CALIFORNIA ENVIRONMENTAL QUALITY ACT
ENVIRONMENTAL INITIAL STUDY CHECKLIST FORM

STRAVINSKI – DAOU DEVELOPMENTS

Public Review Period December 23, 2022 – January 24, 2022

1. PROJECT TITLE:	Stravinski - Daou Developments
Entitlements:	**Stravinski:** Planned Development (PD22-04) Oak Tree Removal (OTR22-06); Vesting Tentative Parcel Map (PR22-0022) **Daou:** Planned Development (22-09)
2. LEAD AGENCY:	City of Paso Robles 1000 Spring Street Paso Robles, CA 93446
Contact Person: **Phone Number:** **Email:**	Darcy Delgado, Associate Planner (805) 237-3904 ddelgado@prcity.com
3. PROJECT LOCATION:	5175 Airport Road APN: 025-434-002
4. PROJECT PROPONENT(s):	SDG Paso Robles 413, LLC
Contact Person: **Phone Number:** **Email:**	Neil Thompson (559) 674-0906 nsthompson@stravinski.com
	Daou Vineyards, LLC
Contact Person: **Phone Number:** **Email:**	Neil Cassidy (805) 369-6722 neil@daouvineyards.com
5. GENERAL PLAN DESIGNATION:	BP (Business Park)
6. ZONING:	M, PD overlay (Industrial, Planned Development Overlay)

7. PROJECT DESCRIPTION:

The project consists of subdividing an approximately 19.75-acre property into two (2) parcels, roughly equal in size at 9.87-acres each. The project is to be built in two phases: Parcel 1 being Phase 1 and Parcel 2 being Phase 2. Phase 1 would accommodate the Stravinski Development Group (SDG) project that

proposes to construct an approximately 196,000 square foot warehouse building. The building will be used as refrigerated wine storage, distribution and fulfillment center. There will not be any public tasting rooms, event centers, retail operations nor any other use that would be open to the public on the project site.

Phase 2 would accommodate the Daou Vineyards project that proposes to construct an approximately 157,000 square foot wine production facility. The interior uses include barrel storage, bottling/packages areas, warehousing, and fermentation areas. The exterior uses include a crush pad, mechanical yards, and wastewater treatment.

There are six native oak trees situated in the northeast quadrant of the parcel, of which, three are proposed for removal. Two of these trees proposed for removal are located adjacent to Airport Road, where the road will be widened and new utilities (sewer and water) will be installed. The third tree proposed for removal is located in the proposed parking area. The City has an Oak Tree Preservation Ordinance which requires the City Council to authorize the removal of trees that are not clearly diseased or dying. This project will require the City Council review the oak trees requested for removal.

8. Surrounding Land Uses and Setting: Briefly describe the project's surroundings:

The 19.75-acre parcel is relatively flat, sloping very gently to the west at less than 1 percent slope. The property is situated along the northern boundary of the City's limit. The majority of the property is undeveloped, with a single-family residence, barn, water tank, and a secondary housing structure clustered in the northeast portion, closest to Airport Road. The site has been actively cultivated going back to at least 1977. One large valley oak (Quercus lobata) is located on the west side of the residence, with a cluster of valley oaks in the middle of the developed area. The proposed project site is surrounded on all sides by a variety of commercial, industrial, and agricultural uses. There are no drainage features, riparian habitat, or wetlands observed at the site.

9. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

None

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

In accordance with AB 52, the City provided formal notification on 05/03/2022 to the designated contact or tribal representative of traditionally and culturally affiliated California Native American tribes that have requested notice. Consultation with the Salinan Tribe of Monterey and San Luis Obispo Counties resulted in a request for a Phase 1 be performed and staff forwarded the Phase 1 for their review. At the timing of publishing this report, it did not result in any additional mitigation measure recommendations or requests.

11. Initial Study Framework. This initial study evaluates the impacts of two separate development projects that are part of a tentative parcel map. The entire project site is on approximately 19.75-acre property, and each phase is approximately 9.87-acres in size. For purposes of this Initial Study, "Project" includes both the SDG (Phase 1) and Daou (Phase 2) developments. The MMRP will take into consideration the subdivision and will separate any mitigation measures to correspond with the development of Parcel 1/Phase 1 (SDG) and Parcel 2/Phase 2 (Dauo).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial Discussion:

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

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

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

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

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

Dany Delgado
Signature

12/22/22
Date

EVALUATION OF ENVIRONMENTAL IMPACTS

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

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

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

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

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

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

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

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

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

9. The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	**1**
Discussion: The land along Airport Road, north of Dry Creek Road is relatively flat without significant change in elevation, therefore there is not an identified scenic vista in this area of the City. The site is on the City's northern boundary adjacent to vineyard properties located in the County of San Luis Obispo. The General Plan Conservation Element identifies Airport Road as it enters City limits from the North, a City Gateway and Visual Corridor[1]. However, the City does not have an adopted Gateway Design Plan for this segment of Airport Road. Based on the site being at the same elevation as the surround properties and based on the quality site planning providing landscape setbacks along with quality architecture, the proposed development will not have an adverse impact on a scenic vista.					
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐	
Discussion: The majority of the project site is vacant except for a single-family residence, barn, water tank, and a secondary housing structure clustered in the northeast portion, closest to Airport Road which will be removed to accommodate site development. Because of its age, a History Evaluation Report (Attachment 9) was prepared to evaluate its potential significance. As discussed in Section V (Cultural Resources), the report concluded that the farmhouse did not meet historic eligibility criteria and that its demolition would not result in a significant impact to cultural or scenic resources, therefore, the project's impacts on historic buildings is less than significant. There are no rock outcroppings on the project site; however, there are numerous on-site trees, including various native oak trees, three of which are proposed to be removed (further discussion regarding impacts to oaks is in Section IV Biological Resources). Two of the trees proposed for removal are located adjacent to Airport Road, where the street will be widened. According to the Arborist's evaluation of the trees, both were rated as being in Fair condition, and do not contribute to any scenic resources. Based on these factors, removal of the trees will be a less than significant impact.					
c) 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?	☐	☐	☒	☐	**2**
Discussion: The proposed building height does not exceed the allowed maximum 50-foot height, per the City's Zoning Ordinance[2]. Development for Phase 1, which will have more visibility based on it having frontage along Airport Road, has been designed to be setback approximately 80-feet from the easterly property line and will include substantial perimeter landscaping. Additionally, the Phase 1 development includes a well-articulated and attractively designed building. Based on the proposed building height, setbacks, and architecture, the project's impacts on the visual character of the urbanized setting will 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?	☐	☒	☐	☐	**2, 10**
Discussion: Existing sources of light and glare in the area includes light from commercial/industrial development to the south and east. Due to the surrounding rural character to the north and west, a mitigation measure has been added to require final lighting plans for both Phases 1 and 2 to be submitted at their respective construction phases, demonstrating compliance with CA Green Building Code Standards and to submit backlight, uplight, and glare (BUG) ratings for each fixture to demonstrate added compliance with regard to light/glare. With this mitigation, this project's impacts on day or nighttime views in the area will be less than significant					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
II. AGRICULTURE AND FORESTRY RESOURCES. 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:					
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?	☐	☐	☐	☒	**1, 14**
Discussion: The project site is designated in the General Plan and is zoned on the City's Zoning Map for industrial and business park development. The Farmland Mapping and Monitoring Program of the California Resources Agency identifies the site as Farmland of Local Potential[14]. The Open Space Element of the Paso Robles General Plan (Figure OS-1, Important Farmland) identifies the site as Farmland of Local Potential[1]. Both of these resources indicated the land is neither prime nor unique farmland of statewide importance. Therefore, the project would not result in impacts on converting prime or other significant soils to urban land uses.					
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	
Discussion: The project would not conflict with zoning for agricultural use. The Project Site is not zoned for agriculture and is not under a Williamson Act Contract.					
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒	
Discussion: There are no forest land or timberland resources within the City of Paso Robles.					
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	
Discussion: The City of Paso Robles does not contain forest land resources.					
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?	☐	☐	☒	☐	
Discussion: The site is located within the city limits of Paso Robles, but is adjacent to county lands zoned for agriculture at the northern and western boundary. There is no rezoning process necessary for this project, as the proposed development aligns with the land use designation. City water and sewer services are not available outside the city boundary, which will discourage further conversion of ag land to commercial uses on Airport Road. The impact of the project is less than significant.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐	**11**
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?	☐	☒	☐	☐	**11**
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐	**11**

Discussion (a-c):

The San Luis Obispo County area is a non-attainment area for the State standards for ozone and suspended particulate matter. The SLO County Air Pollution Control District (APCD) administers a permit system to ensure that stationary sources do not collectively create emissions which would cause local and state standards to be exceeded. The CEQA thresholds of significance established by the SLOAPCD are designed to meet the objectives of the Clean Air Plan and in doing so achieve attainment status with state standards.

The potential for future project development to create adverse air quality impacts falls generally into two categories: Short term and Long term impacts. Short term impacts are associated with the grading and development portion of a project where earth work generates dust, but the impact ends when construction is complete. Long term impacts are related to the ongoing operational characteristics of a project and are generally related to vehicular trip generation and the level of offensiveness of the onsite activity being developed.

Short term impacts:
An Air Quality Assessment was prepared for the entire project site by Ambient Air Quality and Noise Consulting (Attachment 5), which includes an approximately 196,000 square foot warehouse for Phase 1 and a 157,000 square foot wine production facility with a 13,000 square foot covered crush pad for Phase 2.

Estimated maximum daily and quarterly emissions associated with construction of the proposed project (without mitigation) are presented in Table 10 and Table 11, respectively. Construction generated emissions were compared to SLOAPCD's recommended significance thresholds (Daily, Quarterly Tier 1, and Quarterly Tier 2). As depicted in Table 10, maximum daily emissions associated with the entire project construction would total approximately 122.3 lbs/day of ROG+NOX and 1.4 lbs/day of exhaust PM10. As depicted in Table 11, maximum quarterly construction-generated emissions would total approximately 0.89 tons/quarter of ROG+NOX, 0.1 tons/quarter of fugitive PM10, and 0.02 tons/quarter of exhaust PM10.

