coastal scrub on granite sand or disintegrating shale and tolerates disturbance; 85-1035 meters in elevation; blooms April to July.	Not expected. No suitable habitat or soils are present. Species occurs in the Santa Lucia Range to north of Arroyo Grande. Nearest records are in the hills south and southeast of Atascadero.
Yellow-flowered eriastrum	<i>Eriastrum luteum</i>	—	—	1B.2	Annual herb; occurs in broad-leaved upland forest, chaparral, cismontane woodland in sandy or gravelly soils; ranges from 240 to 1000 meters in elevation; blooms May to June.	Not expected. No suitable habitat or soils are present. Occurs in the La Panza Range to the east of Santa Margarita.

*E = Endangered; T = Threatened; R = Rare; '—' = no status; CRPR: Rank 1A - Presumed extirpated in California and either rare or extinct elsewhere; Rank 1B – Rare, threatened or endangered in California and elsewhere; Rank 2A – Presumed extirpated in California, but more common elsewhere; Rank 2B – Rare, threatened, or endangered in California, but more common elsewhere; Rank 3 - Plants needing more information, a review list; Rank 4 – Limited distribution, a watch list. Sources: California Natural Diversity Database (California Department of Fish and Wildlife 2022a); Special Vascular Plants, Bryophytes, and Lichens List (California Department of Fish and Wildlife 2021a); Inventory of Rare and Endangered Plants of California (California Native Plant Society 2022); Information on Wild California Plants for Conservation, Education, and Appreciation (Calflora 2022); Jepson eFlora (Jepson Flora Project 2022); The Vascular Plants of San Luis Obispo County, California (Hoover 1970).