Table 10. Daily Construction Emissions without Mitigation

Construction Activity	Emissions (lbs/day)[1]					
	ROG	NO_X	$ROG+NO_X$	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}
Demolition	2.3	21.7	24.0	0.4	1.0	1.4
Site Preparation	2.7	27.6	30.3	19.8	1.3	21.1
Grading	3.4	35.6	39.0	9.5	1.4	11.0
Building Construction	2.3	17.8	20.1	2.2	0.7	2.9
Paving	1.3	10.2	11.5	0.2	0.5	0.7
Architectural Coating [3]	89.3	1.4	90.7	0.4	0.1	0.4
Maximum Daily Emissions[2]:	92.9	35.6	122.3	19.8	1.4	21.1
SLOAPCD Significance Thresholds:	--	--	137	--	7	--
Exceeds Thresholds?	--	--	**No**	--	**No**	--

1. *Emissions were quantified using the CalEEMod, v2020.4.0, computer program.*
2. *Maximum daily emissions assumes some activities (e.g., building construction, paving, architectural coating application) could potentially occur simultaneously on any given day.*
3. *Includes the use of low-VOC content paint (50 g/L, or less)*

lbs/day = pounds per day; ROG =Reactive Organic Gases; NO_X = oxides of nitrogen; CO = carbon monoxide;
PM_{10} = respirable particulate matter (10 micrometers or less)
Refer to Appendix B for emissions modeling assumptions and results.

Table 11. Quarterly Construction Emissions Without Mitigation

Quarter	Maximum Quarterly Emissions (tons)[1]			
	$ROG+NO_X$	PM_{10}		
		Fugitive	Exhaust	Total
Year 2023 - Quarter 1	0.33	0.1	0.02	0.1
Year 2023 - Quarter 2	0.89	0.1	0.02	0.1
Year 2023 - Quarter 3	0.65	0.1	0.02	0.1
Year 2023 – Quarter 4	0.31	0.1	0.02	0.1
Maximum Quarterly Emissions:	0.89	0.1	0.02	0.1
SLOAPCD Quarterly Tier 1/Tier 2 Thresholds (tons/quarter)	2.5/6.3	2.5/None	0.13/0.32	None
Exceeds SLOAPCD Tier 1/Tier 2 Thresholds?	No/No	No/--	No /No	--

To be conservative, total exhaust PM_{10} emissions were compared to SLOAPCD's DPM threshold. Totals may not sum due to rounding. Refer to Appendix B for modeling assumptions and results. NA=Not Applicable
1. *Maximum quarterly emissions include on-site and off-site emissions.*

Maximum daily and quarterly construction emissions would not exceed SLOAPCD's daily or quarterly significance thresholds with no mitigation. Emissions would be largely a result of mobile-source emissions associated with construction vehicle and equipment operations anticipated to occur during the grading. However, if uncontrolled, fugitive dust generated during construction may result in localized pollutant concentrations that could exceed ambient air quality standards and result in increased nuisance concerns to nearby land uses. For this reason, mitigation measures will be required (refer to MMRP in Attachment 4) to reduce potential construction-generated emissions to a less than significant level.

The following Tables 12 and 13 demonstrate that with mitigation, impacts from fugitive dust, mobile-source emissions, evaporative emissions would be less than significant.

Table 12. Construction Emissions with Mitigation

Construction Activity	Emissions (lbs/day)[1]					
	ROG	NO_X	ROG+NO_X	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}
Demolition	1.0	18.5	19.5	0.3	0.9	1.2
Site Preparation	1.0	19.1	20.1	7.9	1.0	8.9
Grading	1.6	31.1	32.7	3.9	1.3	5.2
Building Construction	1.4	17.7	19.1	2.2	0.9	3.1
Paving	0.8	11.3	12.1	0.2	0.6	0.8
Architectural Coating [4]	89.2	1.5	90.6	0.4	0.1	0.5
Maximum Daily Emissions with Tier 3 Off-Road Equipment & Fugitive Dust Control Measures[2]:	91.4	31.1	121.8	7.9	1.0	8.9
SLOAPCD Significance Thresholds:	--	--	137	--	7	--
Exceeds Thresholds?	--	--	No	--	No	--

1. Emissions were quantified using the CalEEMod, v2020.4.0, computer program.
2. Maximum daily emissions assumes some activities could potentially occur simultaneously on any given day.
3. Includes use of off-road equipment meeting Tier 3 emissions standards and fugitive dust control measures.
4. Includes the use of low-VOC content paint (50 g/L or less)
lbs/day = pounds per day; ROG = Reactive Organic Gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter (10 micrometers or less); DPFs = Diesel particulate filters
Refer to Appendix B for emissions modeling assumptions and results.

Table 13. Quarterly Construction Emissions With Mitigation[1]

Quarter	Maximum Quarterly Emissions (tons)[2]			
	ROG+NO_X	PM_{10}		
		Fugitive	Exhaust	Total
Year 2023 - Quarter 1	0.25	0.6	0.03	0.6
Year 2023 - Quarter 2	0.77	0.6	0.03	0.6
Year 2023 - Quarter 3	0.62	0.6	0.03	0.6
Year 2023 – Quarter 4	0.30	0.6	0.03	0.6
Maximum Quarterly Emissions:	0.77	0.6	0.03	0.6
SLOAPCD Quarterly Tier 1/Tier 2 Thresholds (tons/quarter)	2.5/6.3	2.5/None	0.13/0.32	None

To be conservative, total exhaust PM_{10} emissions were compared to SLOAPCD's DPM threshold. Totals may not sum due to rounding. Refer to Appendix B for modeling assumptions and results. NA=Not Applicable
1. Includes the use of off-road equipment meeting Tier 3 emission standards and fugitive dust control measures.
2. Maximum quarterly emissions include on-site and off-site emissions.
lbs/day = pounds per day; ROG = Reactive Organic Gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter (10 micrometers or less); DPF = Diesel Particulate Filter

Long term impacts:
Long-term operational emissions associated with the proposed project would be predominantly associated with mobile sources. To a lesser extent, emissions associated with area sources, such as landscape maintenance activities, as well as use of electricity and natural gas would also contribute to increased operational emissions.

Unmitigated operational emissions associated with the proposed project are summarized in Table 14. As depicted, daily operational emission from non-permitted sources (excluding wine production emissions exclusively for Phase 2) would total approximately 25.4 lbs/day of ROG+NOx, 16.1 lbs/day of CO, 3.5 lbs/day of fugitive PM10, and 0.1 lbs/day of exhaust PM10.

Table 14. Operational Emissions Without Mitigation

Operational Period/Source	Emissions[1]						
	ROG/ VOC	NO_X	ROG/VOC +NO_X	CO	PM_{10}		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	10.5	<0.1	10.5	0.1	0	<0.1	<0.1
Energy Use	<0.1	0.4	0.4	0.3	0	<0.1	<0.1
Mobile	1.9	12.5	14.4	15.7	3.5	0.1	3.6
Wine Fermentation[2]	39.4	0	0	0	0	0	0
Wastewater Pond[2]	2.3	0	0	0	0	0	0
Total (Excluding Permitted Sources):	12.5	12.9	25.4	16.1	3.5	0.1	3.6
Total (Including Permitted Sources):	54.2	12.9	67.1	16.1	3.5	0.1	3.6
SLOAPCD Significance Thresholds	**--**	**--**	**25**	**550**	**25**	**1.25**	**--**
Exceeds SLOAPCD Thresholds?	--	--	**Yes**	No	No	No	--
Annual Emissions (tons/year)							
Total (Excluding Permitted Sources):	2.2	1.9	4.1	2.4	0.5	0.0	0.5
Total (Including Permitted Sources):	9.9	1.9	11.8	2.4	0.5	0.0	0.5
SLOAPCD Significance Thresholds	**--**	**--**	**25**	**--**	**25**	**--**	**--**
Exceeds SLOAPCD Thresholds?	--	--	No	--	No	--	--

1. *Emissions quantified using CalEEMod, v2020.4.0. Totals may not sum due to rounding. Refer to Appendix B for modeling output files and assumptions.*
2. *Calculated using MBARD's Winery Emissions Calculator based on an estimated annual production rate of 2,335,800 gallons and an estimated wastewater throughput of 3,596,000 gallons/year, based on data provided by the project applicant. It is important to note that new or expanding wineries with storage capacity of 26,000 gallons per year, or more, would be required to obtain a Permit to Operate from SLOAPCD for VOC-related emissions associated with wine production/storage and associated wastewater ponds.*

Operations from Phase 2 would also result in additional emissions of VOCs (ethanol) associated with wine production, including fermentation during the production process and evaporative emissions associated with the onsite wastewater pond. Emissions from these sources would be subject to SLOAPCD permitting requirements. Assuming an estimated annual production rate of 2,335,800 gallons, VOC emissions from wine fermentation would total approximately 39.4 lbs/day and 7.2 tons/year. Evaporative VOCs from the onsite wastewater storage pond would total approximately 2.3 lbs/day and 0.4 tons/year. As noted in Table 14, maximum daily emissions, with and without the inclusion of onsite permitted sources, would exceed SLOAPCD's corresponding daily significance threshold of 25 lbs/day. As a result, this impact would be considered potentially significant without mitigation incorporated.

Implementation of Mitigation Measures AQ-3 (refer to MMRP in Attachment 4) includes SLOAPCD-recommended measures to reduce operational-generated emissions. Additional mitigation measures recommended by the ARB for the control of emissions associated with warehouse operations have also been included.

Mitigated operational emissions are summarized in Table 15. With mitigation, operational emissions of ROG+NOX would not exceed SLOAPCD significance thresholds. Mitigation Measure AQ-4 would also require that a Permit to Operate (PTO) be obtained from SLOAPCD for proposed permitted sources, specifically for wine production for Phase 2. Permitted sources exceed the SLOAPCD's permitting limitation would be subject to Best Available Control Technology requirements. Depending on the amount of emissions generated, wine production facilities may also be subject to offset requirements. Compliance with SLOAPCD permit requirements would ensure that emissions from permitted sources would not exceed applicable thresholds. With mitigation, this impact would be considered less than significant.