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
ANIMALS						
INVERTEBRATES						
Atascadero June beetle	<i>Polyphylla nubila</i>	—	—	—	Sandy soils in annual grassland, chamise chaparral, and oak woodland and savannah.	Not expected. Onsite soils are not sandy. Restricted to Paso Robles and Atascadero and San Luis Obispo on "inland sand dunes".
California linderiella	<i>Linderiella occidentalis</i>	—	—	—	Seasonal pools or vernal pools in grasslands or in sandstone depressions. Can occur in very small pools and are heat tolerant.	Not expected. Species does not occur in flowing water and so would not occupy the ephemeral stream. Pools from spilling cattle troughs are likely to be heavily impacted by trampling, causing muddy conditions and could crush individuals. In SLO Co., recorded only near Santa Margarita and Camp SLO.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Crotch bumble bee	<i>Bombus crotchii</i>	—	CE	—	Inhabits grasslands and scrub, especially hot and dry areas. It nests and overwinters underground. Food plants include milkweed, lupine, phacelia, sage, clarkia, poppy, and buckwheat as well as agricultural crops.	Unlikely. No potential food plants were seen in the disturbed grassland habitat onsite. The only records in the area are from pre-1970 near Atascadero.
Lompoc grasshopper	<i>Trimerotropis occulens</i>	—	—	—	Associated with pale rocky or gravelly soils.	Not expected. No potentially suitable soils are present, the only record in the area is from 1909 and has an imprecise locality. Generally found outside of this area.
Obscure bumble bee	<i>Bombus caliginosus</i>	—	—	—	Forages on ceanothus, coyote brush, thistles, sweet peas, lupines, willows, clover and blackberry. Queens emerge in late-January and build nests underground, on the ground or in trees. Workers are produced until males emerge in April. After mating, the queens build up fat stores and go into hibernation underground in late-October.	Unlikely. Very few flowering plants that could be used as food for this species are present as the grassland is almost exclusively non-native grasses and is grazed down. Little is known about this species and the only records in the vicinity are from 1949 and 1956 west of Atascadero.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	—	—	Grasslands with temporary ponded water. Inhabits small clear-water depressions in rock, vernal pools and swales, as well as anthropogenic habitats such as tire ruts, dozer scrapes and railroad pools. Needs standing water for at least 18 days to complete its lifecycle.	Not expected. Species does not occur in flowing water and so would not occupy the ephemeral stream. Pools from spilling cattle troughs are heavily impacted by trampling, causing muddy conditions that are unsuitable. Trampling could crush individuals. Water in these pools persists until at least mid-May, and could support predators and competitors. No records are from the Salinas Valley south of Paso Robles. Occurs in disjunct locations within the county - Camp Roberts, Paso Robles/Creston, Tank Farm SLO, Carrizo Plain and SE La Panza Range.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
FISH						
South-central California coast DPS steelhead	<i>Oncorhynchus mykiss irideus</i> pop. 9	T	—	—	Adults spawn in freshwater streams with clear, well-oxygenated, cool water and clean gravel substrate. Also require instream cover (branches, logs) and streamside vegetation. Juveniles rear in freshwater reaches or lagoons before going to the ocean to mature, and then return to freshwater to reproduce.	Not expected. Onsite is much too ephemeral to support fish. Recorded in Salinas River.
AMPHIBIANS/REPTILES						
Blainville's (=coast) horned lizard	<i>Phrynosoma blainvillii</i>	—	—	SSC	Grasslands, sandy washes, coastal scrub, chaparral, coniferous forest and woodlands with patches of open areas for sunning and bushes for cover. Often with loose sandy soils for burial, but also uses small mammal burrows. Preys on native species of ants and other small invertebrates.	Not expected. No cover is present onsite and urban development and Hwy. 101 would be a barrier to movement. There are no records in the Salinas Valley although is known to occur along the coast and in eastern areas of the county.
California red-legged frog	<i>Rana draytonii</i>	T	—	SSC	Forages and breeds in streams with deep slow-moving pools, stock ponds, reservoirs, springs, lagoons, and marshes; usually with emergent or riparian vegetation but also found at sites lacking vegetation. Uses riparian and various upland habitats in winter and for dispersal.	Not expected. Ephemeral stream onsite does not hold water long enough for this species, and there are no deep vegetated pools. No aquatic sites are near the site that could support breeding; therefore, frogs are not expected during winter dispersal. Salinas River has high abundance of non-native predatory fish that would preclude successful breeding. Hwy. 101 and urban development would be a barrier to dispersal. Recorded in tributaries south of Templeton, but these localities have been surveyed in recent years and only have bullfrogs. Not recorded to be extant at any other Salinas River valley location.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Coast Range newt	<i>Taricha torosa</i>	—	—	SSC	Primarily terrestrial in forests, oak woodlands, chaparral, and rolling grassland. Breeds in ponds, reservoirs and pools of clear streams with rocky substrates and cascades.	Not expected. Onsite stream is much too ephemeral and does not have appropriate rocky habitat with pools and cascades. Recorded in the upper portions of creeks in the Santa Lucia Range.
Foothill yellow-legged frog	<i>Rana boylei</i>	Under Review	E	SSC	Rocky streams and rivers with open sunny banks, surrounded by forests, chaparral, riparian and grassland. Sometimes found in isolated pools, backwaters, and spring-fed pools. Reproduction is exclusively in streams and rivers. Usually found near water and both diurnal and nocturnal.	Not expected. This species has been extirpated from this area since 1975-1978, and the closest extant populations are from Rocky Point northward.
Lesser slender salamander	<i>Batrachoseps minor</i>	—	—	SSC	Forests composed of mixed oak, tanbark oak, sycamore and bay laurel with moist conditions. Found above 400 m elevation. Active above ground on warm, wet nights but otherwise is underground or under cover objects.	Not expected. No oak woodland habitat or mesic conditions are present, and the site is outside of the species' very restricted distribution. It occurs on the ridge of the Santa Lucia Range, and site is below the elevational range of the species.
Northern California legless lizard	<i>Anniella pulchra</i>	—	—	SSC	Beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, oak woodland, and stream terraces with riparian vegetation. Fossorial species requires moist, loose soils or leaf litter with plant cover or surface objects (rocks, boards, logs, etc.). Can occur in residential areas.	Not expected. No suitable cover is present onsite and does not occur in open, dry grassland. Has been recorded at several locations in the site vicinity.
Southwestern (=western) pond turtle	<i>Actinemys pallida</i> (= <i>Emys marmorata</i>)	—	—	SSC	Ponds, lakes, rivers, streams, marshes, brackish lagoons, and irrigation ditches with a mosaic of vegetation and open areas for basking. Uses upland areas for nesting and in winter, including woodland, forest, grassland, chaparral, and grasslands.	Not expected. Onsite drainage is much too ephemeral to support this species. No suitable aquatic habitat is present in adjacent areas and site is mostly surrounded by barriers to movement - Hwy. 101, urban development and fencing. Recorded in the Salinas River floodplain in Paso Robles and Santa Margarita.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Western spadefoot	<i>Spea hammondi</i>	— (under review)	—	SSC	Grassland, open woodland/savanna, coastal scrub, and chaparral habitats where it primarily occupies underground burrows that it digs in a variety of soils but often associated with sand. Breeds in vernal pools, ephemeral ponds, stock ponds and streams that dry to isolated pools which lack aquatic vertebrate predators.	Unlikely. Although shallow pools formed by the over-spilling cattle trough could attract breeding spadefoot, site is not within a known vernal pool area where breeding habitat is present. With cattle present at such high frequency, it is likely that any individuals or tadpoles would be trampled. Recorded 0.4 mi to the east along Salinas River area. In some years, a suitable breeding pool may form in the Toad Creek, but surrounding area has been dry farmed with regular disking that removes upland habitat.
BIRDS						
American peregrine falcon	<i>Falco peregrinus anatum</i>	BCC	—	FP (nesting)	Various open habitats, coastal areas, inland wetlands, and desert mountains. Feeds mainly on birds, but also eats bats, fish, rodents and insects. Nests on high cliffs, dunes or mounds near water from coastal areas north of Santa Barbara. Also uses buildings, cavities in trees or snags or old raptor nests. Occurs in this area year-round.	Potential. The open habitat onsite and in the surrounding area is suitable for foraging. No cliffs are present for nesting. Has been observed in eBird on several occasions in the vicinity of the site.
Bald eagle	<i>Haliaeetus leucocephalus</i>	BCC	E	FP (nesting & wintering)	Open areas near water where they mainly feed on fish, and may also eat birds, amphibians, reptiles, small mammals, and crabs. Nests are in large mature trees such as ponderosa pine or occasionally on cliffs or the ground, often within 1 mile of a large water source.	Potential. The site is open enough and surrounded by open country for foraging on small mammals, however is unlikely that this species would forage within the urban environment. May perch on large oak trees, but unlikely to nest due to human disturbance from the highway and urban development. Numerous observations in the vicinity in eBird.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Burrowing owl	<i>Athene cunicularia</i>	BCC	—	SSC (burrow sites & some wintering sites)	Open treeless areas with low sparse vegetation such as grasslands, deserts, pastures, agricultural fields, airports, and artificial embankments where they prey on small vertebrates and various invertebrates. Nests in burrows created by other animals with nearby lookouts such as fence posts or shrubs. Formerly occurred year-round in this area, but now restricted to winter.	Unlikely. Suitable grassland habitat with low, sparse vegetation is present. Ground squirrel burrows were observed near old debris that could be used as a vantage point are onsite. However, species is extremely rare in this area. There are a few recent records in eBird east of Paso Robles and Creston but none from the Salinas River valley. No records were in the CNDDB.
California horned lark	<i>Eremophila alpestris actia</i>	—	—	WL	Areas with sparse vegetation or bare ground in prairies, deserts, tundra, beaches, dunes, airports, plowed fields and heavily grazed pastures where they eat seeds and insects. Nesting is on bare ground. Occurs year-round in this area.	Potential. Grazed grassland onsite is highly suitable. Could forage or nest onsite. Has been recorded in eBird throughout the Salinas River valley.
Cooper's hawk	<i>Accipiter cooperii</i>	—	—	WL (nesting)	Mature and open woodlands including oak forest, conifers and riparian; may also be found in suburban areas with tall trees. Feeds on birds, small mammals, reptiles and amphibians. Nesting is in dense woodlands. Occurs in this area year-round.	Potential. Could occur onsite as a transient and forage periodically, but would not nest outside of dense woodland. They have been recorded at numerous locations close to the site.
Ferruginous hawk	<i>Buteo regalis</i>	BCC	—	WL (wintering)	Open country such as grasslands, sagebrush, saltbush shrubland, and edges of pinyon-juniper forest where they prey on small mammals. Nests on lone trees, cliffs, utility poles, and shrubs from ground-level to 65-foot high. Occurs in this area during winter.	Potential. Could forage onsite, but does not nest in this area. Has been recorded in the general vicinity in eBird.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Golden eagle	<i>Aquila chrysaetos</i>	BCC	—	FP, WL (nesting & wintering)	Uncommon resident of mountainous and valley-foothill areas. Foraging typically occurs in open terrain where they prey on small mammals. Nesting usually occurs on cliff ledges, and less commonly in large trees or on structures such as electrical towers. Occurs in this area year-round.	Potential. Could forage onsite and perch in the valley oak trees. Low probability to nest given high human activity. Has been recorded throughout the Salinas River corridor and surrounding foothills in eBird.
Grasshopper sparrow	<i>Ammodramus savannarum</i>	—	—	SSC (nesting)	Grasslands, prairies, hayfields, and open pastures with little scrub cover and some bare ground where they prey on grasshoppers and other invertebrates. Nests on the ground at the base of clumps of grass within a large patch of tall grass. Occurs in this area during breeding season.	Potential. Could forage onsite, but is unlikely to nest in the grassland habitat due to the heavy grazing and extremely low vegetation height. In addition, there are a low number of records from the Salinas River valley and they are more common along the coast.
Great blue heron	<i>Ardea herodias</i>	—	—	— (nesting colony)	Freshwater and saltwater marshes, also foraging in grasslands and agricultural fields. Nesting colonies are near lakes, ponds and wetlands bordered by forests. Nests are placed mainly in trees, but may also nest on the ground, in bushes or artificial structures. Occurs year-round in this area.	Potential. Individuals could forage periodically but there is no nesting habitat. There are numerous records in eBird from the vicinity.
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	BCC	—	— (nesting)	Nests in oak woodland, chaparral, weedy fields, coastal scrub, pine-juniper woodland, riparian, suburban and rural residential areas. Outside of breeding season, uses same habitats as in the nesting season plus desert arroyos, river floodplains, mesquite, roadsides, agricultural areas, orchards and parks. Migratory and occurs in this area during the breeding season.	Potential. Could forage onsite periodically while moving through the area but there is no sufficiently dense vegetation for nesting. Recorded in eBird from the surrounding area.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Least Bell's vireo	<i>Vireo bellii pusillus</i>	E	E	WL	Riparian forest near permanent water or in dry river bottoms, with dense, low, shrubby vegetation where they forage on insects and spiders. Rare in this region during the breeding season and winters in southern Baja California.	Not expected. No suitable habitat is present on or near the site. One breeding pair observed along the Salinas River north of Paso Robles in 2005 and historical records are from within 5 miles of the site.
Lewis's woodpecker	<i>Melanerpes lewis</i>	BCC	—	— (nesting)	Oak savannah, deciduous woodlands, and coniferous forest. Requires open habitats with scattered trees and snags with cavities. Occurs in central and southern CA during the winter.	Potential. Suitable foraging habitat is present and could occur as a transient. Does not nest in this area. There are several observations surrounding the site in eBird.
Loggerhead shrike	<i>Lanius ludovicianus</i>	BCC	—	SSC (nesting)	Open country with low vegetation and well-spaced shrubs or trees such as coastal scrub, grasslands, agricultural fields, pastures, riparian areas, desert scrub, savannas, prairies, golf courses, and along roadsides where they prey on insects, amphibians, reptiles and small mammals. Nests in trees, shrubs, or brush piles. Occurs in this area year-round.	Potential. Habitat onsite is suitable for foraging but there is no dense scrubby vegetation for nesting. There are numerous observations in eBird from near the study area.
Merlin	<i>Falco columbarius</i>	—	—	WL (wintering)	Coastlines, open grasslands, savannas, woodlands, lakes, wetlands, and montane conifer forests where they prey on small birds, small mammals and insects. Nests in existing corvid or hawk nest but does not nest in California. Occurs in this area during winter.	Potential. Suitable foraging habitat is present in the study area but does not nest in this region. There are numerous observations in eBird from the general area.
Northern harrier	<i>Circus cyaneus</i>	—	—	SSC (nesting)	Large areas of wetlands and grasslands with low vegetation where they prey on small mammals, amphibians, reptiles and birds. Nesting is in marshes, grazed meadows, and desert shrubland where they nest on the ground in a dense clump of vegetation such as willows, grasses, sedge, bulrushes or cattails. Occurs year-round in this area.	Potential. Suitable foraging habitat is present onsite, but there is no suitable dense marsh or scrub habitat for nesting. There are numerous records in eBird from the surrounding area.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Nuttall's woodpecker	<i>Picoides nuttallii</i>	BCC	—	—	Riparian deciduous and oak woodland. Excavates nesting cavities in dead willows, sycamores, cottonwoods, and alders. Occurs year-round in this region.	Potential. Suitable foraging habitat is present and they are unlikely to nest in the oak trees as they prefer riparian habitat. There are a high number of observations near the site.
Oak titmouse	<i>Baeolophus inornatus</i>	BCC	—	— (nesting)	Montane hardwood-conifer, montane hardwood, oak woodland (blue, valley and coast live), and montane and valley foothill riparian. Ventures into residential areas. Nests are in cavities often near water. Eats insects, spiders, berries, acorns and seeds. Yearlong resident.	Potential. Could periodically forage onsite while moving through the area but species prefers woodland and the site is open grassland with two large trees. Would not nest onsite. There are numerous records in eBird in the vicinity including very close to the site.
Prairie falcon	<i>Falco mexicanus</i>	BCC	—	WL (nesting)	Grasslands, desert shrubland, tundra, coastal scrub, feedlots, and agricultural fields where they feed on small mammals, insects and birds. Nests on high cliff ledges and steep bluffs overlooking open areas. Occurs year-round in inland areas of this region, rarely on the coast.	Potential. Could forage in the open grassland habitat onsite but there is no nesting habitat. There are several records from areas surrounding the site in eBird.
Purple martin	<i>Progne subis</i>	—	—	SSC (nesting)	Forages in developed areas, parks, fields, dunes, streams, meadows, and riparian and coniferous woodland where they prey on insects. Nests in coniferous woodlands in tall isolated trees or snags using woodpecker holes, or in artificial structures such as bird houses, traffic lights or oil pumps. Occurs in this area during the breeding season.	Potential. Could forage or nest onsite, but observations from the area are very localized surrounding Atascadero. Low probability to occur but cannot be ruled out.
Rufous hummingbird	<i>Selasphorus rufus</i>	BCC	—	— (nesting)	Riparian areas, open woodlands, scrub, chaparral, mountain meadows, gardens and orchards. Feeds on nectar of flowering plants, insects, spiders and tree sap. Breeds in coniferous forests north of California; does nest in this area and occurs during migration.	Potential. Could forage onsite during migration. Does not nest in this area. Individuals have been recorded nearby in eBird, particularly from developed areas.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Sharp-shinned hawk	<i>Accipiter striatus</i>	—	—	WL (nesting)	Forages along the edges of dense mixed woodlands and forests where they prey on birds. Nests are in dense coniferous forests with closed canopies, but not in this region. Occurs only in winter in this area.	Potential. Could occur as a transient while migrating, but dense forest is lacking for foraging. Does not nest in this area. There are numerous records surrounding the site in eBird.
Tricolored blackbird	<i>Agelaius tricolor</i>	BCC	T	SSC (nesting colony)	Forages in a variety of habitats including pastures, agricultural fields, rice fields, and feedlots. Nests colonially in freshwater marshes with tules or cattails, or in other dense thickets of willow, thistle, blackberry, or wild rose in close proximity to open water. Occurs year-round in this area.	Potential. Could forage onsite while moving through the area but there is no marsh habitat for roosting or nesting. Has been recorded at several locations in the Salinas River valley.
White-tailed kite	<i>Elanus leucurus</i>	—	—	FP (nesting)	Savannas, open woodlands (oak or pine), riparian forest, marshes, desert grasslands, and fields where they prey on small mammals, birds, lizards, and insects. Nests and roosts in the edges of forests or in tall isolated trees. Occurs in this area year-round.	Potential. Could forage onsite in the open grassland habitat and roost in the valley oaks. No stick nests observed indicating raptor use of these two trees. Has been recorded in eBird at several locations close to the site.
Yellow-billed magpie	<i>Pica nutalli</i>	BCC	—	— (nesting & communal roosts)	Permanent residents of open oak woodland and savannah, riparian, valley hardwood-conifer, residential and agricultural areas, pastures and orchards. Feed on the ground on insects, invertebrates, trash, carrion, acorns, fruit, grain, nestlings, eggs, earthworms, ticks and live rodents. Nests and roosts in small colonies high in large trees. Occurs year-round in this area.	Potential. Suitable foraging, nesting and roosting habitat is onsite. There are numerous records in eBird surrounding the site.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
MAMMALS						
American badger	<i>Taxidea taxus</i>	—	—	SSC	Open grasslands, fields and the edge of scrub and woodland habitats; requires dry loose soils for burrowing and shelter and feeds on a variety of small mammals such as California ground squirrel and pocket gopher. Young are born in dens in March and April.	Unlikely. Although suitable habitat is present onsite and a ground squirrel colony was documented, this small area is surrounded by barriers to movement. Hwy. 101 to the west may represent a major source of mortality. Dense urban development is present to the south and east. Areas to the north and northeast have sections of fencing that may impede movement. No potential dens were seen during the surveys. Record nearby is from 2003 of a mortality on Hwy. 101.
Hoary bat	<i>Lasiurus cinereus</i>	—	—	—	Open habitats or habitat mosaics along woodland edges. Roosts in dense foliage of large trees. Maternity roosts are woodlands/forests with medium to large trees. Winters along the coast and in southern CA, and breeds inland and in northern CA.	Potential. Suitable open foraging habitat is present at the site but there is no woodland habitat onsite for roosting. There were no records in the CNDDDB but the site is in the species' yearlong range.
Monterey dusky-footed woodrat	<i>Neotoma macrotis luciana</i>	—	—	SSC	Builds large stick middens in chaparral and woodland habitats of moderate canopy and moderate to dense understory. Occurs in the Coast Ranges from Monterey Bay to Los Osos/Atascadero. Reaches its eastern extent at Camp Roberts where it contacts <i>Neotoma fuscipes bullatior</i> and southern extent where <i>Neotoma macrotis macrotis</i> and <i>Neotoma lepida intermedia</i> occur.	Not expected. No suitable habitat is present as it does not occur in open grassland. Nearest records are from Camp Roberts but may be more common as specialized studies are needed to differentiate subspecies.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Pallid bat	<i>Antrozous pallidus</i>	—	—	SSC	Open dry habitats including deserts, grasslands, shrublands, woodlands, and forests. Roosts in rocky outcrops, caves, crevasses, mines, hollow trees, and buildings that moderate temperature. Night roosts on porches and open buildings. The entire state of CA except the highest elevations in the Sierra Nevada are within the species' year-round range.	Potential. Could forage over the site and roost in the valley oak trees in large cavities. Has been recorded in the vicinity.
Salinas pocket mouse	<i>Perognathus inornatus psammophilus</i>	—	—	SSC	Grasslands, alkali shrubland, and oak savannah habitats in the Salinas Valley from Soledad south to San Miguel. Creates burrows in alluvial or wind-drifted sands. Forages on seeds of grasses and forbs, which it stores in its burrows.	Not expected. No suitable sandy soils are present and the site is outside of the species' distribution. Nearest records are from Camp Roberts.
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	E	T	—	Annual Grassland, Valley Sink Scrub, Valley Saltbush Scrub, and some agricultural areas. Open, level areas with loose textured, sandy soils for burrowing. Prey base consists of kangaroo rats, rabbits, ground squirrels, birds and insects. Nocturnal and active throughout the year. Pups are born in dens.	Not expected. Although open and level grassland habitat is present, site is outside of the historic range and has not been found in the Salinas Valley for several decades. Nearest recent records are from east of Paso Robles.
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	—	—	SSC	Desert scrub, grassland, sagebrush, chaparral, oak woodlands, riparian and coniferous forests; prefers mesic habitats and closely tied to rock cliffs with crevasses. Roosts in caves, cliffs, mines, tunnels, abandoned buildings and bridges. The year-round range of the species is considered to be all of California except high elevations in the Sierra Nevada.	Potential. Could forage onsite, and may roost under the adjacent bridge. Individuals have been recorded nearby.