Table 15. Operational Emissions With Mitigation

Operational Period/Source	Emissions[1]						
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	8.0	<0.1	8.0	0.1	0	<0.1	<0.1
Energy Use	<0.1	0.4	0.4	0.3	0	<0.1	<0.1
Mobile	1.9	12.5	14.4	15.7	3.5	0.1	3.6
Total (Excluding Permitted Sources):	12.5	12.9	22.8	16.1	3.5	0.1	3.6
SLOAPCD Significance Thresholds	**--**	**--**	**25**	**550**	**25**	**1.25**	**--**
Exceeds SLOAPCD Thresholds?	--	--	No	No	No	No	--
Annual Emissions (tons/year)							
Total (Excluding Permitted Sources):	2.2	1.9	4.1	2.4	0.5	0.0	0.5
SLOAPCD Significance Thresholds	--	--	**25**	--	**25**	--	--
Exceeds SLOAPCD Thresholds?	--	--	No	--	No	--	--

1. Emissions quantified using CalEEMod, v2020.4.0. Totals may not sum due to rounding. Includes use of low-VOC content paints, use of low-flow water fixtures, installation of drought-tolerant landscaping and water-efficient irrigation systems. Additional mitigation measures, such as promoting the use of alternative means of transportation for workers, would result in additional reductions. Does not include emissions from permitted sources (e.g., wine production). Refer to Appendix B for modeling output files and assumptions.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☒	☐	☐	**11**

Discussion: Wine production facilities can generate nuisance odors during various steps of the process. As part of Phase 2, grape waste and wastewater from production will be collected in tanks on site, treated, and leftover solids will be hauled to approved, permitted receiver sites. Mitigation Measure AQ-4 (refer to MMRP in Attachment 4), which would require compliance with SLOAPCD permitting requirements for stationary sources, will require a "permit to operate" from SLOAPCD. In accordance with SLOAPCD permitting requirements, this would substantially reduce odors associated with on-site wine processing processes. With mitigation, this impact would be considered less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
IV. BIOLOGICAL RESOURCES. Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	

Discussion: A Biological Resources Assessment (BRA) was prepared for the entire project site by Sage Institute, Inc. (Attachment 6). An initial site assessment was conducted in January 2020, however, a subsequent assessment was done in December 2022 to document current conditions of the project site and to update the project description as well as the evaluation for any direct or indirect impacts.

Construction of the proposed project would convert approximately 17.5-acres of active cropland and 2.5-acres of existing developed areas to a fully developed site encompassing two phases. Overall, no special-status plant or wildlife species were observed during the assessment and are not expected to occur on the project site as there is no suitable habitat for any special-status wildlife. Given there is no special-status plant or wildlife species habitat present on the site, impacts on general biological resources are considered to be less than significant.

Vegetation and tree removal (clearing and grubbing) during the nesting season for birds could result in the destruction of active bird's nests. Indirect impacts may occur due to habitat loss or construction-related disturbances. As such, this could be considered a potentially significant impact requiring mitigation to avoid take or destruction of active nests thereby reducing this potentially significant impact to a less than significant level.

While somewhat unlikely, bats could occupy the structures prior to removal. As such, this could be considered a potentially significant impact requiring mitigation to avoid destruction of an active bat roost thereby reducing this potentially significant impact to a less than significant level.

The project is within the SJKF movement corridor between the Carrizo Plain core population and the Camp Roberts subpopulation. While there are abundant open lands through the area, the project could incrementally block or degrade SJKF movement through this corridor. The proposed project would develop approximately 20-acres, 2.5-acres of which is already developed (See Figure 2 of Attachment 6), leaving a net impact to SJKF movement corridor of 17.5-acres. This loss of 17.5-acres of cropland habitat movement opportunity for the SJKF is considered a potentially significant impact requiring mitigation to contribute to the long-term conservation of the movement corridor through the region.

There are a variety of mitigation measures included for this project to address the potentially significant impacts noted above, reducing them to a less than significant level. Mitigation measures for each phase of development include the requirement a qualified biologist to survey the area for nesting birds if site disturbing activities and/or tree removals are planned to occur between February 1 and August 31. If nesting birds are located on or near the proposed project site, or in a tree approved for removal, the birds shall be avoided until they have successfully fledged or the nest is no longer deemed active.

Additionally, to reduce any potentially significant impact on the regional SJKF movement corridor, and avoid take of any SJKF from project construction, a mitigation measure is included requiring the applicant to submit evidence to the City that states they have provided compensation for the loss of movement habitat, which can be broken up by the respective phases or done for the entire site. There are also a number of mitigation measures to be applied during construction activities to avoid a direct take. Based on the mitigation measures proposed, impacts would be reduced to less than significant.

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 Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒	
Discussion: According to the BRA by Sage Institute, there are no drainage features, riparian habitat, or wetlands that were observed during SII field surveys or are evidenced by review of available aerial photography. Therefore, there is no impact anticipated for this environmental factor.					
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?	☐	☐	☐	☒	
Discussion: See response IV.b above.					
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?	☐	☐	☒	☐	
Discussion: As identified by the Biological Resources Assessment (BRA) prepared by Sage Institute, due to the project site being surrounded by the airport and a variety of developed urban uses, the project site does not represent a substantial movement corridor for wildlife and the project is not expected to increase the level of fragmentation in the region nor is it expected to create a barrier to wildlife movement.					
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐	

Discussion: Any significant trees (oaks) will need to be protected or mitigated if removed pursuant to the Oak Tree Preservation Ordinance (Chapter 10.01) and as indicated in Section 21.16E.250 of the Municipal Code. Recommended mitigation measures that were provided in the Tree Evaluation Letter (Attachment 7) were reviewed as part of Sage Institute's analysis for consistency with the City's Oak Tree Preservation Ordinance. Based on this review, the Tree Evaluation Letter provides appropriate oak tree removal Mitigation Recommendations that would fully mitigate impacts related to the removal of the three (3) valley oaks. In summary, oak trees removed by the project would be replaced in accordance with the City's Oak Tree Preservation Ordinance. Planting small trees in quantity to account for the mitigated dbh equivalency would satisfy this requirement. Mitigation for the removal of three oak trees (Tree No.1, 2, and 3) is equivalent to 25.5-inches in caliper for oak replacement trees (or nine, 3-inch caliper valley oaks). The Tree Evaluation Letter also includes other appropriate Mitigation Measures for establishing tree protection zones for the oak trees to be retained, tree protection fencing, signage, construction monitoring, and post-construction reporting. The retention of three (3) valley oak trees combined with planting nine (9) replacement trees per the Mitigation Measures in the Tree Evaluation Letter would continue to provide nesting, foraging, and roosting habitat for resident and migratory birds. With the incorporation of the mitigation measures, this project's impacts on oak trees will be less than significant.					
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?	☐	☐	☐	☒	
Discussion: There are no Habitat Conservation Plans or other related plans in the City of Paso Robles.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
V. CULTURAL RESOURCES. Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☒	☐	
Discussion: A Cultural Resources Assessment was prepared by Material Culture Consulting (Attachment 10) for the area identified as Phase 1, and indicates the site was developed with a structure and outbuildings by at least 1937. As mentioned in the Section I above, the History Evaluation Report (Attachment 9) concluded that the farmhouse did not meet historic eligibility criteria since it does not contribute to any historical event, historical figures, and the house does not possess architectural distinction unique among others. Although the assessment did not include Phase 2 area, there were no other structures located on this portion of the site.					
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐	
Discussion: As part of the Phase I Cultural Resources Assessment, a records search was conducted which identified eleven previously conducted cultural resources investigations within 1-mile of the Project Area, none of which intersect the Project Area. No previously recorded cultural resources were identified within the Project Area. Three previously recorded cultural resources were identified within 1-mile of the Project Area, two of which are historic and one is prehistoric and include the Estrella Adobe just 850 feet northeast of the Project Area. Although the assessment was only done for the area encompassed by Phase 1, the study concludes that based on the above factors, the probability of encountering cultural resources is considered moderate and this can be applied to the entire site. Due to the historic occupation of the Project Area included in the assessment, and the presence of the Estrella Adobe, mitigation measures have been applied to the entire 19.75-acre project site, including requiring archaeological monitoring for vegetation clearing, trimming, and removal, and during ground disturbance occurring within the first five (5) feet below surface during construction.. With the mitigation, project impacts would be reduced to less than significant. Consultation with the Salinan Tribe of Monterey and San Luis Obispo Counties resulted in a request for a Phase 1 be performed and staff forwarded the Phase 1 for their review. At the timing of publishing this report, it did not result in any additional mitigation measure recommendations or requests. Mitigation is included in the Tribal Cultural Resources section of this report.					
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐	

Discussion: According to the Cultural Resources Assessment, the probability of encountering cultural resources within the Project Area is considered moderate. Although no resources were observed during the course of survey of the Phase 1 Area, the historic occupation of the entire site and the close proximity of the Estrella Adobe church and cemetery indicate that the Project Area holds the potential to contain as-yet undocumented archaeological resources.

Mitigation measures are included in this project to require archaeological monitoring for both Phases during vegetation clearing, trimming, and removal, and during ground disturbance occurring within the first five (5) feet below surface during construction. With the mitigation, project impacts would be reduced to less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
VI. ENERGY. Would the project:					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐	
Discussion: The proposed project is two commercial buildings subject to air quality and energy efficiency requirements. Standard construction practices are expected; the proposed development will not use or promote the use of energy resources in a wasteful or inefficient manner.					
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐	
Discussion: The proposed project will not conflict with adopted energy conservation plans and will be subject to compliance with the California Energy Code.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
VII. GEOLOGY AND SOILS. Would the project:					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐	**3, 10**
Discussion: The potential for and mitigation of impacts that may result from fault rupture in the project area are identified and addressed in the EIR for the 2003 update of the General Plan[3], pg. 4.5-8. There are two known fault zones on either side of the Salinas River Valley. The Rinconada Fault system runs on the west side of the valley, and grazes the City on its western boundary. The San Andreas Fault is on the east side of the valley and is situated about 30 miles east of Paso Robles. The City of Paso Robles recognizes these geologic influences in the application of the California Building Code (CBC) to all new development within the City. There are no Alquist-Priolo Earthquake Fault Zones within City limits. Review of available information and examinations indicate that neither of these faults is active with respect to ground rupture in Paso Robles. Soils and geotechnical reports and structural engineering in accordance with local seismic influences would be applied in conjunction with any new development proposal. Based on standard conditions of approval[10], the potential for fault rupture and exposure of persons or property to seismic hazards is not considered significant.					
ii) Strong seismic ground shaking?	☐	☐	☒	☐	**3**

Discussion: The proposed project will be constructed to current California Building Codes. The General Plan EIR[3] identified impacts resulting from ground shaking as less than significant and provided mitigation measures that will be incorporated into the design of this project including adequate structural design and not constructing over active or potentially active faults. Therefore, impacts that may result from seismic ground shaking are considered less than significant.					
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	**3, 10**
Discussion: Per the General Plan EIR[3], the project site is located in an area with soil conditions that have a low to moderate potential for liquefaction or other type of ground failure due to seismic events and soil conditions. To implement the EIR's mitigation measures to reduce this potential impact, the City has a standard condition[10] to require submittal of soils and geotechnical reports, which include site-specific analysis of liquefaction potential for all building permits for new construction, and incorporation of the recommendations of the reports into the design of the project.					
iv) Landslides?	☐	☐	☒	☐	**1**
Discussion**:** Per the General Plan Safety Element[1], the project site is in an area that is designated a low-risk area for landslides. Therefore, potential impacts due to landslides is less than significant.					
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	**15**
Discussion: The Soil Survey Map available by the NRCS for the site indicates the site's runoff properties are low[15]. For projects of this size, a Storm Water Pollution Prevention Plan (SWPPP) and an erosion control plan are required to be approved by the City Engineer prior to commencement of site grading, which will result in a less than significant impact.					
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?	☐	☐	☒	☐	
Discussion: See response to items a.iii. and a.iv. above.					
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?	☐	☐	☒	☐	
Discussion: A Geotechnical Engineering Report was prepared for the project site (Attachment 11) which indicates the surface soils are a very low expansive sandy material that are underlain with low to medium expansive clayey soils. Expansive soils tend to swell with seasonal increases in soil moisture and shrink during the dry season as soil moisture decreases. The volume changes that the soils undergo in this cyclical pattern can stress and damage slabs, flatwork, and foundations if precautionary measures are not incorporated into the design and construction procedure. The City has a standard condition[10] to require submittal of soils and geotechnical reports, which include site-specific analysis of liquefaction potential for all building permits for new construction, and incorporation of the recommendations of the reports into the design of the project. The study's recommended strategies will be required at the time of building permit submittal for both parcels, therefore impacts are 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?	☐	☐	☐	☒	
Discussion: The proposed project will be connected to the City's sewer system; and therefore, the issue of site soil ability to support septic tanks is not applicable.					
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒	
Discussion: No known paleontological resources or geological features are known to existing on the site. No impacts are expected.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
VIII. GREENHOUSE GAS EMISSIONS. Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐	

Discussion:

Estimated GHG emissions attributable to future development would be primarily associated with increases of CO2 from mobile sources. To a lesser extent, other GHG pollutants, such as CH4 and N2O, would also be generated. Short-term and long-term GHG emissions associated with the development of the proposed project are discussed in greater detail, as follows:

Short-term Construction GHG Emissions
Estimated increases in GHG emissions associated with the construction of the proposed project are summarized in Table 19. Based on the modeling conducted, construction-related GHG emissions would total approximately 460.4 MTCO2e. Amortized GHG emissions, when averaged over the assumed 25-year minimum life of the project, would total approximately 18.4 MTCO2e/year. There would also be a small amount of GHG emissions from waste generated during construction; however, this amount is speculative. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted. Amortized construction-generated GHG emissions are included in the operational GHG emissions impact discussion provided below.

Table 19. Construction-Generated GHG Emissions Without Mitigation

Construction Year	GHG Emissions ($MTCO_2e$/Year)
2023	460.4
Amortized Construction Emissions:	18.4

Amortized emissions are quantified based on a minimum 25-year project life. Refer to Appendix B for modeling assumptions and results.

Long-term Operational GHG Emissions
Estimated long-term increases in GHG emissions associated with the proposed project for future year 2030 conditions are summarized in Table 20. For informational purposes, opening year 2024 emissions were also calculated and included in Table 20. As depicted, operational GHG emissions for the proposed project, with the inclusion of amortized construction GHGs, would total approximately 1,1,358 MTCO2e/year under operational year 2030 conditions. A majority of the operational GHG emissions would be associated with motor vehicle use and energy use. To a lesser extent, operational GHG emissions would also be associated with solid waste generation and water use. As depicted in Table 20, total emissions would equate to 2.8 MTCO2e/SP, which would exceed the significance threshold of 1.9 MTCO2e/SP. As a result, this impact is considered potentially significant.

Permitted Emission Sources
The proposed Daou warehouse (Phase 2) would also include wine production, which can result in additional emissions of CO2 during the wine fermentation process. As previously noted, the facility would have a maximum production rate of 2,335,800 gallons/year and would be subject to SLOAPCD's permitting requirements. The SLOAPCD's GHG significance threshold for permitted sources of 10,000 MTCO2e/year. Assuming a maximum production rate of 2,335,800 gallons/year, the Daou warehouse would result in an estimated 934 MTCO2e/year, which would not exceed SLOAPCD's significance threshold. Emissions from permitted sources would be considered to have a less-than-significant impact.

Table 20. Operational GHG Emissions Without Mitigation

Operational Year/Source	GHG Emissions ($MTCO_2e$/Year)	
	Opening Year 2024	Future Operational Year 2030
Energy Use[1]	306	306
Motor Vehicles	876	782
Waste[2]	89	89
Water	163	163
Amortized Construction Emissions:	18	18
Total Emissions:	1,471	1,358
Total $MTCO_2e$/SP:		2.8
GHG Efficiency Significance Threshold:		1.9
Exceeds Threshold?		Yes

1. Includes natural gas use. Assumes use of PG&E for energy supplier and default electricity intensity factors contained in CalEEMod. Includes emissions from non-permitted sources. Permitted sources are evaluated separately in comparison to SLOAPCD's GHG significance threshold of 10,000 $MTCO_2e$/year.
2. Includes a minimum 50% diversion rate.
3. Based on an ITE estimated total 484 employees.
Refer to Appendix B for modeling assumptions and results.

Implementation of Mitigation Measures AQ-3 would require implementation of numerous measures to reduce long-term operational emissions, including implementation of measures to reduce project-generated VMT, as well as on-site measures to reduce operational emissions. Mitigation Measure AQ-4 would require Phase 2 of the project to obtain permits from the SLOAPCD for applicable emission sources. Mitigation Measure

GHG-1 would include additional measures that would result in substantial reductions in GHG emissions associated with energy use. With implementation of these measures, project generated emissions would be reduced to approximately 2.1 MTCO2e/SP under operational year 2030 conditions, which would still exceed the significance threshold of 1.9 MTCO2e/SP. Therefore, Mitigation Measure GHG-2 would also require carbon offsets sufficient to reduce project-generated GHG emissions to below applicable GHG thresholds, calculated over the estimated 25-year life of the project. With all the mitigation included, this impact would be considered less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐	**1**

Discussion: The project is consistent with the City's General Plan designation. Since the project is consistent with the General Plan it is also consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan, and as a result, the project would not conflict with the land use assumptions or exceed the population or job growth projections used by the City to develop the 2013 Climate Action Plan (CAP).

The City of Paso Robles is a member city of the San Luis Obispo Council of Governments (SLOCOG). SLOCOG's 2019 Regional Transportation Plan (RTP)/ Sustainable Communities Strategy (SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2019 Regional Transportation Plan (RTP) was adopted by the SLOCOG Board in June 2019. The RTP includes the region's Sustainable Communities' Strategy (SCS), which outlines how the region will meet or exceed its GHG reduction targets as required by SB 375 through the promotion of a variety of transportation demand management & system management tools and techniques to maximize the efficiency of the transportation network. Consistency with the requirement of SB 375 ensures consistency with the GHG reduction targets set by ARB. The 2019 SCS was found to be consistent with the requirement of SB 375 and is also consistent with the general plans of the region's jurisdictions (SLOCOG 2019).

According to the Regional Housing Needs Assessment, the City of Paso Robles has about 15 percent more housing units than jobs, indicative of a "jobs-poor" community. The City's housing to jobs ratio is estimated to decrease from a year 2015 ratio of 1.15 jobs/housing to a ratio of 1.112 jobs/housing by year 2035, thereby decreasing the imbalance between jobs and housing units. The proposed project would result in increased employment and would not result in an increase in housing. As a result, the proposed project would be anticipated to improve the jobs-housing imbalance. In addition, based on the VMT analysis prepared for the project, project-generated VMT would not exceed the City's VMT significance threshold. As a result, the project would not be considered to conflict with regional VMT-reduction efforts.

Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**	**Source**
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒	
Discussion: The proposed project does not include the use, transport, or storage of hazardous materials and will not result in a risk of accidental explosion or release of hazardous substances. Therefore, the project will not have an impact on this environmental factor.					
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?	☐	☐	☐	☒	
Discussion: The proposed project does not include the use, transport, or storage of hazardous materials and will not result in a risk of accidental explosion or release of hazardous substances. Therefore, the project will not have an impact on this environmental factor.					
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	**16**

	Discussion (c and d): c) No schools or proposed schools are within ¼ mile of site. d) The proposed project is not listed on the Cortese List compiled by the California Department of Toxic Substances Control[16].The project will not create a significant hazard to the public or the environment.				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒	**4**
	Discussion: The project site is within Airport Safety Zone 5, which is the Traffic Pattern Zone[4]. Indoor manufacturing and warehousing uses are compatible in Zone 5. Noise contours included in the 2007 Paso Robles Airport Land Use Plan indicate the site is outside of the nearest mapped noise contours. Although some noise is anticipated, because the project is outside of the noise sensitive areas, no significant noise impact is expected.					
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	
	Discussion: The City does not have any adopted emergency response plans. As proposed, the development would not interfere with emergency response.					
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐	
	Discussion: The city does not contain any very-high fire severity zones. The site is at the urban – rural fringe, but is not heavily wooded. It is unlikely to be impacted by wildland fires.					