Common Name	Scientific Name	Fed	CA	CDFW	Ecological Information	Evaluation of Occurrence/ Site Suitability / Local Records
Western red bat	<i>Lasiurus blossevillii</i>	—	—	SSC	Grasslands, riparian forest, shrublands, open woodlands, and orchards. Roosts in forests and woodlands in trees or occasionally shrubs. Roost sites are in the foliage of riparian trees or in urban areas. Occurs throughout the state in summer, and in winter in coastal areas south of San Francisco.	Potential. Could forage over the site due to the proximity of the Salinas River, but not expected to roost because riparian habitat is absent. No records were recorded in the vicinity in the CNDDDB, but known to occur in this area.
Yuma myotis	<i>Myotis yumanensis</i>	—	—	—	Open forests and woodlands and forages over water sources such as ponds, streams, and stock tanks. Roosts in buildings, mines, caves, crevices and under bridges; night roosts in more open areas such as under tree bark or tree cavities. Occurs in this region yearlong.	Potential. Suitable foraging habitat is present in the study area, and they could night roost in the oak trees. May roost under the North Main Street bridge just off-site. There were no records in the CNDDDB, but their year-round range includes all of San Luis Obispo County.

*E = Endangered; T = Threatened; C = Candidate; BCC = Birds of Conservation Concern; SSC = Species of Special Concern; FP = Fully Protected; WL = Watch List; '—' = no status; California Natural Diversity Database (California Department of Fish and Wildlife 2022a); Special Animals List (California Department of Fish and Wildlife 2021b); California Wildlife Habitat Relationships System (CDFW 2022c); A Guide to the Amphibians and Reptiles of California (California Herps 2022); eBird (The Cornell Lab of Ornithology 2022a); All About Birds (The Cornell Lab of Ornithology 2022b); Guide to North American Birds (Audubon 2022); Birds of Conservation Concern (USFWS 2021).

DESIGNATED CRITICAL HABITAT	
South-central California coast DPS Steelhead	Absent. The onsite drainage is too ephemeral to support this species and is not listed as critical habitat. The Salinas River and its major tributaries are critical habitat for this DPS.

Source: Threatened and Endangered Species Active Critical Habitat Report (United States Fish and Wildlife Service 2022b).

SENSITIVE NATURAL COMMUNITIES	
Central Coast Arroyo Willow Forest — State Rarity Rank S3.2	Absent. Dense closed-canopy forest characterized by arroyo willow (<i>Salix lasiolepis</i>) and/or Pacific willow (<i>S. lasiandra</i>). Occurs on moist to saturated sandy or gravelly soil in floodplains, low-gradient stream reaches and dune slack ponds. No arroyo willows are onsite.

SENSITIVE NATURAL COMMUNITIES	
Central Coast Cottonwood-Sycamore Riparian Forest — State Rarity Rank S3.2	Absent. Moderately closed broadleaved riparian forest dominated by California sycamore (<i>Platanus racemosa</i>) and Fremont cottonwood (<i>Populus fremontii</i>), with lower cover by coast live oak (<i>Quercus agrifolia</i>). The understory is usually dense thickets of willows (<i>Salix</i> spp.), mulefat (<i>Baccharis pilularis</i>) and nettles (<i>Urtica</i> spp.). No species characteristic of riparian habitat are in the study area.
Central Coast Live Oak Riparian Forest — State Rarity Rank 3.2	Absent. Band of riparian on drier, outer floodplains along perennial streams between the more mesic cottonwood or willow-dominated communities and more xeric chaparral. Dominated by coast live oak (<i>Quercus agrifolia</i>) with a relatively open understory of grasses. Other species in the understory include coyote brush (<i>Baccharis pilularis</i>), California rose (<i>Rosa californica</i>), fragrant sumac (<i>Rhus aromatica</i>), and blue elderberry (<i>Sambucus mexicana</i>). No coast live oaks are onsite.
Central Coast Riparian Scrub — State Rarity Rank S3	Absent. A dense, shrubby streamside thicket dominated by any of several species of willows (<i>Salix</i> spp.) and has coyote brush (<i>Baccharis pilularis</i>) as a secondary component. Occurs on sand or gravel bars along rivers and streams with ground water close to the surface. Also occurs around dune slack ponds. No willows are onsite.
Coastal and Valley Freshwater Marsh — State Rarity Rank S2.1	Absent. Occurs in permanently flooded sites with freshwater and lacking significant flow, dominated by perennial, emergent vegetation such as bulrushes (<i>Scirpus</i> sp. and <i>Schoenoplectus</i> sp.) and cattails (<i>Typha</i> sp.). No freshwater marsh vegetation occurs onsite.
Freshwater Seep — State Rarity Rank S3.2	Absent. Occurs in permanently moist or wet soil that seeps from surfacing groundwater or water table, usually within grassland or meadow communities. Composed of mainly perennial herbs, especially sedges (<i>Carex</i> spp.) and rushes (<i>Juncus</i> spp.). No wetland vegetation is onsite.
Northern Interior Cypress Forest — State Rarity Rank S2.2	Absent. Occurs on dry, rocky, and often serpentine soils. Stands are open and scrubby, being maintained by fires. It is dominated by one or more native cypress species (<i>Hesperocyparis</i> spp.). Suitable soils and cypress are not present onsite. In this region, restricted to Cuesta Ridge.

SENSITIVE NATURAL COMMUNITIES	
Northern Vernal Pool — State Rarity Rank S2.1	<p>Absent. Seasonally wet depressions often underlain by hardpan or claypan soils that may have a hummocky topography with mounds intervening between the depressions. They fill after winter rains and dry completely after the rains have ceased. Herbaceous community is comprised of herbs and grasses adapted to seasonal inundation and grow in rings as pools dry. The principal endemic vernal pool plant species is shining navarretia (<i>Navarretia nigelliformis</i> ssp. <i>radians</i>), with lower occurrence of Hoover's button celery (<i>Eryngium aristulatum</i> var. <i>hooveri</i>). Occurs in the Central Coast Vernal Pool Region, and the site is outside of the area mapped having appropriate geologic structure. No topographic depressions that support ponded water were observed onsite, and the alluvial soils were well-drained. No vernal pool plant species were observed onsite. Puddles from overflowing cattle trough are not vernal pools.</p>
Valley Needlegrass Grassland — State Rarity Rank S3.1	<p>Absent. Often occurs on clay soils that are moist or saturated in winter and very dry in the summer. It is dominated by purple needle grass (<i>Stipa pulchra</i>), but may have higher percent cover overall by native and introduced annual grassland species. No purple needle grass was observed onsite and likely would not be able to persist with current level of grazing pressure.</p>
Valley Oak Riparian Forest and Woodland — State Rarity Rank S3	<p>Absent. Moderately closed canopy, winter-deciduous broadleaved riparian woodland dominated by valley oak (<i>Quercus lobata</i>). Not fully described in Holland (1986), but in San Luis Obispo County this community differs from Valley Oak Woodland in that the trunks are below the top of bank of drainages and the canopy is more continuous. Other species may include willow (<i>Salix</i> spp.), coast live oak (<i>Quercus agrifolia</i>), and blue elderberry (<i>Sambucus nigra</i> ssp. <i>caerulea</i>). No riparian trees were along the ephemeral drainage.</p>
Valley Oak Woodland — State Rarity Rank S2	<p>Absent. Valley oak (<i>Quercus lobata</i>) is usually the only tree species and is an open savanna with grassland understory. Most stands have large trees with open canopies. Occurs on well-drained alluvial soils usually in valley bottoms below 2000 feet (610 meters) in elevation. With only two valley oaks on the 10-acre site, would not be considered a woodland habitat. More closely aligns with non-native grassland with two scattered valley oak trees.</p>
Vernal Marsh — State Rarity Rank S2	<p>Absent. Vegetated by low, annual herbs such as sedges (<i>Carex</i> spp.) and rushes (<i>Juncus</i> spp.). Has marshy conditions or standing water following winter rains but is reduced or completely dry by summer. Often found at the transition between Coastal and Valley Freshwater Marsh and drier upland grassland. No wetland vegetation was present onsite.</p>

Sources: Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986); California Natural Diversity Database (California Department of Fish and Wildlife 2022a); California Sensitive Natural Communities (California Department of Fish and Wildlife 2022b).

APPENDIX E

Drainage Memorandum



Subject: Preliminary Drainage Calculations
301 N Main Street, Templeton, CA
SUB2023-00013 TR-3212 (APN: 040-201-033)

To: Scott Newton (Mittry Farms Trust)

From: Anna Kauo PE, AKA Engineering Company
PO BOX 3470, Shell Beach, CA
(805) 888-1952, anna.kauo@akaengco.us

Date: July 12, 2023

INTRODUCTION

The purpose of this memorandum is to provide drainage calculations for the 301 N Main Street, Templeton project per the County of San Luis Obispo Public Works comments relating to SUB2023-00013 TR-3212. This memo references the Preliminary Design for Stormwater Basin and Preliminary Floodplain Hydraulic Analysis Technical Memorandums prepared by GHD and submitted to the County with the tentative tract map application.

PROJECT INFORMATION

The calculations included in this memo are provided to respond to the comment below and support the GHD technical memorandums.

County of San Luis Obispo Public Works comment #4 states: *Revise Technical Memorandum for Retention Basin Sizing. Toad Creek is not capable of receiving additional runoff, and it is not acceptable to worsen flooding at Main Street. Demonstrate that post-development runoff does not exceed pre-development runoff with 2-year to 100-year storm events.*

The SLO County Standards require that retention basins be designed to store the runoff from a 50-year design storm with a 10-hour duration and 10-hour intensity. Refer to the Preliminary Design for Stormwater Basin Technical Memorandums prepared by GHD and submitted to the County with the tentative tract map application summarizes the basin sizing for this standard.

METHODOLOGY & ASSUMPTIONS

Peak Runoff for pre- and post-development flows are calculated using the SCS method due to runoff being routed into the post-development basins. Hydraflow Hydrographs Extension for Autodesk Civil 3D was used to determine values.

Q = peak discharge (cubic feet per second)

S = Potential maximum retention (inches)

CN = SCS Curve Number

A = drainage area (acres)

P = precipitation (inches)

Precipitation Data is retrieved from the National Oceanic and Atmospheric Administration (NOAA) Atlas 14. Data used for the precipitation values in inches, for the SCS 6- and 24-hour durations corresponding to the 2-, 10-, 50-, and 100-year storms are as shown below.

	2-yr		10-yr		50-yr		100-yr			
6-hr	1.14 (0.977-1.35)	1.46 (1.24-1.72)	1.88 (1.60-2.23)	2.24 (1.89-2.68)	2.74 (2.22-3.42)	3.14 (2.48-4.02)	3.56 (2.74-4.69)	4.01 (2.98-5.46)	4.64 (3.28-6.63)	5.15 (3.50-7.66)
12-hr	1.44 (1.23-1.70)	1.93 (1.64-2.28)	2.57 (2.19-3.05)	3.11 (2.62-3.72)	3.84 (3.11-4.78)	4.40 (3.48-5.63)	4.98 (3.83-6.56)	5.59 (4.15-7.60)	6.42 (4.54-9.17)	7.08 (4.81-10.5)
24-hr	1.75 (1.59-1.97)	2.47 (2.24-2.79)	3.41 (3.07-3.85)	4.17 (3.73-4.75)	5.19 (4.50-6.12)	5.98 (5.07-7.19)	6.78 (5.62-8.35)	7.60 (6.12-9.62)	8.71 (6.74-11.5)	9.58 (7.16-13.1)

Retention Basin Capacity per storm event are calculated using Rational Method per the Preliminary Design for Stormwater Basin Technical Memorandums prepared by GHD and the following:

Volume (cf) = CiAt (1 ft/12 in)

C = 0.66

A = 332,365 SF

t = 10 hour

i (2-year) = 0.22

i (10-year) = 0.38

i (50-year) = 0.58

i (100-year) = 0.62

BASIN SIZING

The design basin volume shown on the preliminary grading and drainage plan is 2.737 ac-ft. The runoff from the private driveway and residential lots will drain to the basins. The basins can be modified to accommodate the additional runoff from the 100-year design storm should the County request the basins be sized for the 100-year design storm.