X. HYDROLOGY AND WATER QUALITY. Would the project:					
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐	
	Discussion: The project will disturb more than 1 acre of land, so will be required to submit a Storm Water Pollution Prevention Plan (SWPPP). In addition, the development will be subject to the Regional Water Quality Control Boards Post Construction Stormwater Management Requirements. Erosion control measures and best management practices (BMPs) are required to be incorporated into grading and construction plans for the short and long-term management and protection of water quality. A preliminary Stormwater Management Plan has been prepared for both Phases 1 and 2 (Attachments 12 and 13). Both phases show the construction of bioswales integrated into the landscaping and excess runoff from the swales channeled to a storm drain system and then to a retention basin sized to fully retain a 100-year storm runoff event. Considering the project design for stormwater control, impacts as a result of the development of this project on stormwater will be less than significant.				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐	**7, 10**
	Discussion: The project site is within the City limits and it is zoned to allow for light industrial uses. The City's municipal water supply is composed of groundwater from the Paso Robles Groundwater Basin, an allocation of the Salinas River underflow, and a surface water allocation from the Nacimiento Lake pipeline project. The project is consistent with the 2020 Urban Water Management Plan (UWMP)[7], which anticipates and plans for buildout of the City. Since the UWMP has accounted for land uses at the project site, the project will have adequate water supply available, and will not further deplete or significantly affect, change or increase water demands planned for use in the basin. Standard conditions[10] applied to all new development require the payment of development impact fees for water service expansion to mitigate its proportionate share of related impacts.				
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:	☐	☐	☒	☐	**10**

Discussion: The proposed new/replaced impervious surface area is 370,163 square feet for Phase 1 (Stravinski), and 343,954 square feet for Phase 2 (Daou), which qualifies the project as Tier 4, per the City and Regional Water Quality Control Board Post-Construction Stormwater Requirements (PCRs). Based on the preliminary Stormwater Control Plan (Attachments 12 and 13), the project site does not receive offsite runon from adjacent properties, but the site does receive offsite runoff from the western half of Airport Road. This runoff sheet flows directly onto the site whereas the east half of Airport Road is collected by an existing roadside swale. The existing east Airport Road swale flows approximately 2,300 feet north to an existing drainage course tributary to Huer Huero Creek. The west side of airport road north and south of the project site drains directly to native vegetated areas.

There are a variety of methods to satisfy PCRs through the site's design. For instance, the proposed site will follow existing grades to maintain general sloping from east to west. The site layout uses minimum driveway widths to reduce impervious coverage and to maximize open space for structural control measures and landscaping. Roadway widening will be limited to the minimum lane widths necessary for increased traffic. Additionally, there are multiple bioswales and detention basins to capture runoff.

Based on the amount of proposed grading, there is potential for construction activities to temporarily alter existing drainage patterns on-site. The temporary alteration of drainage patterns may result in an increase of erosion and siltation at the project site during construction activities. Standard conditions of approval will require the project to prepare a final SWPPP to be approved prior to the issuance of building permits and to be implemented during both phases of construction activities. The SWPPP would include BMPs to avoid or minimize erosion and siltation during construction activities. Long-term erosion and sedimentation caused by alteration of drainage patterns is not anticipated because project grading would maintain the natural grade of the site. In addition, the project would be subject to Central Coast RWQCB PCRs 1, 2, 3, and 4 to manage long-term erosive and other pollutant runoff from the site. The preliminary Stormwater Control Plans for the project site identifies strategies to comply with required PCRs, which would be implemented following approval of the plan. Implementation of stormwater control strategies would avoid or minimize long-term erosive runoff from the site.

i) result in a substantial erosion or siltation on- or off-site;	☐	☐	☒	☐	
Discussion: See discussion X.c (above). Additionally, in compliance with State and local regulations, during construction erosion and/or stormwater control measures will be implemented during site disturbance; therefore the project is not expected to result in substantial erosion or siltation.					
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐	
iv) impede or redirect flood flows?	☐	☐	☒	☐	
Discussion (ii-iv): See the discussion in X.a (above) for discussion on the stormwater management approach. Measures and BMPs will be installed and implemented to decrease the amount/rate of surface runoff during storm events.					
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒	
Discussion: The proposed project is located in an area of minimal flood hazard (Zone X), so no impacts to this environmental factor are anticipated.					
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐	
Discussion: See the discussion in X.a for discussion on the stormwater management approach. Measures and BMPs will be installed and implemented to adhere to the City's Stormwater Management Program, therefore impacts would be reduced to less than significant.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XI. LAND USE AND PLANNING. Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	**1,2**

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?	☐	☐	☐	☒	**1,2**

Discussion (a and b)**:**

a) The project is a light industrial development in the Industrial (M) zoning district. The proposed development is consistent with the General Plan and Zoning designations. No established community will be divided.

b) The proposed project is subject to the City General Plan and Zoning Code. These documents and ordinances include standards to protect aesthetic quality and scenic viewsheds, biological resources, cultural resources, and public health and safety. Specific requirements or policies identified in these documents are discussed in specific resource sections. Based on project design and compliance with existing zoning and land use regulations, the project would be consistent with policies adopted for the purpose of avoiding or mitigating environmental effects.

Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**	**Source**
XII. MINERAL RESOURCES. Would the project:					
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	☐	☐	☐	☒	**1**
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?	☐	☐	☐	☒	**1**

Discussion (a and b)**:** There are no known mineral resources at this project site.

Issues	**Potentially Significant Impact**	**Less Than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**	**Source**
XIII. NOISE. Would the project result in:					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐	**1, 5**

Discussion: The project will be subject to the City's Noise Element and Noise Ordinance[1, 5]. Construction of the project will result in short term, temporary increases in ambient noise during the daytime. Since standard conditions limit the hours of construction from 7 am to 7 pm and excludes construction on Sundays and Federal Holidays, the project is not expected to result in a significant noise impact resulting from construction noise.

A Noise analysis (Attachment 8) has been prepared for Parcel 1 "Stravinski" and indicates as a result of the development, noise levels could increase for the residence to the north of the project site by up to 3dB. The study recognizes that the adjacent residential property is located in the County, and as the County Municipal Code limits increases to 1 dB or less, the project noise emission from the north side of the Stravinski development would require mitigation to reduce impacts to be less than significant. To address this, a mitigation measure has been added to require a noise wall or berm of at least 7 feet in height be placed along the north property line (for Parcel 1) and extend a minimum of 210 feet westward, from Airport Road, along the project's northern property line. The design feature will limit the noise increase to 1 dB or less.

Consistent with the City's Noise Element, with the mitigation proposed, the sound level at the receiving house would be 58.3 dBA, whereas the standard would allow up to 60 dBA which also includes ambient background noise. Since the sound level is within the allotted average noise level, the project's impacts are reduced to less than significant during operational stages.

Although a noise analysis was not prepared for Parcel 2 "Daou", the same mitigation of having a sound wall or berm up to 7 feet in height will be applied to the westerly property boundary to mitigate for noise emissions affecting the residence adjacent to and west of Parcel 2. Since the crush pad and the main operations are located between the Daou building and Stravinski building, there will only be minimal back of house noise anticipated near the westerly property line closest to where the house is located. With the 7 foot noise barrier in place, the project would result in less than significant impacts to the operations of the Daou facility.

b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	

Discussion: The levels of groundborne noise and vibration generated by project construction would be low, and noise would only occur during daytime hours of construction and would cease upon completion of the project. Therefore, impacts from groundborne vibrations are considered to 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?	☐	☐	☐	☒	

Discussion: The project site is within Airport Safety Zone 5, the Traffic Pattern Zone4. Indoor manufacturing and warehousing uses are compatible in Zone 5. Noise contours included in the 2007 Paso Robles Airport Land Use Plan indicate the site is outside of the nearest mapped noise contours. Although some noise from airport operations is anticipated, because the project is outside of the noise sensitive areas, no significant noise impact is expected.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XIV. POPULATION AND HOUSING. Would the project:					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	**1**
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	**1**

Discussion (a and b):
The project will not induce population growth, displace substantial housing or people. Although the existing single-family residence will be demolished, the City's General Plan anticipates redevelopment of this site to a more intense use, such as what is proposed.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XV. PUBLIC SERVICES. Would the project:					
a) 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?	☐	☐	☒	☐	
Police protection?	☐	☐	☒	☐	
Schools?	☐	☐	☒	☐	
Parks?	☐	☐	☒	☐	
Other public facilities?	☐	☐	☒	☐	
Discussion: The proposed project will result in an incremental but not significant demand for additional government services, which will be mitigated through payment of development impact fees. Therefore, impacts that may result from this project on government services are considered less than significant.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XVI. RECREATION.					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐	
Discussion (a and b)**:** The project is for light industrial uses and is not expected to have a significant impact on local recreation facilities. The project will be required to install curb, gutter and sidewalk in Airport Road, which will incrementally improve offsite parking and pedestrian access in the vicinity.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XVII. TRANSPORTATION. Would the project:					
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐	**1**

Discussion: The project includes the widening of Airport Drive, which is identified in the General Plan Circulation Element[1] as an undivided arterial. Widening will accommodate two travel lanes, a center turn lane, and a southbound shoulder for a future southbound Class II bike lane consistent with City standards.

A Traffic Impact Study (TIS) was prepared for this project by Central Coast Transportation Consulting, dated November 2022 (Attachment 14). According to the study, the Stravinski and Daou warehouse projects would generate approximately 646 new vehicle and truck trips per weekday, including 64 AM and 68 PM peak hour trips using warehouse trip generations rates. Since the SR 46 E and Airport Road intersection has a high collision rate that is significantly higher than the statewide average rate for similar facilities, mitigation measures will be required to maintain consistency with the safety policies established in the Circulation Element. These mitigation measures include prohibiting outbound distribution trucks between the following times (at the time the Huer Huero Creek Bridge is constructed, there is no longer a prohibition on outbound distribution times):

- Monday through Thursday: 3 to 6 PM
- Friday: 2 to 6 PM
- Sunday: 10 AM to 2 PM

Additionally, a mitigation measure has been added requiring the applicant to participate in one of the following improvements to be constructed to serve project truck trips:

- Extend the eastbound median acceleration lane at the SR 46 E/Airport Road intersection and require trucks to use Airport Road; or
- Accommodate westbound U-turns for STAA trucks on SR 46 E with Caltrans approval; or
- Construct a Huer Huero Creek Bridge (by others) and require trucks to use Golden Hill Road. Truck levels to be evaluated after occupancy and construction of the bridge prior to removing the time restrictions listed above.