Basin volume (2-year) = 40,216 cf (0.92 ac-ft)

Basin volume (10-year) = 69,464 cf (1.59 ac-ft)

Basin volume (50-year) = 106,024 cf (2.43 ac-ft) – required per SLO County standards

Basin volume (100-year) = 113,336 cf (2.60 ac-ft)

Basin design volume per preliminary plans = 119,224 cf (2.737 ac-ft)

PRE-DEVELOPMENT CALCULATIONS FOR PEAK RUNOFF RATE

CN = 70 (Pasture, grazing grassland)

A = 10.02 acres

Tc=10 min

Pre-development peak runoff rate

Q (2-year) = 1.38 cfs

Q (10-year) = 7.62 cfs

Q (50-year) = 16.43 cfs

Q (100-year) = 20.70 cfs

POST-DEVELOPMENT CALCULATIONS FOR PEAK RUNOFF RATE

Shed 1 is the area that drains and is contained into retention basins.

CN = 80 (Single-family Residential, 4.45 ac CN=75, 1.16 ac CN=98)

A = 7.64 acres (332,635 sf)

Tc=10 min

Q (2-year) = 3.5 cfs, no discharge from basins (total storage used=22,573 cf)

Q (10-year) = 10.1 cfs, no discharge from basins (total storage used=56,757 cf)

Q (50-year) = 18.0 cfs, no discharge from basins (total storage used=97,843 cf)

Q (100-year) = 21.6 cfs (total storage used=116,787 cf)

Shed 1 peak runoff and volume is fully contained within the proposed retention basins for the 50-year storm. Basins are 8-ft deep with 1-ft of freeboard. The design volume is 105,894 cubic feet, not including the freeboard. The 100-year storm can be contained within the proposed retention basins with minor modifications to increase the volume by 10,893 CF.

Shed 2 is the area that does not drain to basins and drains directly to Toad Creek. This area does not have an increase in impervious areas and has very limited grading.

C = 70 (Pasture, grazing grassland)

A = 2.38 acres (103,700 sf)

Tc=10 min

Q (2-year) = 0.33 cfs

Q (10-year) = 1.81 cfs

Q (50-year) = 3.90 cfs

Q (100-year) = 4.91 cfs

CONCLUSIONS

The Post-development peak runoff does not exceed the pre-development runoff with the 2-, 10-, 50- and 100-year design storm events. The basin storage volume captures the impervious areas. The area (shed 2) that does not drain to the basin remains undeveloped.

Should the County require the basins be sized for the 100-year design storm with a 10-hour duration and 10-hour intensity, the project can accommodate the increase in basin volume with minor modifications.

ATTACHMENTS

Post-development SCS Method Hydrograph Reports (storm frequency with basin storage volume)

- 2-year, total storage used = 22,573 cf
- 10-year, total storage used = 56,757 cf
- 50-year, total storage used = 97,843 cf
- 100-year, total storage used = 116,787 cf

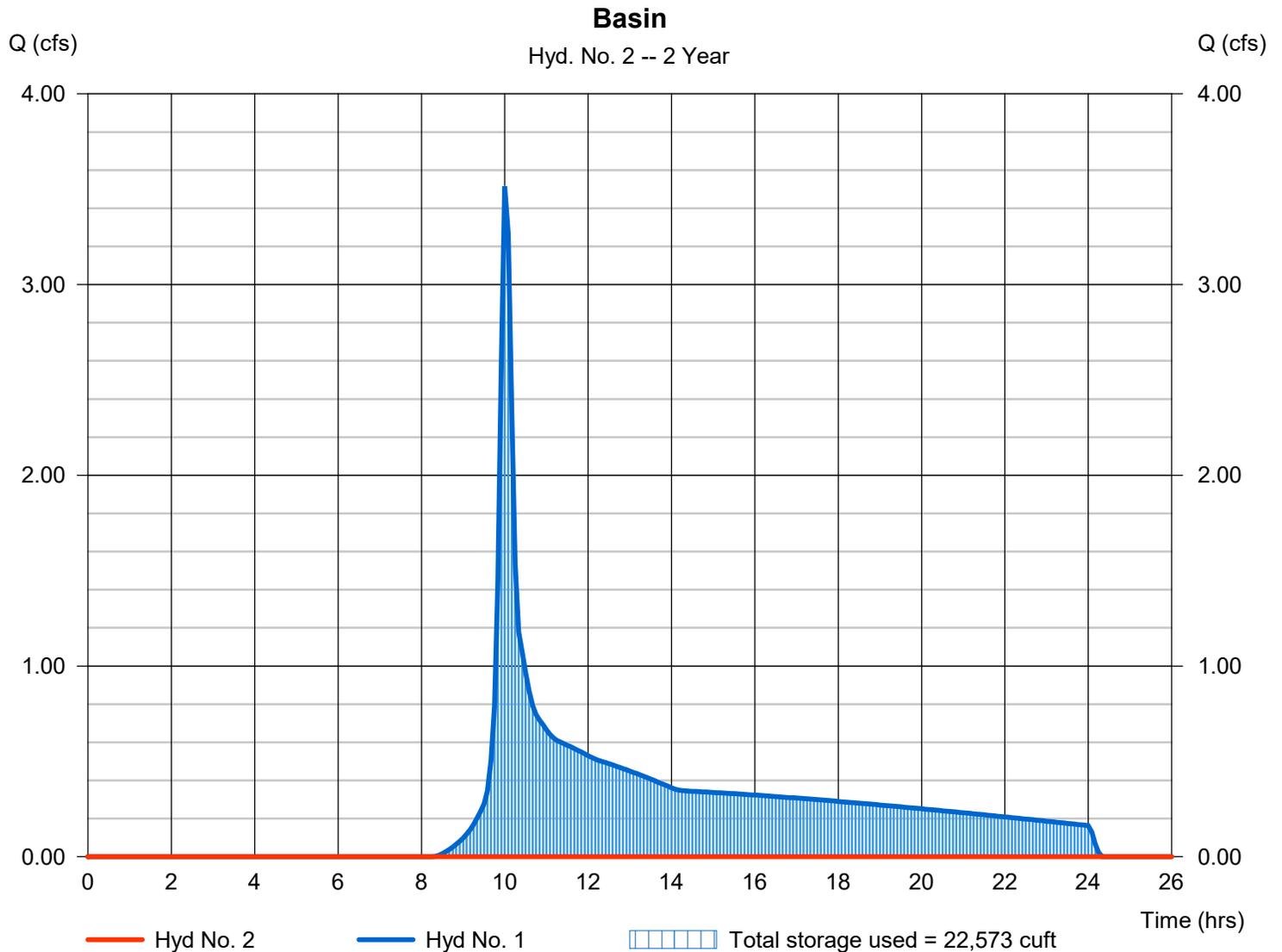
Hydrograph Report

Hyd. No. 2

Basin

Hydrograph type	= Reservoir	Peak discharge	= 0.000 cfs
Storm frequency	= 2 yrs	Time to peak	= n/a
Time interval	= 5 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 1 - Post Dev.	Max. Elevation	= 753.19 ft
Reservoir name	= Combined Basins	Max. Storage	= 22,573 cuft

Storage Indication method used.



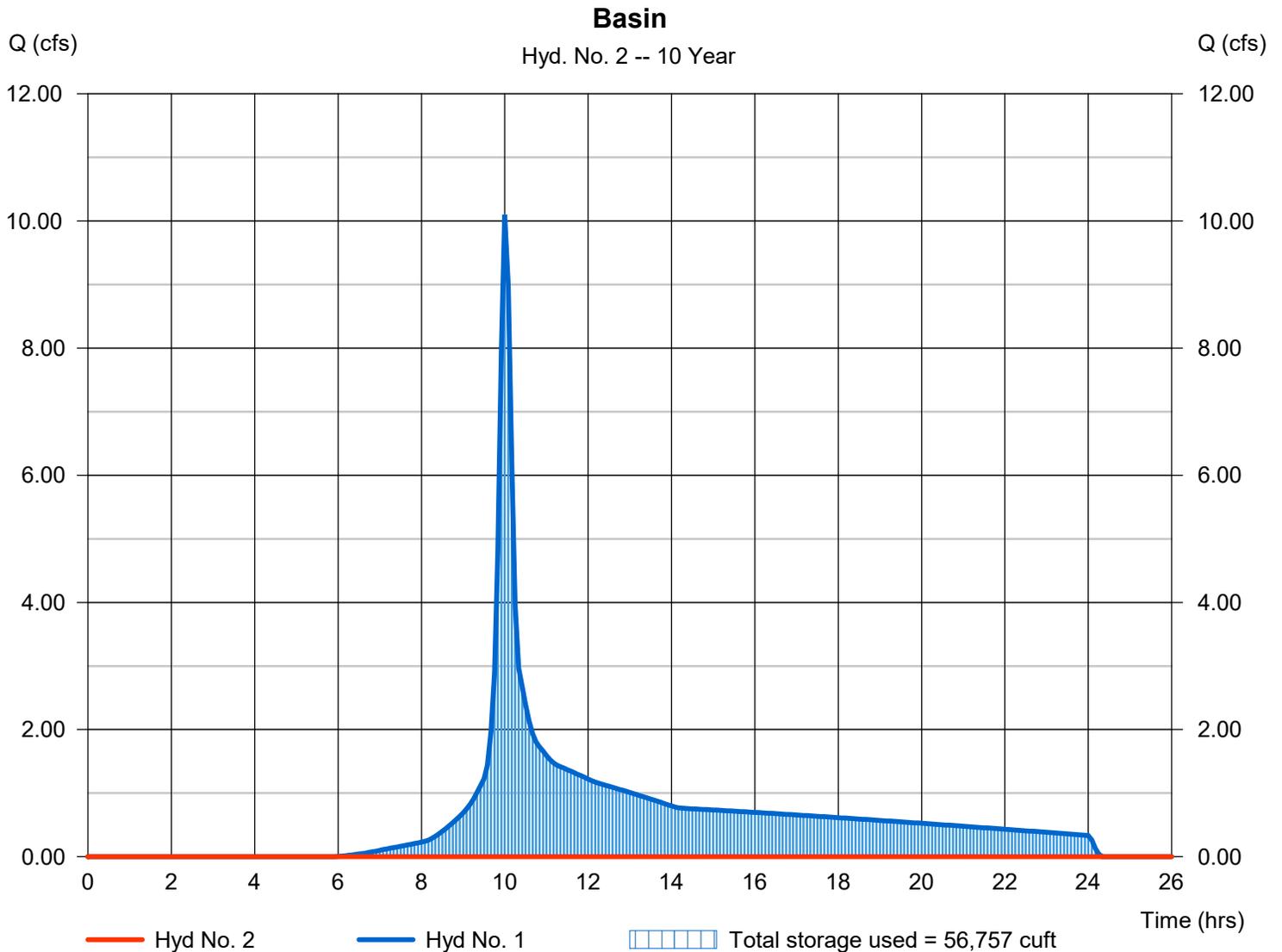
Hydrograph Report

Hyd. No. 2

Basin

Hydrograph type	= Reservoir	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= n/a
Time interval	= 5 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 1 - Post Dev.	Max. Elevation	= 755.67 ft
Reservoir name	= Combined Basins	Max. Storage	= 56,757 cuft

Storage Indication method used.