Lastly, the applicant will be required to participate in an agreement to share costs associated with construction and maintenance of these and other affected local roads. Other regional improvements to access on SR 46 E are included in the City's Development Impact Fees. With these mitigation measures noted above, the project's impacts will be reduced to less than significant.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☒	☐	

Discussion: A Traffic Impact Study (TIS) was prepared for this project by Central Coast Transportation Consulting, dated November 2022 (Attachment 14), which concluded the project will have a less than significant impact on vehicle miles traveled (VMT) based on the City's 2022 Transportation Impact Analysis Guidelines thresholds, which indicate, "Office and industrial projects may have a significant impact if the work VMT per employee exceeds 85 percent of the regional average". Based on the SLOCOG Travel Demand Model, the project is expected to have a work VMT lower than the threshold of significance.

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

Discussion: The project is located on a straight stretch of Airport Road. There are no hazardous design features associated, with, planned for or will result from this project.

d) Result in inadequate emergency access?	☐	☐	☐	☒	

Discussion: The project has been reviewed by the City's Department of Emergency Services. The project will not impede emergency access, and is designed in compliance with all emergency access safety features and to City emergency access standards.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XVIII. TRIBAL CULTURAL RESOURCES.					
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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	☐	☐	☒	☐	

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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐	

Discussion: As identified in Section V., the Cultural Resources Study prepared by Material Culture Consulting (Attachment 10) indicates the site was developed with a structure and outbuildings by at least 1937. The History Evaluation Report (Attachment 9) concluded that the farmhouse did not meet historic eligibility criteria since it does not contribute to any historical event, historical figures, and the house does not possess architectural distinction unique among others.

As part of the Phase I Cultural Resources Assessment, a records search was conducted which identified eleven previously conducted cultural resources investigations within 1-mile of the Project Area, none of which intersect the Project Area. No previously recorded cultural resources were identified within the Project Area. Three previously recorded cultural resources were identified within 1-mile of the Project Area, two of which are historic and one is prehistoric and include the Estrella Adobe just 850 feet northeast of the Project Area.

Based on the above, the probability of encountering cultural resources within the Project Area is considered moderate. Due to the historic occupation of the Project Area and the presence of the Estrella Adobe, mitigation measures have been applied to the project including requiring archaeological monitoring for vegetation clearing, trimming, and removal, and during ground disturbance occurring within the first five (5) feet below surface during construction. Therefore, with the mitigation incorporated, this project will result in less than significant impacts on tribal cultural resources.

Consultation with the Salinan Tribe of Monterey and San Luis Obispo Counties resulted in a request for a Phase 1 be performed and staff forwarded the Phase 1 for their review. At the timing of publishing this report, it did not result in any additional mitigation measure recommendations or requests.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐	

Discussion: There is existing water and sewer available in Airport Road at the southern end of the project site that the project will extend northward along Airport Road and connect to for both phases of the development. Per the City's General Plan EIR, Urban Water Management Plan, and Sewer System Management Plan, the City's water and wastewater treatment facilities are adequately sized, including planned facility upgrades, to provide water needed for this project and treat effluent resulting from this project. Therefore, this project will not result in the need to construct new facilities. No new off-site storm drainage facilities will be required to be constructed with this project, since the plans demonstrate all stormwater will be retained on-site. There are overhead power lines along Airport Road, which will be undergrounded as part of the Airport Road widening efforts. Based on this being an infill site with all utilities reasonably available, impacts to these facilities will be less than significant.

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

Discussion: The project site is within the City limits and it is zoned to allow for industrial development. The City's municipal water supply is composed of groundwater from the Paso Robles Groundwater Basin, an allocation of the Salinas River underflow, and a surface water allocation from the Nacimiento Lake pipeline project. The City's General Plan identified this site for future availability for water and sewer service, with the Urban Water Management Plan (UWMP) verifying there is adequate capacity to serve the project. Based on these factors, water use for this project has been accounted for and therefore impacts to groundwater supplies are less than significant. Standard conditions applied to all new development require the payment of development impact fees for water service expansion to mitigate its proportionate share of related impacts.					
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?	☐	☐	☐	☒	
Discussion: Per the City's Sewer System Management Plan (SSMP) the City's wastewater treatment facility has adequate capacity to serve this project as well as existing commitments.					
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒	
Discussion: Per the City's Landfill Master Plan, the City's landfill has adequate capacity to accommodate construction related and operational solid waste disposal for this project.					
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒	
Discussion: The proposed project will comply with federal, state, and local management and reduction statutes and regulations.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	
Discussion: The City of Paso Robles does not have an adopted emergency response plan or evacuation plan. The site is zoned for industrial development, such as what is proposed. Therefore, the project could not impair emergency plans.					
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐	
Discussion (b and c): As previously identified in Section IX, the city does not contain any very-high fire severity zones. The site is at the urban – rural fringe, but is not heavily wooded. It is unlikely to be impacted by wildland fires and is not considered as being located within the wildland urban interface (WUI) and therefore would not need specific measures for fire-fighting purposes, beyond emergency vehicle access, clearance around buildings, and connection to water. The project has been reviewed by the City of Paso Robles Fire Department and designed with Fire Codes in mind. Given these considerations the impact will 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?	☐	☐	☐	☒	
Discussion: The project site is flat and not subject to landslide potential or significant drainage changes.					

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Source
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.					
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of 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?	☐	☒	☐	☐	
Discussion: As noted within this environmental document, and with the mitigation measures outlined in the document, the projects future development impacts related to habitat for wildlife species and oak tree preservation will be less than significant with mitigation incorporated. The project would not result in impacts to fish habitat or impacts to fish and wildlife populations.					
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.)	☐	☐	☐	☒	
Discussion: Based on the location of the project being within the City's limits, consistency with the City's General Plan and Zoning Ordinance, and implementation of mitigation measures including contribution of fees to existing programs or monitoring activities, the project would not result in any impacts that are cumulatively considerable.					
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐	
Discussion: Since the site is zoned for industrial development which is anticipated by the existing General Plan and General Plan EIR, and since it would be developed at some point in the future with development that would have similar site disturbance such as grading and infrastructure for such development, and as a result of this study identifying mitigation measures for impacts created by the project, it is not anticipated that the project will result in substantial adverse environmental impacts on human beings, either directly or indirectly.					

EARLIER ANALYSIS AND BACKGROUND MATERIALS.

Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D).

Earlier Documents Prepared and Utilized in this Analysis and Background / Explanatory Materials

Reference #	Document Title	Available for Review at:
1	City of Paso Robles General Plan	City of Paso Robles Community Development Department 1000 Spring Street Paso Robles, CA 93446 https://www.prcity.com/313/General-Plan
2	City of Paso Robles Zoning Code	https://library.municode.com/ca/el_paso_de_robles/codes/code_of_ordinances
3	City of Paso Robles Environmental Impact Report for General Plan Update	City of Paso Robles
4	2005 Airport Land Use Plan	https://www.prcity.com/354/Airport-Land-Use-Plan
5	City of Paso Robles Municipal Code	https://library.municode.com/ca/el_paso_de_robles/codes/code_of_ordinances
6	City of Paso Robles Water Master Plan	City of Paso Robles
7	City of Paso Robles Urban Water Management Plan 2016	City of Paso Robles https://www.prcity.com/DocumentCenter/View/14827/Urban-Water-Management-Plan-PDF
8	City of Paso Robles Sewer Master Plan	City of Paso Robles https://www.prcity.com/DocumentCenter/View/15356/Sewer-System-Management-Plan-PDF?bidId=
9	City of Paso Robles Housing Element	City of Paso Robles https://www.prcity.com/DocumentCenter/View/30615/201201-Adopted-Housing-Element-2021-2028
10	City of Paso Robles Standard Conditions of	Same as above

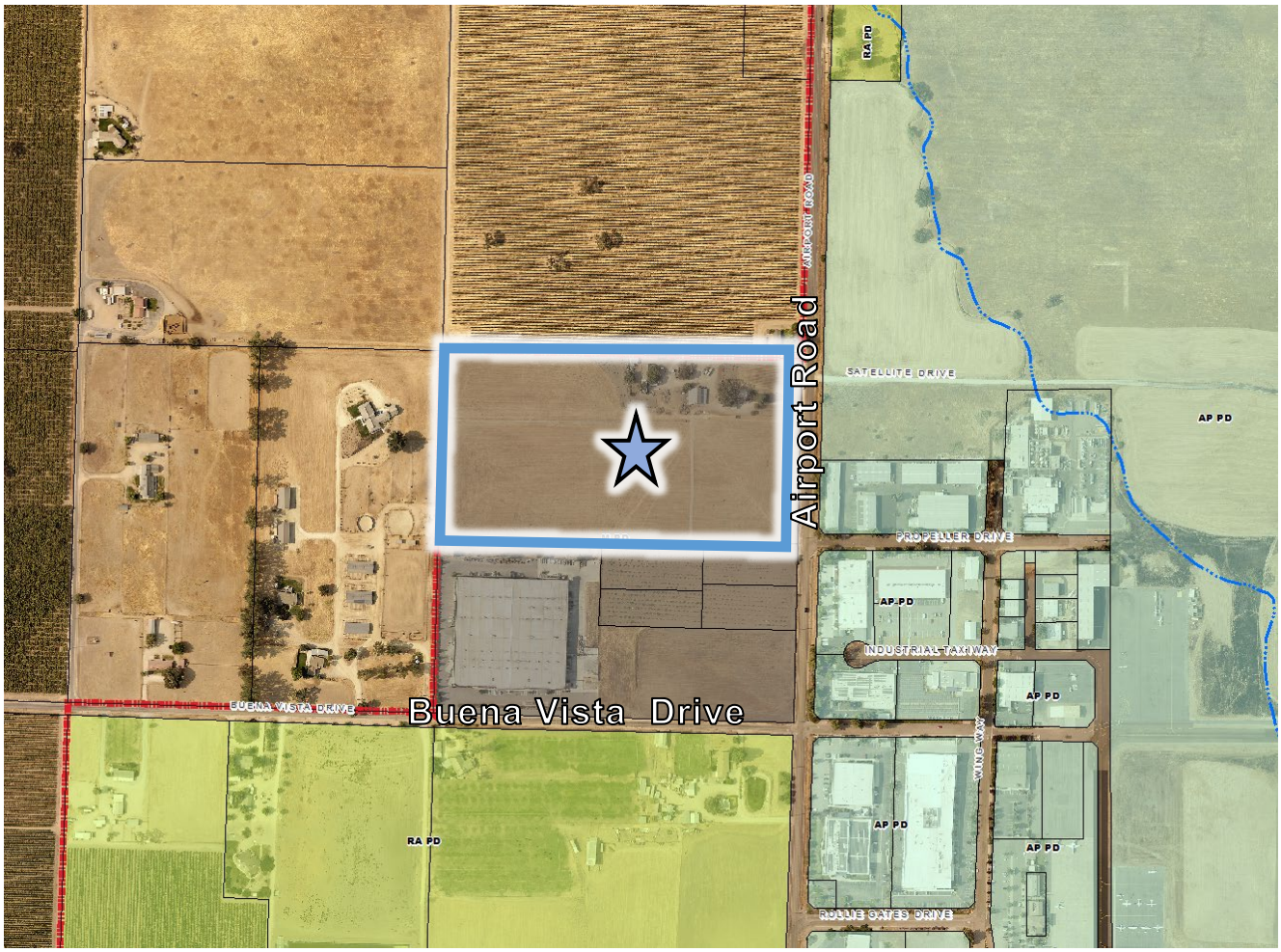
	Approval for New Development	
11	San Luis Obispo County Air Pollution Control District Guidelines for Impact Thresholds	https://www.slocleanair.org/rules-regulations/land-use-ceqa.php
12	San Luis Obispo County – Land Use Element	San Luis Obispo County Department of Planning County Government Center San Luis Obispo, CA 93408
13	Regional Transportation Plan, San Luis Obispo Council of Governments, 2019	https://slocog.org/2019RTP
14	Farmland Mapping and Monitoring Program California Resources Agency	https://www.conservation.ca.gov/dlrp/fmmp
15	USDA, Natural Resources Conservation Service	https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
16	Cortese List California Department of Toxic Substance Control	https://www.envirostor.dtsc.ca.gov/public/map/