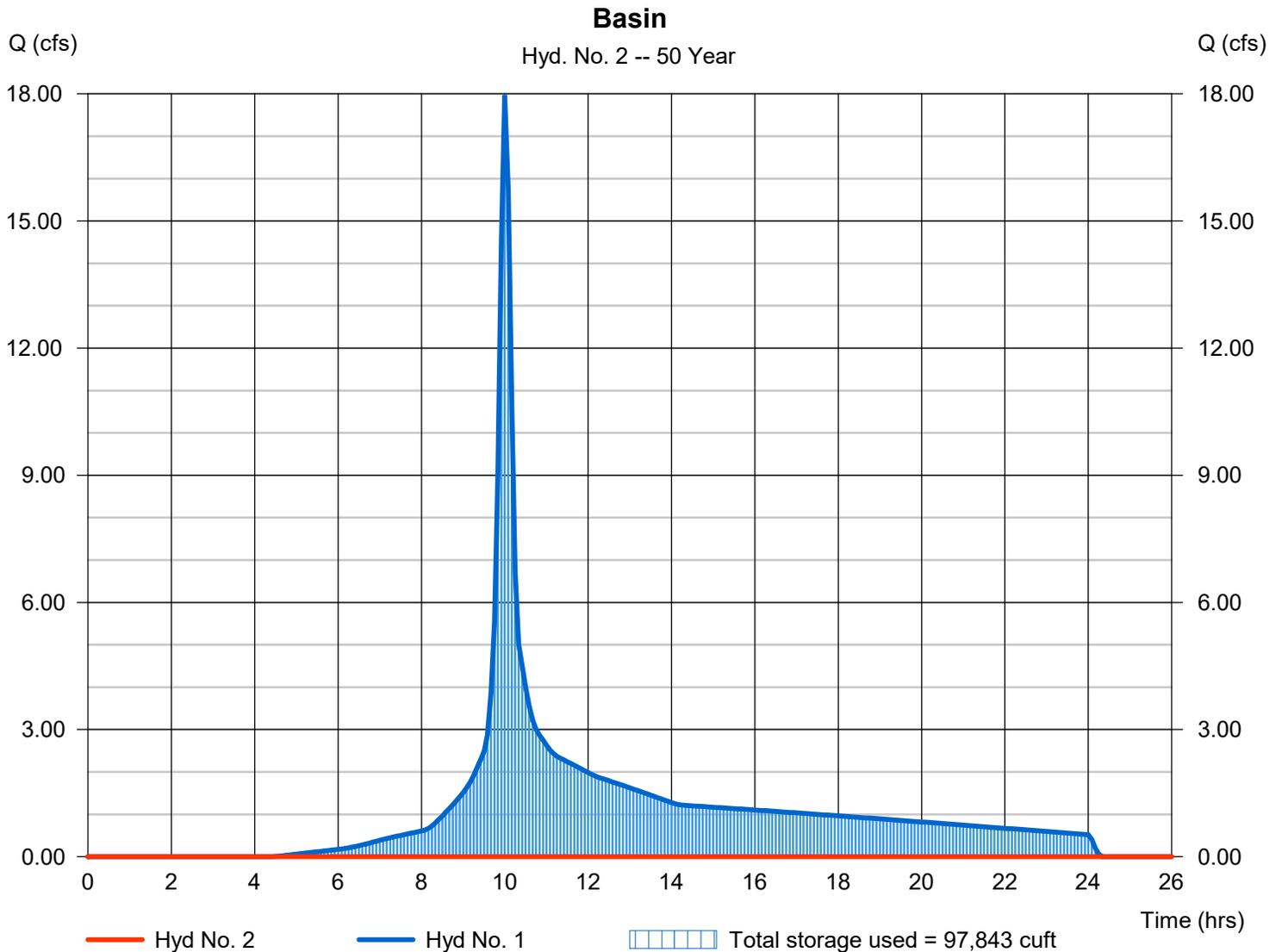
Hydrograph Report

Hyd. No. 2

Basin

Hydrograph type	= Reservoir	Peak discharge	= 0.000 cfs
Storm frequency	= 50 yrs	Time to peak	= n/a
Time interval	= 5 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 1 - Post Dev.	Max. Elevation	= 757.98 ft
Reservoir name	= Combined Basins	Max. Storage	= 97,843 cuft

Storage Indication method used.



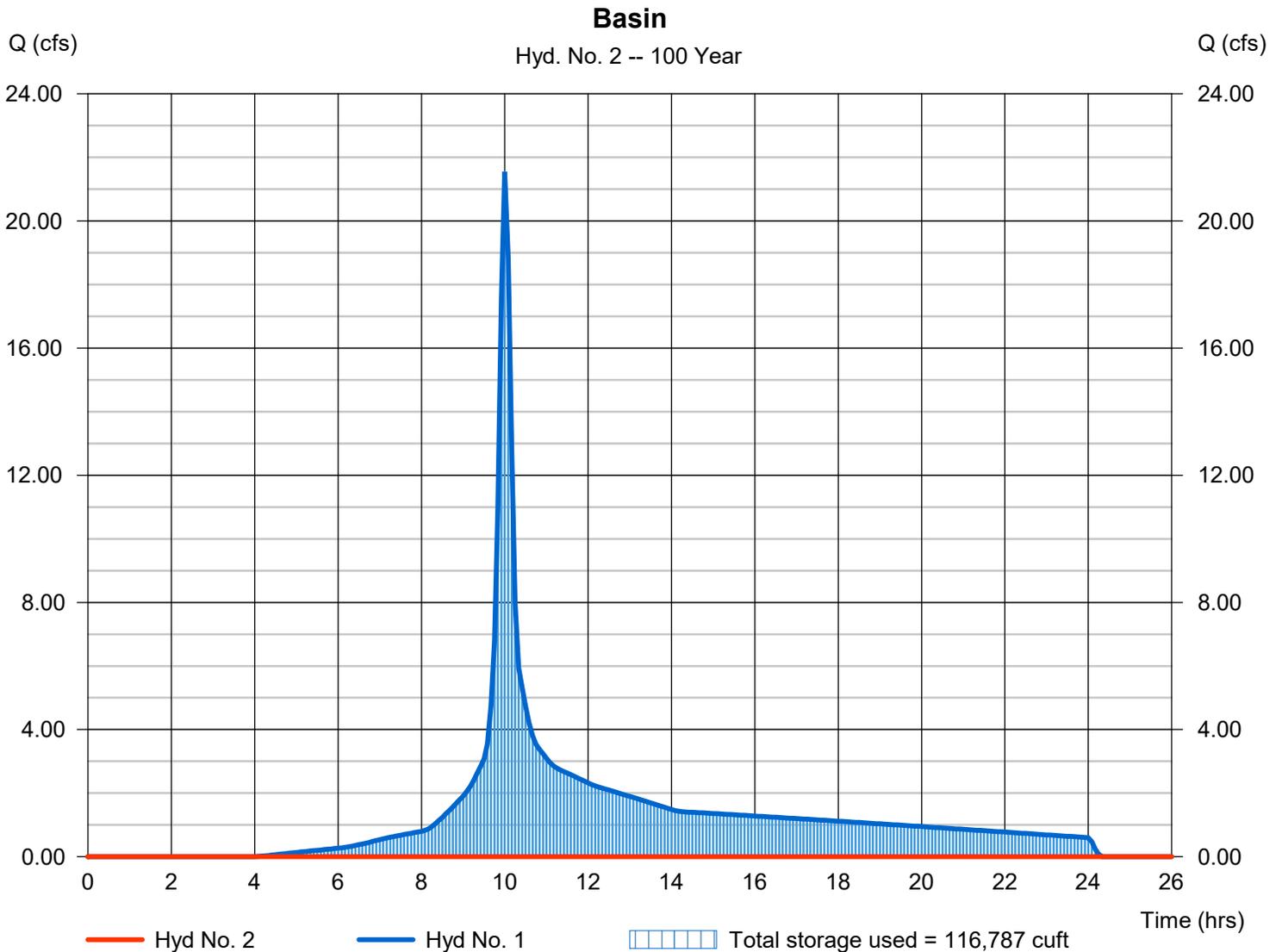
Hydrograph Report

Hyd. No. 2

Basin

Hydrograph type	= Reservoir	Peak discharge	= 0.000 cfs
Storm frequency	= 100 yrs	Time to peak	= n/a
Time interval	= 5 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 1 - Post Dev.	Max. Elevation	= 758.88 ft
Reservoir name	= Combined Basins	Max. Storage	= 116,787 cuft

Storage Indication method used.



APPENDIX F

Acoustical Analysis

ACOUSTICAL ANALYSIS

**301 NORTH MAIN STREET RESIDENTIAL SUBDIVISION
TEMPLETON, CALIFORNIA
SAN LUIS OBISPO COUNTY**

WJVA Project No. 21-48

PREPARED FOR

**MITTRY FARMS TRUST
P.O. BOX 3431
SHELL BEACH, CALIFORNIA**

PREPARED BY

**WJV ACOUSTICS, INC.
VISALIA, CALIFORNIA**



OCTOBER 6, 2022

INTRODUCTION

The project consists of a 22-lot single-family residential subdivision within the Community of Templeton, in the County of San Luis Obispo. The site is currently undeveloped land, adjacent to both U.S. Route 101 (US 101) and Main Street. The applicant has requested an acoustical analysis to quantify project site noise exposure and determine noise mitigation requirements. This analysis, prepared by WJV Acoustics, Inc. (WJVA), is based upon a project site grading plan and lot layout prepared by AKA Engineering, traffic data provided by the San Luis Obispo Council of Governments (SLOCOG) and the findings of on-site noise level measurements. Revisions to the site plan may affect the findings and recommendations of this report. The site grading plan is provided as Figure 1.

Appendix A provides definitions of the acoustical terminology used in this report. Unless otherwise stated, all sound levels reported in this analysis are A-weighted sound pressure levels in decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighted sound levels, as they correlate well with public reaction to noise. Appendix B provides typical A-weighted sound levels for common noise sources.

CRITERIA FOR ACCEPTABLE NOISE EXPOSURE

The Noise Element of the County of San Luis Obispo General Plan (dated May 5, 1992) establishes noise level standards for both transportation and non-transportation (stationary) noise sources. Table I provides the transportation noise sources maximum interior and exterior noise level standards for various land use categories, in terms of the L_{dn} . The L_{dn} represents the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m.-7:00 a.m.). The L_{dn} represents cumulative exposure to noise over an extended period of time and are therefore calculated based upon *annual average* conditions. Table I provides the General Plan noise level standards for transportation noise sources.

Outdoor activity areas include backyards of single-family residences, individual patios or decks of multi-family developments and common outdoor recreation areas of multi-family developments. The intent of the exterior noise level requirement is to provide an acceptable noise environment for outdoor activities and recreation.

TABLE I
MAXIMUM ALLOWABLE NOISE EXPOSURE – TRANSPORTATION NOISE SOURCES
COUNTY OF SAN LUIS OBISPO GENERAL PLAN NOISE LEVEL STANDARDS
dBA

Noise-Sensitive Land Use	Outdoor Activity Areas ¹	Interior Spaces	
	$L_{dn}/CNEL$, dB	$L_{dn}/CNEL$, dB	L_{eq} dB ²
Residential	60 ³	45	---
Hotels and Motels	60 ³	45	---
Hospitals, Nursing and Personal Care	60 ³	45	---
Public Assembly and Entertainment	---	---	35
Offices	60 ³	---	45
Churches, Meeting Halls	---	---	45
Schools, Libraries, Museums	---	---	45
Outdoor Sports and Recreation	-70	---	--

1 Where the location of the outdoor activity areas is unknown or is not applicable, the exterior noise level standard shall be applied to the property line of the receiving land use.

2 As determined for a typical worst-case hour during periods of use.

3 For other than residential uses, where an outdoor activity area is not proposed, the standard shall not apply. Where it is not possible to reduce noise in outdoor activity areas to 60 dB $L_{dn}/CNEL$ may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: County of San Luis Obispo General Plan

Table II provides noise level performance standards for non-transportation (stationary) noise sources, as provided in the County of San Luis Obispo General Plan Noise Element. The non-transportation noise level standards are provided in terms of the energy average noise level (L_{eq}) and maximum allowable noise level (L_{max}), and become 5 dB more restrictive during the nighttime hours (10:00 p.m. to 7:00 a.m.). It should be noted, truck and vehicle movements off public roadways are considered to be stationary noise sources.

TABLE II MAXIMUM ALLOWABLE NOISE EXPOSURE – STATIONARY NOISE SOURCES COUNTY OF SAN LUIS OBISPO GENERAL PLAN dBA		
Noise Level Descriptor	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime² 10:00 p.m. to 7:00 a.m.
Hourly L_{eq} , dB	50	45
Maximum Level, dB	70	65
Maximum Level, dB – Impulsive Noise	65	60

1 As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

2 Applies only where the receiving land use operates or is occupied during nighttime hours.

Source: County of San Luis Obispo General Plan

It should be noted, the County of San Luis Obispo Code of Ordinances (Noise Ordinance) also provides noise level standards. The standards provided in the County’s Noise Ordinance are identical to those provided above in Table II.

PROJECT SITE NOISE EXPOSURE

The project site currently consists of undeveloped land. The project site is generally bounded by US 101 to the west and N. Main Street to the East. The adjacent land to the north is a San Luis Obispo County Sheriff substation and the adjacent land to the south consists of agricultural land uses. The dominant source of noise within the project site is traffic noise associated with vehicles on US 101 and (to a lesser extent) vehicles along N. Main Street. Additional sources of noise observed during the site visit included occasional aircraft overflights, birds and noise associated with agricultural activities.

The project site has significant topographical changes, particularly being at higher elevation to the west compared to the eastern portion of the project site. Additionally, the project site is generally at a higher elevation to the north compared to the southern portion of the project site. The overall site topography provides some acoustic shielding of US 101 traffic noise at the locations of the proposed single-family residential lots.

Ambient Noise Survey

In order to quantify existing project-site noise exposure, WJVA staff conducted continuous 24-hour noise level measurements at two (2) locations within the project site on September 9, 2021. Ambient noise measurement site LT-1 was located within the western portion of the project site, in the vicinity of the closest proposed lots to US 101. Ambient measurement site LT-2 was located within the eastern portion of the project site, in the vicinity of the lots closest to N. Main Street. The locations of the two ambient noise measurement sites are provided on Figure 2.

Noise monitoring equipment consisted of Larson-Davis Laboratories Model LDL 820 sound level analyzers equipped with Bruel & Kjaer (B&K) Type 4176 ½" microphones. The monitors were calibrated with a B&K Type 4230 acoustical calibrator to ensure the accuracy of the measurements. The equipment complies with applicable specifications of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

Measured hourly energy average noise levels (L_{eq}) at site LT-1 ranged from a low of 49.5 dB between 3:00 a.m. and 4:00 a.m. a high of 58.2 dBA between 2:00 p.m. and 3:00 p.m. Hourly maximum (L_{max}) noise levels at site LT-1 ranged from 61.8 to 74.8 dBA. Residual noise levels at the monitoring site, as defined by the L_{90} , ranged from 38.9 to 55.2 dBA. The L_{90} is a statistical descriptor that defines the noise level exceeded 90% of the time during each hour of the sample period. The L_{90} is generally considered to represent the residual (or background) noise level in the absence of identifiable single noise events from traffic, aircraft and other local noise sources. The measured L_{dn} value at site LT-1 was 59.9 dB L_{dn} . Figure 3 graphically depicts hourly variations in ambient noise levels at site LT-1 and provides a site photograph.

Measured hourly energy average noise levels (L_{eq}) at site LT-2 ranged from a low of 44.9 dB between 3:00 a.m. and 4:00 a.m. a high of 56.3 dBA between 2:00 p.m. and 3:00 p.m. Hourly maximum (L_{max}) noise levels at site LT-2 ranged from 56.6 to 70.4 dBA. Residual noise levels at the monitoring site, as defined by the L_{90} , ranged from 35.7 to 51.9 dBA. The measured L_{dn} value

at site LT-2 was 56.6 dB L_{dn} . Figure 4 graphically depicts hourly variations in ambient noise levels at site LT-2 and provides a site photograph.

Existing and Future Project Site Noise Exposure

In addition to the above-described ambient noise level measurements, WJVA staff conducted two individual traffic noise calibration measurements, in the vicinity of Lot 1 and Lot 13. The purpose of the calibration measurements was to assess the accuracy of the FHWA traffic noise model (discussed in detail below) and to assess the varying levels of acoustic shielding provided by the topographical difference between the project site elevation grade and that of the US 101 roadway.

From the 24-hour ambient noise level measurements and the two additional calibration measurements, it was determined that in the vicinity of Lot 1, measured noise levels were approximately 4 dB lower than those calculated for the observed traffic conditions, while in the vicinity of Lot 13, measured noise levels were approximately 7 dB lower than those calculated for the observed traffic conditions. Additionally, noise levels measured at ambient noise monitoring site LT-1 were approximately 8 dB lower than those calculated for the observed traffic conditions, based upon existing site topography and grading.

WJVA utilized the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA Model is a standard analytical method used for roadway traffic noise calculations. The model is based upon reference energy emission levels for automobiles, medium trucks (2 axles) and heavy trucks (3 or more axles), 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, and is generally considered to be accurate within ± 1.5 dB.

Annual Average Daily Traffic (AADT) data for US 101 and N. Main Street, in the project vicinity, were obtained from SLOCOG. Truck percentages for traffic on US 101 in the project vicinity was obtained from Caltrans. Truck percentages on N. Main Street and the day/night distribution of traffic were estimated by WJVA, based upon previous studies conducted in the project vicinity since project-specific data were not available from government sources. A speed limit of 65 mph was assumed for US 101 and a speed limit of 40 mph was assumed for N. Main Street. Table III summarizes annual average traffic data used to model noise exposure within the project site.

TABLE III
TRAFFIC NOISE MODELING ASSUMPTIONS
301 N. MAIN STREET SUBDIVISION, TEMPLETON

	US 101		N. Main Street	
	Existing	2045	Existing	2045
Annual Avenue Daily Traffic (AADT)	57,226	70,954	4,869	12,236
Day/Night Split (%)	85/15		90/10	
Assumed Vehicle Speed (mph)	65		40	
% Medium Trucks (% AADT)	8.3		2	
% Heavy Trucks (% AADT)	3.7		1	

Sources: SLOCOG
WJV Acoustics, Inc.

Using the FHWA model, data from Table III, and the above-described acoustical shielding determinations, existing and future (2045) traffic noise levels were calculated for the closest proposed residential lots to US 101 (Lot 1 and Lot 13). Table IV provides the existing and future (2045) traffic noise exposure at these lots closest to US 101, before grading changes.

TABLE IV
301 N. MAIN STREET SUBDIVISION
EXISTING AND FUTURE TRAFFIC NOISE EXPOSURE

Lot	Existing Noise Exposure dB, L _{dn}	Future (2045) Noise Exposure dB, L _{dn}
Lot 1	65	66
Lot 13	61	62

1 As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

2 Applies only where the receiving land use operates or is occupied during nighttime hours.

Source: County of San Luis Obispo General Plan

Reference to Table IV indicates that project site noise exposure for future (2045) traffic conditions would be in the range of approximately 62 (vicinity of Lot 13) to 66 dB L_{dn} (vicinity of Lot 1) at the closest residential lots to US 101. Mitigation must therefore be incorporated into project design to comply with the County's 60 dB L_{dn} exterior noise level standard.

In regards to the proposed residential lots closest to N. Main Street, WJVA calculated existing and future (2045) project site noise exposure, resulting from traffic on N. Main Street. Lot 12 represents the closest proposed lot to N. Main Street, at a setback distance of approximately 180 feet (distance from approximate center of the lot backyard to the centerline of the roadway). At this distance, traffic noise exposure for existing and future (2045) roadway conditions was calculated to be approximately 54 dB L_{dn} and 58 dB L_{dn}, respectively. Such levels do not exceed

the County's 60 dB L_{dn} exterior noise level standard for the closest lots to N. Main Street, and mitigation measures are not required for project compliance for these lots.

Exterior Noise Mitigation

The County of San Luis Obispo exterior noise level standard for transportation noise sources is 60 dB L_{dn} for residential land uses. Noise levels at the closest proposed residential lots to US 101 would be expected to be in the range of approximately 62 to 66 dB L_{dn} for future (2045) traffic conditions. Such levels exceed the County's exterior noise level standard and mitigation measures must be incorporated into project design for compliance with the applicable standards. The incorporation of sound walls is the most effective method of exterior traffic noise mitigation.

A computer model was used to determine the required height of a sound wall along the western property line, with residential adjacency. The model calculates sound wall insertion loss (noise reduction) based upon the distance from the source to the wall, the distance from wall to the receptor, and the relative heights of the sources and receptors. A semi-truck is assumed to have an effective source height of 8 feet above the pavement and the assumed height of a residential receiver is 5 feet above the ground. Additionally, proposed changes to project site grading and proposed lot elevations were factored into the sound wall model calculations.

Based upon the above-described assumptions and method of analysis, the noise level insertion loss values for sound walls of various heights were calculated. The calculations indicated that a sound wall along the side and rear of Lot 1, constructed to a minimum height of eleven (11) feet above the lot (backyard) grade elevation would result in exterior noise levels of approximately 59 dB L_{dn} within the backyard (where the exterior noise level standard applies). Additionally, the calculations indicated that a sound wall along the side and rear of Lot 13, constructed to a minimum height of eight-and-a-half (8.5) feet above the lot grade elevation would result in exterior noise levels of approximately 59 dB L_{dn} within the backyard.

Based upon decreasing noise levels with increased distance from the roadway, calculations indicate the sound wall at the southern lots should extend through Lot 14 (heights can taper as indicated on Figure 2, down to a final height of 6 feet above rear lot elevation at Lot 14), in order for all lots to comply with the 60 dB L_{dn} exterior noise standard. Additionally, the calculations indicate that a sound wall on the northern lots should extend through Lot 4. However, the sound wall at the northern lots could taper down to a height of 7 feet at Lot 2 and to 6.5 feet at Lot 3 and 6 feet at Lot 4. All wall heights described are relative to the height above the backyard elevations of each respective lot. The locations and heights of the required walls are provided on Figure 1.

Interior Noise Levels-

The interior noise level standard is 45 dB L_{dn} . The above-described sound walls would be effective at first-floor exterior façade locations only. Therefore, the worst-case exterior noise exposure is 66 dB L_{dn} (second floor façade). This means that the proposed residential construction for the homes must be capable of providing a minimum outdoor-to-indoor noise level reduction (NLR) of approximately 21 dB (66-45=21).

A specific analysis of interior noise levels was not performed. However, it may be assumed that residential construction methods complying with current building code requirements will reduce exterior noise levels by approximately 25 dB if windows and doors are closed. This will be sufficient for compliance with the San Luis Obispo County 45 dB L_{dn} interior standard at all proposed lots. Requiring that it be possible for windows and doors to remain closed for sound insulation means that air conditioning or mechanical ventilation will be required.

CONCLUSIONS AND RECOMMENDATIONS

The proposed 22-lot single-family residential development will comply with applicable San Luis Obispo County exterior noise level requirements provided the following mitigation measures are incorporated into final project design.

Exterior Noise Compliance:

1. At the northern lots, a sound wall constructed to a minimum height of eleven (11) feet above the lot grade elevation (of backyard) will be required at Lot 1. The height of the sound wall can taper to a height of seven (7) feet above backyard lot grade at Lot 2 and to a height of six-and-a-half (6.5) feet at Lot 3 and to a height of six (6) feet Lot 4, as indicated on Figure 1. Sound walls are not required for compliance for the remaining northern lots. Suitable construction materials include concrete blocks, masonry or stucco on both sides of a wood or steel stud wall.
2. At the southern lots, a sound wall constructed to a minimum height of eight-and-a-half (8.5) feet above the lot grade elevation (of backyard) will be required at Lot 13 and continue through Lot 14, and can taper down to a height of 6 feet, as indicated on Figure 1. Sound walls are not required for compliance for the remaining southern lots. Suitable construction materials include concrete blocks, masonry or stucco on both sides of a wood or steel stud wall.

Interior Noise Compliance:

The proposed single-family residential development will comply with applicable San Luis Obispo County interior noise level requirements provided the following mitigation measures are incorporated into final project design.

1. Mechanical ventilation or air conditioning must be provided for all homes so that windows and doors can remain closed for sound insulation purposes.

The conclusions and recommendations of this acoustical analysis are based upon the best information known to WJV Acoustics Inc. (WJVA) at the time the analysis was prepared concerning the proposed site plan, traffic volumes and roadway configurations and project site grading. Any significant changes in these factors will require a reevaluation of the findings of this report. Additionally, any significant future changes in motor vehicle technology, noise regulations or other factors beyond WJVA's control may result in long-term noise results different from those described by this analysis.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Walter J. Van Groningen". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Walter J. Van Groningen
President

WJV:wjv

FIGURE 1: PROJECT SITE PLAN AND SOUND WALL REQUIREMENTS

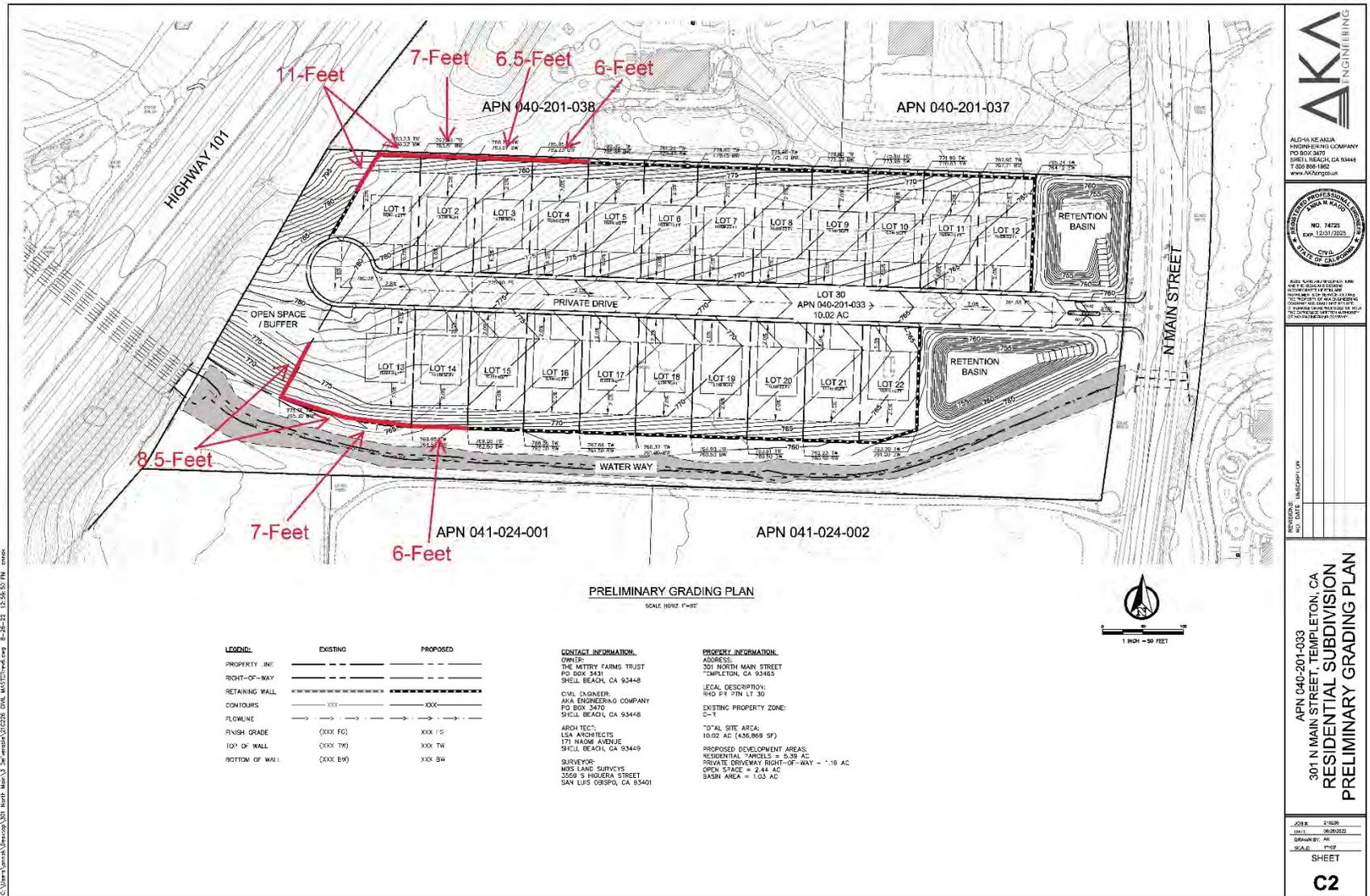


FIGURE 2: PROJECT SITE VICINITY AND NOISE MONITORING SITE LOCATIONS



FIGURE 3: AMBIENT NOISE MEASUREMENT SITE LT-1

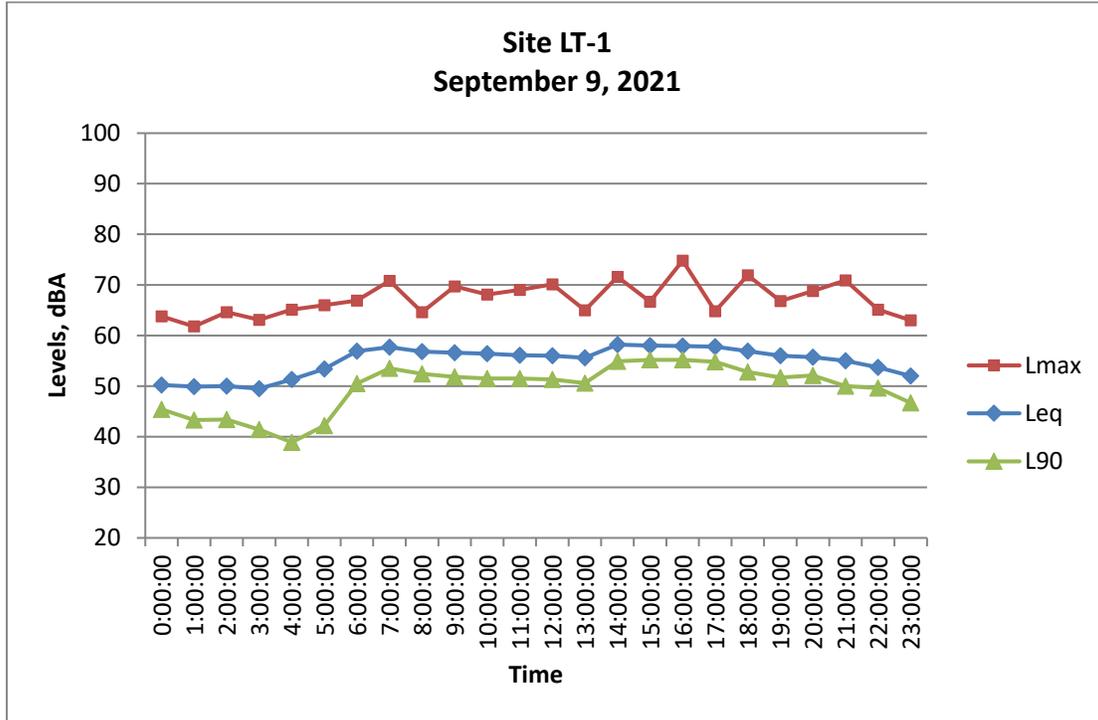
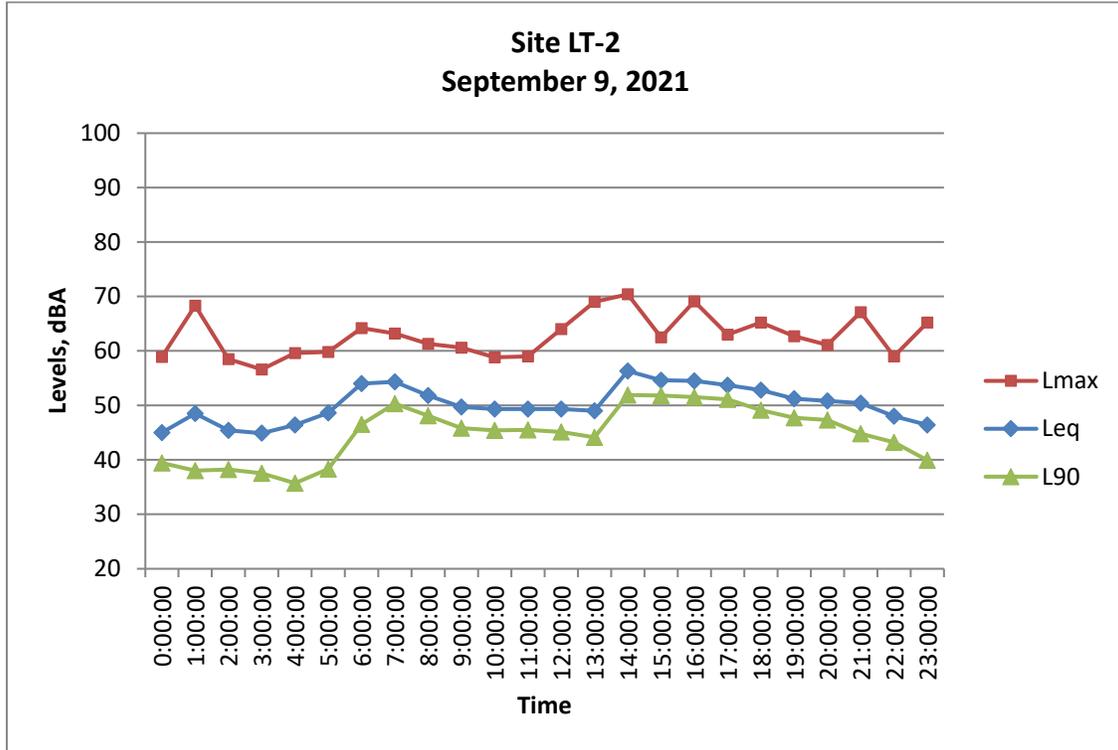


FIGURE 4: AMBIENT NOISE MEASUREMENT SITE LT-2



APPENDIX A

ACOUSTICAL TERMINOLOGY

AMBIENT NOISE LEVEL:	The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.
CNEL:	Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.
DECIBEL, dB:	A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
DNL/L_{dn}:	Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.
L_{eq}:	Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. L _{eq} is typically computed over 1, 8 and 24-hour sample periods.
NOTE:	The CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while L _{eq} represents the average noise exposure for a shorter time period, typically one hour.
L_{max}:	The maximum noise level recorded during a noise event.
L_n:	The sound level exceeded "n" percent of the time during a sample interval (L ₉₀ , L ₅₀ , L ₁₀ , etc.). For example, L ₁₀ equals the level exceeded 10 percent of the time.

A-2

ACOUSTICAL TERMINOLOGY

NOISE EXPOSURE

CONTOURS:

Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.

NOISE LEVEL

REDUCTION (NLR):

The noise reduction between indoor and outdoor environments or between two rooms that is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. A measurement of Noise level reduction combines the effect of the transmission loss performance of the structure plus the effect of acoustic absorption present in the receiving room.

SEL or SENEL:

Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

SOUND LEVEL:

The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

SOUND TRANSMISSION

CLASS (STC):

The single-number rating of sound transmission loss for a construction element (window, door, etc.) over a frequency range where speech intelligibility largely occurs.

APPENDIX B
EXAMPLES OF SOUND LEVELS

NOISE SOURCE	SOUND LEVEL	SUBJECTIVE DESCRIPTION
AMPLIFIED ROCK 'N ROLL ▶	120 dB	DEAFENING
JET TAKEOFF @ 200 FT ▶		
	100 dB	VERY LOUD
BUSY URBAN STREET ▶		
	80 dB	LOUD
FREEWAY TRAFFIC @ 50 FT ▶		
	60 dB	MODERATE
CONVERSATION @ 6 FT ▶		
TYPICAL OFFICE INTERIOR ▶		FAINT
SOFT RADIO MUSIC ▶	40 dB	
RESIDENTIAL INTERIOR ▶		VERY FAINT
WHISPER @ 6 FT ▶	20 dB	
HUMAN BREATHING ▶	0 dB	

APPENDIX G

Transportation Memorandum



MEMORANDUM

Date: September 20, 2022
To: Scott Newton
From: Michelle Matson, Joe Fernandez, and Korinne Tarien, CCTC
Subject: 301 North Main Street, Templeton (APN 040-201-033) – Transportation Impact Analysis

This memorandum summarizes the transportation impact analysis for the proposed development at 301 North Main Street in Templeton in the unincorporated area of San Luis Obispo County. The project site plan is attached.

SUMMARY

The proposed project would construct 22 single family detached dwelling units on a new private gated road on an existing vacant 10 acre parcel currently zoned commercial retail (CR).

The proposed project would generate fewer trips than estimated in the Templeton Circulation Study under Cumulative Conditions and will pay their fair share toward regional transportation improvements through payment of the Templeton Road Improvement Fee (RIF). The project is in a prescreened area for below-threshold vehicle miles traveled (VMT) indicating a less than significant impact on VMT.

The project will be required to complete frontage improvements consistent with County Standard A-2dI. The existing culvert south of the project driveway will likely need to be extended to accommodate the improvements.

EXISTING TRANSPORTATION CONDITIONS

Main Street is a two to three-lane arterial with Class II bike lanes and intermittent sidewalks. The posted speed limit is 40 miles per hour adjacent to the project site. The average daily traffic (ADT) on Main Street north of Creekside Ranch Road was approximately 5,800 in June 2020, below levels counted in May 2015, when the ADT was 6,550. San Luis Obispo Regional Transit Authority (SLORTA) Route 10 provides service from San Luis Obispo to Paso Robles. However, the only stops in Templeton are located on Las Tablas Road west of US 101.

PROJECT CONDITIONS

The following section summarizes the project trip generation, VMT, site access, and circulation.

Trip Generation

The Institute of Transportation Engineers' (ITE) *Trip Generation Manual* 11th Edition was used to estimate the project trip generation as summarized in **Table 1**.

Table 1: Trip Generation

Weekday Vehicle Trip Generation								
Land Use	Size	Daily Total	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Single-Family Detached ¹	22 DU	251	4	15	19	15	9	24
Total Vehicle Trips		251	4	15	19	15	9	24

DU = Dwelling Unit; KSF = Thousand Square Feet; ITE = Institute of Transportation Engineers.
 1. ITE LU Code #210, Single-Family Detached Housing. Fitted curve equations used.
 Source: ITE Trip Generation Manual, 11th Ed.

The proposed project is expected to generate 251 new vehicle trips per weekday, including 19 AM peak hour trips and 24 PM peak hour trips.

The parcel is approximately 10 acres and currently zoned CR. With a floor-area ratio of 0.25, the 10 acre parcel would have approximately 110,000 square feet (s.f) of retail. Using ITE rates, a 2,000 s.f. retail plaza would generate 25 PM peak hours trips, similar to the proposed project’s trip estimate.

The parcel is included in the Templeton Circulation Study (Omni-Means, 2015) in traffic analysis zone (TAZ) 458 with the Sheriff’s parcel and three additional vacant CR parcels. Under 2015 conditions, 578 daily government trips were estimated in the TAZ. Under 2035 conditions, an additional 1,305 daily vehicle trips were estimated. The project comprises approximately 59 percent (or 770 trips) of the vacant CR land in the TAZ. The proposed single family home project would generate fewer trips than estimated in the Templeton Circulation Study. We recommend the project pay their fair share toward regional transportation improvements through payment of the Templeton RIF.

Vehicle Miles Traveled

The County published draft Transportation Impact Analysis (TIA) Guidelines in October 2020 which require VMT analysis consistent with recently mandated changes to the California Environmental Quality Act (CEQA). The guidelines describe screening criteria for projects consistent with the General Plan presumed to have a less-than-significant impact based on project type, intensity, or location. Projects located within an area identified as having below-threshold VMT are presumed to have a less-than-significant impact. The following image shows the output of the County’s quick response VMT tool for the project APN showing that no analysis is required, and the area is pre-screened for this location and project type.

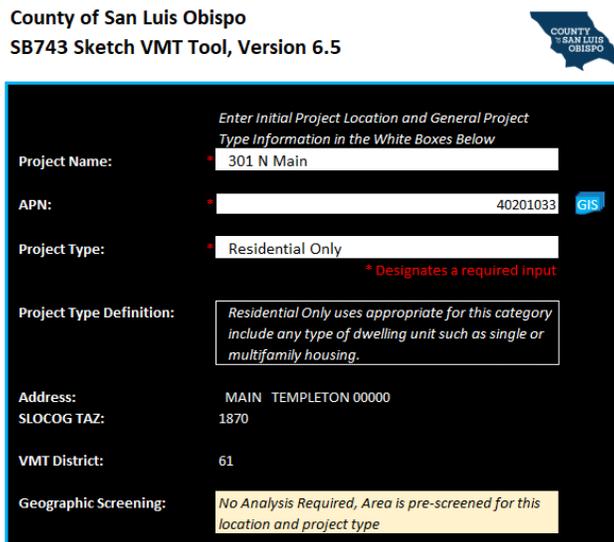


Figure 1 of the TIA Guidelines also show that the project is in a pre-screened area. Therefore, the project produces VMT per capita below the threshold and is expected to have a less than significant impact on VMT.

Site Access & Circulation

The current site is vacant. The proposed project will construct one driveway on Main Street and a private gated road accessing the homes. The proposed driveway is located across from an existing driveway and approximately 200 feet south of the Sheriff's station driveway. Sight distance at the proposed driveway is adequate to meet County Standards.

Traffic collision data was obtained from the Statewide Integrated Traffic Records System (SWITRS) for Main Street in the vicinity of the project. From 2016 to 2021, two collisions were reported on Main Street south of Ramada Drive to north of Creekside Ranch Road. One collision adjacent to the project site, was a solo vehicle fixed object collision due to unsafe speed in a construction or repair zone. The other collision reported 900 feet south of Ramada Drive was a sideswipe collision due to unsafe speed and loose material on the roadway; however, the GPS coordinates of the collision were 900 feet north of Main Street. There is no apparent collision pattern and no additional recommendations.

The project will be required to complete frontage improvements consistent with County Standard A-2dI. The existing culvert south of the project driveway will likely need to be extended to accommodate the improvements. The proposed cul-de-sac radius does not meet County Standard A-6a; however, the road will be private. Although private, Cal Fire approval will still be required and a 48 foot radius cul-de-sac may be needed for truck turning movements.

ATTACHMENTS

Site Plan

REFERENCES

California Governor's Office of Planning and Research (OPR). December 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA.

County of San Luis Obispo. July 2016. San Luis Obispo County Bikeways Plan.

_____. June 2019. Public Improvement Standards.

_____. October 2020. Transportation Impact Analysis Guidelines.

Omni-Means (A GHD Company). May 2017. Templeton Community 2017 Travel Demand Model and Circulation Study Update.

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

APPENDIX H

Biological Resources Memorandum



KEVIN MERK ASSOCIATES, LLC

P.O. BOX 318

SAN LUIS OBISPO, CA 93406

805-748-5837

Environmental Consulting Services

MEMORANDUM

Date: April 3, 2024

To: Scott Newton

Organization: Mittry Farms Trust

From: Kevin Merk

Email: kmerk@kevinmerkassociates.com

cc: Frances Romero, TW Land Planning and Development

Re: Potential Culvert Extension at 301 North Main Street, Templeton, CA

Kevin Merk Associates, LLC (KMA) is providing this memorandum, at your request, to update the October 19, 2022 Biological Resources Assessment we prepared for the project. The proposed residential development project was sited to avoid impacts to an onsite drainage feature that is an unnamed tributary to Toad Creek that drains to the Salinas River. Based on our recent conversations and review of email correspondence between you and the County of San Luis Obispo, improvements to the west side of North Main Street will be required as part of the project that may result in impacts to this drainage feature. Given space limitations within the road right of way, the improvements may result in the need to extend the existing box culvert to the west. Depending on the final methods and techniques approved for road improvements, disturbance to the stream's bed and banks could occur and this would trigger review and potential permitting from the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act, Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the federal Clean Water Act and state Porter-Cologne Water Quality Act, and California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code Section 1600 et seq. In addition to impacts on the jurisdictional stream channel associated with culvert extension, wildlife such as birds and bats could be present in the box culvert at the time of construction and impacted by construction activities, and mitigation measures associated with wildlife protection should be applied to this component of the project. The following information is provided to update the findings of our 2022 Biological Resources Assessment now that impacts to the onsite stream could occur with a goal to ensure all project-related impacts to biological resources have been adequately identified, and are reduced to a less than significant level pursuant to the California Environmental Quality Act. The below impact statement and associated mitigation were numbered in sequence consistent with impact statements in the 2022 Biological Resources Assessment.

Impact Bio-5. Project road improvements to North Main Street could result in culvert extension that would impact an unnamed stream that is a tributary to Toad Creek and the Salinas River. This is a potentially significant, but mitigable impact.

As stated above, the project was sited to avoid and buffer the onsite drainage feature. It is our understanding that avoidance of the stream may be feasible from an engineering perspective to construct the road improvements and avoid extending the box culvert (i.e., cantilevering the sidewalk). If the road

improvements can be constructed outside the stream channel, permitting from the USACE, RWQCB, and CDFW may not be required. Prior to road improvements and associated project construction elements that would occur within (or over) the stream corridor, authorization from these agencies will need to be obtained. A qualified biologist shall prepare a wetland delineation that identifies the extent of each agency's jurisdiction on the project site. An impact map showing the limits of permanent and temporary impacts shall also be prepared to support the permitting process. The permitting agencies will also require compensatory mitigation for the loss of stream habitat surface area as well as habitat function and value. A Compensatory Mitigation and Monitoring Plan (CMMP) shall be prepared to describe the extent of impacts and the methods and techniques needed to provide a minimum mitigation ratio of 3:1 for habitat restoration/enhancement for the area lost. This CMMP shall be prepared to meet the County's requirements for impacts on stream habitats, as well as the USACE, RWQCB and CDFW compensatory mitigation requirements for permit acquisition. Mitigation shall occur on the same drainage upstream from the road improvements consistent with the conceptual landscaping shown on project plans (7/20/23). The implementation of the following mitigation measures would bring the level of effects to the drainage feature and associated stream habitat below significance under CEQA.

Mitigation Measure Bio-5a: Obtain necessary permits for impacts on waters of the state and waters of the United States. The applicant shall prepare and submit applications to obtain a Clean Water Act Section 404 Permit from USACE, a Clean Water Act Section 401 Water Quality Certification from RWQCB, and a California Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement from CDFW. As a component of the application packages, a Preliminary Delineation of Wetlands and Other Waters (also known as a wetland delineation) shall be prepared and submitted, along with the CMMP describing the methods and techniques to restore and enhance the onsite mitigation area at a minimum 3:1 ratio (habitat restored to habitat impacted). The applicant would then be required to show the County proof of permit acquisition or a determination from each agency that a permit is not required prior to the issuance of a grading permit. The below measure provides further detail.

Mitigation Measure Bio-5b: Prepare and implement a Compensatory Mitigation and Monitoring Plan (CMMP) onsite. The total area of habitat restoration and enhancement shall be established at a minimum 3:1 ratio to ensure state and federal requirements are met. Additional requirements may be required by the USACE, RWQCB and CDFW as part of the permitting process and shall be incorporated into the final CMMP accordingly. The CMMP will at a minimum include the following components:

1. Description of restoration site, including its location, size, current environmental conditions, ownership and measures to ensure its long-term protection.
2. Overall goals and measurable objectives to create a self-sustaining stream habitat that requires minimal maintenance. A description of how habitat enhancement work in the creek corridor and buffer area will promote the ecological integrity of the restoration site and compensate for the loss of onsite stream channel from road improvements.
3. An implementation plan, including schedule, site preparation (including non-native invasive species removal), planting plan (species and number of each, propagule type, seeding/planting density), and responsible party.

A maintenance plan detailing activities to be conducted during the establishment period (irrigation, non-native species removal) and schedule for implementation. The maintenance plan shall also address the long-term guidelines and constraints to maintaining the vegetation in the mitigation area. No pesticides, herbicides or fertilizers shall be used in a manner in which these substances can affect the creek habitat and biota. Guidelines shall be provided for the maintenance of planted trees, such as trimming or replacement.

4. A monitoring plan, including data collection methodology, how success criteria will be measured, and monitoring schedule for a period of at least five years. Monitoring will include establishing photo points that will aid in tracking the success of the planted propagules during each annual

monitoring period. The vegetation density, cover and species richness of the mitigation site shall be assessed during the spring and fall throughout the monitoring period.

5. Final success criteria based on the goals and measurable objectives to ensure that a viable native plant community is established consistent with the requirements established by the County and other involved regulatory agencies.
6. Contingency measures, such as supplemental planting, seeding or herbivore control, if success criteria are not being met.
7. Reporting requirements and notification of completion to responsible agencies.

Implementation of the above mitigation measures together with those resulting from regulatory agency permitting would reduce construction-related impacts on stream surface area and stream habitat function and value to a less than significant level. It is also important to note that the 2022 Biological Resources Assessment included mitigation measures for nesting bird protection (Bio-1) and roosting bat protection (Bio-2). With proposed road improvements to North Main Street, these measures shall be implemented prior to any work on or around the box culvert to protect wildlife that may be present in this part of the site.

I trust the above information is sufficient to help the County complete the environmental review process for this project. Please contact me if you have any further questions regarding biological resources on the project site. Thank you.