Attachments:

1. Vicinity Map
2. Site Plan
3. Perspective Renderings
4. Mitigation Monitoring & Report Plan
5. Air Quality & Greenhouse Gas Impact Assessment (December 2022) by Ambient Air Quality & Noise Consulting
6. Biological Resources Assessment (December 2022) by Sage Institute
7. Tree Evaluation Report (March 2022) by Althouse & Meade
8. Noise Analysis (May 2022) by 45dB Acoustics
9. History Evaluation Report (July 2019) by Katie Vallaire of LSA
10. Cultural Resources Assessment (June 2022) by Material Culture Consulting, Inc.
11. Geotechnical Engineering Report (April 2022) by Mid-Coast Geotechnical, Inc.
12. Preliminary Stormwater Control Plan, Stravinski (May 2022) by Wallace Group
13. Preliminary Stormwater Control Plan, Daou Vineyards (May 2022) by Wallace Group
14. Traffic Impact Study (November 2022) by Central Coast Transportation Consulting

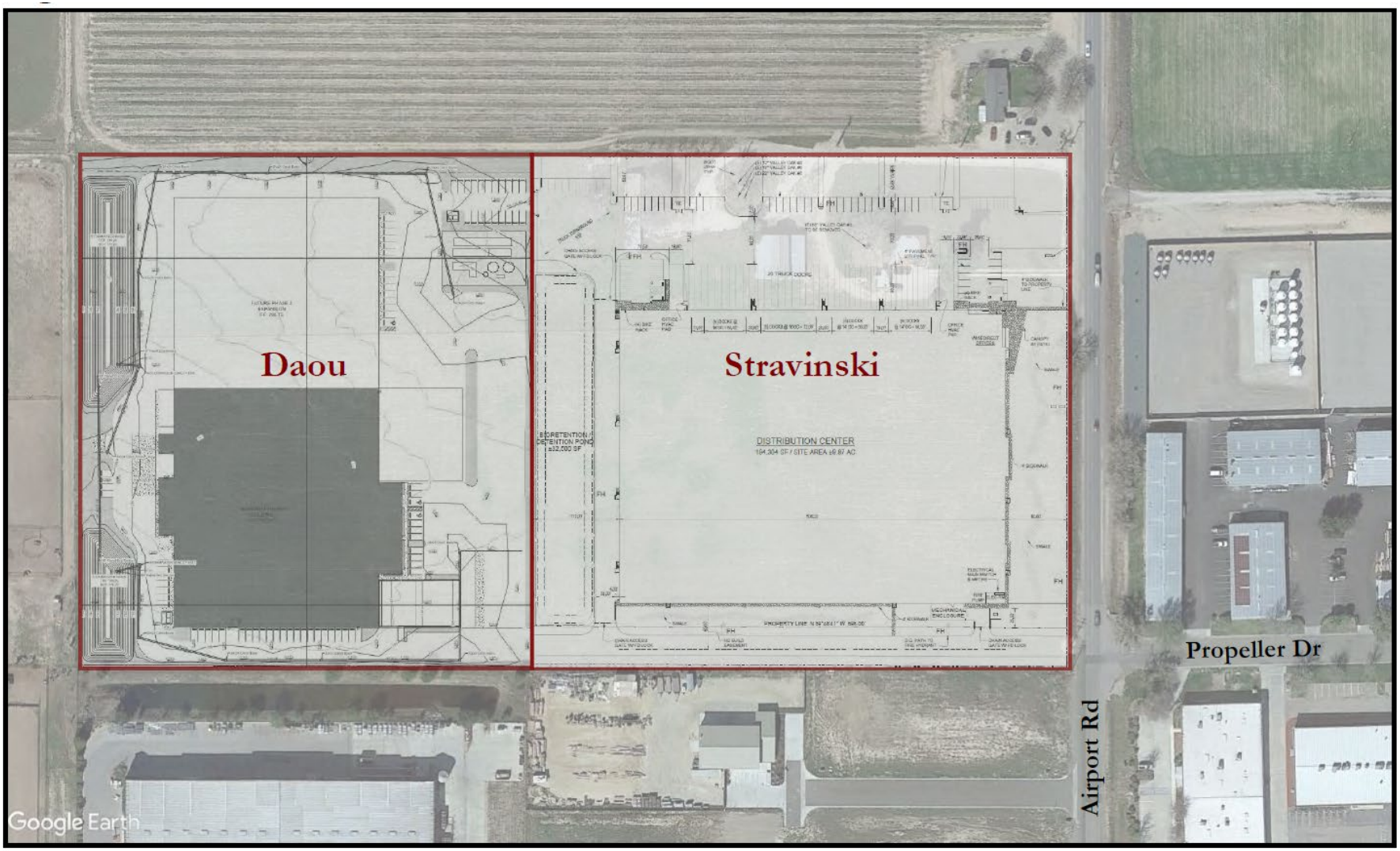
Attachment 1

Vicinity Map



Attachment 2

Site Plan



Attachment 3

Perspective Renderings

Stravinski

NORTH - EAST PERSPECTIVE

NORTH ENTRY PERSPECTIVE

SOUTH ENTRY PERSPECTIVE

NORTH - EAST ENTRY PERSPECTIVE

SOUTH - EAST PERSPECTIVE

Attachment 3

Perspective Renderings

Daou

1 VIEW DRIVING ONTO THE BACK LOT
Scale: NTS

2 VIEW OF METAL SCREEN AND FRONT OF BUILDING
Scale: NTS

Attachment 4

Mitigation Monitoring and Reporting Plan

Project File No./Name: **Stravinski – Daou Developments**
Approving Resolution No.:____ by: ☐ Planning Commission ☐City Council Date:_____

The following environmental mitigation measures were either incorporated into the approved plans or will be incorporated into the conditions of approval. Each and every mitigation measure listed below has been found by the approving body indicated above to lessen the level of environmental impact of the project to a level of non-significance. A completed and signed checklist for each mitigation measure indicates that it has been completed.

Explanation of Headings:

Type: ..... Project, ongoing, cumulative
Monitoring Department or Agency: ..... Department or Agency responsible for monitoring a particular mitigation measure
Shown on Plans: ..... When a mitigation measure is shown on the plans, this column will be initialed and dated.
Verified Implementation: ..... When a mitigation measure has been implemented, this column will be initialed and dated.
Remarks: ..... Area for describing status of ongoing mitigation measure, or for other information.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
AES-1. Prior to issuance of construction permits in either phase, the Applicant shall provide a revised lighting plan for the respective phase that demonstrates that the selected light fixtures, locations, and optical distribution patterns comply with the California Green Building Code standards. Specifically, the plan shall evaluate the light fixture selection against the lighting zone that is appropriate. Backlight, uplight, and glare (BUG) ratings provided by the manufacturer of the proposed fixtures shall be provided for each fixture type proposed. The lighting plans shall be prepared by a qualified engineer who is an active member of the Illuminating Engineering Society of North America (IESNA) using guidance and best	Project	City of Paso Robles Community Development Department (CDD)	X	Notes shown on construction documents.	Prior to issuance of building permit.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
practices endorsed by the International Dark Sky Association. All fixtures shall meet or exceed the standards of the California Green Building Code Maximum Allowable BUG Rating (Table 5.106.8 in the 2019 version). The plan shall also include the following to meet this requirement: a. In order to prevent "hot spots" onto the structures, wall mounted fixtures shall be positioned for lighting at the ground level and around the building for safety using appropriate IES uniformity ratings and shall not shed light back onto the building. To achieve this, the plan shall consider use of house side shields to minimize glare that may be observed from the vertical surface of the building walls. Walls that include wall mounted light fixtures shall use nonreflective materials, including nonreflective glass. b. The project shall include lighting controls and dimming capabilities for both building-related lighting and pedestrian/parking-related lighting, based on the IES, California Green Building Code, and California Energy Code minimums. Occupancy sensors shall be utilized so that lighting is dimmed or turned off when an area is unoccupied. c. Lighting in parking areas and along drive aisles shall be the minimum level necessary to provide appropriate visibility of pedestrians and vehicles.					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
d. Lighting fixtures located in parking areas or drive aisles shall not be located adjacent to or above trees that will obscure lighting beyond safe levels as the trees mature. e. Any exterior lighting, including lighting for signs, shall be "warm-white" or filtered (correlated color temperature of < 3,000 Kelvin; scotopic/photopic ratio of < 1.2) to minimize blue emissions. f. All exterior lighting fixtures shall be International Dark Sky Association approved (Fixture Seal of Approval program) and shall be installed so that they are shielded and directed downwards.					
AQ-1. The following mitigation measures shall be implemented for each respective Phase of development to reduce construction generated fugitive dust. These measures shall be shown on grading and building plans. a. Reduce the amount of disturbed area where possible. b. Use water trucks, SLOAPCD-approved dust suppressants (see Section 4.3 in the CEQA Air Quality Handbook), or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the 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 mph.	Project	CDD	X	Notes shown on construction documents.	Prior to issuance of grading permit for each Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
Reclaimed (non-potable) water should be used whenever possible. Please note that since water use is a concern due to drought conditions, the contractor or builder shall consider the use of an APCD-approved dust suppressant where possible to reduce the amount of water used for dust control. For a list of suppressants, see Section 4.3 of the CEQA Air Quality Handbook. c. All dirt stockpile areas should be sprayed daily or covered with tarps or other dust barriers as needed. d. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. e. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between the top of load and top of trailer) in accordance with CVC Section 23114. f. “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 CVC Section 23113 and California Water Code 13304. To prevent ‘track out’, designate access points and require all employees, subcontractors, and others to use them. Install and operate a ‘track-out prevention device’					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
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 trackout prevention device may need to be modified. g. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities. h. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established. i. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD. j. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
sweepers with reclaimed water should be used where possible. Roads shall be pre-wetted prior to sweeping when possible. l. The burning of vegetative material shall be prohibited. Effective February 25, 2000, the APCD prohibited developmental burning of vegetative material within San Luis Obispo County. If you have any questions regarding these requirements, contact the SLOAPCD Engineering & Compliance Division at (805) 781-5912. m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent the transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition.					
AQ-2. The following measures shall be implemented for each respective Phase of development to reduce construction emissions from on and off-road construction equipment (NOx, ROG, and DPM) and area sources. These measures shall be shown on grading and building plans:	Project	CDD	X	Notes shown on construction documents.	Prior to issuance of grading permit for each Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
a. Maintain all construction equipment in proper tune according to manufacturer's specifications. b. Heavy-duty (50 horsepower or greater) diesel-fueled construction equipment shall meet, at a minimum, ARB's Tier 3 certified engines, or cleaner, off-road heavy-duty diesel engines; be fitted with diesel exhaust particulate filters in accordance with manufacturer recommendations; and, comply with the State Off-Road Regulation. Heavy-duty equipment with Tier 4 engines shall be used to the extent locally available. Where Tier 3, or cleaner, equipment is not available, incorporate diesel emission control strategies/retrofits, such that emission reductions achieved equal or exceed that of a Tier 3 engine. Installing California Verified Diesel Emission Control Strategies. Verified diesel emissions control strategies can be found at: arb.ca.gov/diesel/verdev/vt/cvt.htm. c. When applicable, portable equipment, 50 horsepower (hp) or greater, used during construction activities shall be registered with the California statewide portable equipment registration program (issued by the California Air Resources Board) or be permitted by the APCD. Such equipment may include power screens, conveyors, internal combustion engines, crushers, portable generators, tub grinders, trammel screens, and portable plants (e.g., aggregate plant,					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
asphalt plant, concrete plant). For more information, contact the SLOAPCD Engineering & Compliance Division at (805) 781-5912. d. Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for onroad heavy-duty diesel engines, and comply with the State On-Road Regulation. e. All on and off-road diesel equipment shall not idle when not in use. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5-minute idling limit. f. Construction equipment staging areas shall be located at the furthest distance possible from nearby sensitive land uses. g. To the extent locally available, electrified or alternatively powered construction equipment shall be used. h. Construction of the proposed project shall use low-VOC content paints (e.g., 50 grams VOC per liter, or less). i. To the extent locally available, use prefinished building materials or materials that do not require the application of architectural coatings. j. Meet or exceed Cal Green Tier 2 standards for reducing cement use in concrete mix as allowed by local ordinance and conditions.					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
AQ-3. The following mitigation measures shall be implemented for each respective Phase of development to reduce the operational emissions generated by the project: a. For the proposed Stravinski refrigerated warehouse, the use of diesel-fueled transport refrigeration units (TRUs) or auxiliary power units shall not be used. All truck TRUs to be used by the building tenant(s) shall be plug-in capable. b. Electrical main service panel shall for both warehouses shall be designed to accommodate the potential future installation of electric charging stations for haul trucks. c. Heavy-duty trucks to be owned by the project applicants shall be model year 2014, or later. To the extent available, zero-emission vehicles should be used. d. Warehouse service equipment (e.g., yard hostlers, yard equipment, forklifts, pallet jacks) shall be zero-emission. e. In accordance with ARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, Heavy-duty diesel-fueled truck idle time shall be limited to 5-minutes/truck when not in use. Signage shall be posted at loading dock areas to advise drivers of this requirement. f. Provide a pedestrian-friendly and interconnected streetscape with good access to/from the development	Project	CDD	X	Notes shown on construction documents.	Prior to issuance of grading permit for each Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
for pedestrians, bicyclists, and transit users to make alternative transportation more convenient, comfortable, and safe. g. Implement programs to reduce employee vehicle miles traveled (e.g. incentives, SLO Regional Rideshare trip reduction program, vanpools, remote working, alternative schedules.) h. Provide employee lockers and showers to promote bicycle and pedestrian use. One shower and 5 lockers for every 25 new employees is recommended. i. Exceed Cal Green standards by 25% for providing on-site bicycle parking: both short-term racks and long-term lockers, or a locked room with standard racks and access limited to bicyclists only. j. Reduce fugitive dust from roads and parking areas with the use of paving or other materials. k. Exceed Cal Green Tier 2 standards for building energy efficiency. l. Exceed Cal Green Tier 2 standards for utilizing recycled content materials. m. Exceed Cal Green Tier 2 standards for the use of greywater, rainwater, or recycled water where applicable/available. n. Exceed Cal Green Tier 2 standards for using shading, trees, plants, cool roofs, etc. to reduce "heat island" effect.					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
o. Exceed Cal Green building standards at the time of development for water conservation (e.g. use of low flow water fixtures, water efficient irrigation systems, and draught tolerant landscaping.) p. All built-in appliances shall be Energy Star certified or equivalent. q. Design roof trusses to handle dead weight loads of standard solar-heated water and photovoltaic panels. r. To the extent available, use paints and cleaning products that are low-VOC content (e.g., 50 grams/liter VOC content, or less). s. Utilize on-site renewable energy system (e.g. solar, wind, geothermal, biomass and/or bio-gas) to offset at least 10% of the project's electricity use.					
AQ-4. Prior to project construction for Phase 2 only, the SLOAPCD shall be consulted to identify applicable permitting limitations and requirements for wine production and the proposed wastewater pond. A Permit to Operate (PTO) shall be obtained from the SLOAPCD prior to installation of permitted equipment or processes.	Project	CDD	X	Notes shown on construction documents.	Prior to issuance of grading permit for Phase 2.
AQ-5. The following mitigation measures shall be implemented for each respective Phase of development to reduce the disturbance of asbestos and lead. Strategies include but are not limited to the following: a. Demolition of on-site structures shall comply with the National Emission Standards for Hazardous Air	Project	CDD	X	Notes shown on construction documents.	Prior to issuance of demolition permit for either Phase. Prior to issuance of grading permit for either Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
Emissions requirements (NESHAP, 40 CFR, Part 61, Subpart M) for the demolition of existing structures. The SLOAPCD is delegated authority by the Environmental Protection Agency (EPA) to implement the Federal Asbestos NESHAP. Prior to demolition of on-site structures, the SLOAPCD shall be notified, per NESHAP requirements. Additional information may be obtained at website URL: http://slocleanair.org/ business/asbestos.php. b. If during the demolition of existing structures, paint is separated from the construction materials (e.g. chemically or physically), the paint waste will be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed of in accordance with local, state and federal regulations. According to the Department of Toxic Substances Control (DTSC), if the paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as construction debris (a non-hazardous waste). The landfill operator will be contacted prior to disposal of building material debris to determine any specific requirements the landfill may have regarding the disposal of lead-based paint materials. The disposal of demolition debris shall comply with any such					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
requirements. Contact the SLOAPCD Enforcement Division at (805) 781-5912 for more information. Approval of a lead work plan and permit may be required. Lead work plans, if required, will need to be submitted to SLOAPCD ten days prior to the start of demolition. c. Prior to any grading activities, a geologic evaluation shall be conducted to determine if naturally occurring asbestos (NOA) is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM. These requirements may include but are not limited to: 1) Development of an Asbestos Dust Mitigation Plan which must be approved by the SLOAPCD before operations begin, and, 2) Development and approval of an Asbestos Health and Safety Program (required for some projects).					
BIO-1. To reduce any potentially significant impact on nesting birds from vegetation and tree removals, the following mitigation measure is recommended for each Phase of development: Vegetation removal and initial site disturbance shall be conducted between September 1st and January 31st outside of the nesting season for birds. If vegetation	Project	CDD / Qualified Biologist	X	Notes shown on construction documents. Site inspection as needed.	Prior to issuance of grading permit for each Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
and/or tree removal is planned for the bird nesting season (February 1st to August 31st), then preconstruction nesting bird surveys shall be conducted by a qualified biologist to determine if any active nests would be impacted by project construction. If no active nests are found, then no further mitigation shall be required. If any active nests are found that would be impacted by construction, then the nest sites shall be avoided with the establishment of a non-disturbance buffer zone around active nests as determined by a qualified biologist. Nest sites shall be avoided and protected with the non-disturbance buffer zone until the adults and young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist. As such, avoiding disturbance or take of an active nest would reduce potential impacts on nesting birds to a less-than-significant level.					
BIO-2. To reduce any potentially significant impact on bat roosts, the following mitigation measure is recommended for each Phase of development as needed per the demolition plans: Prior to demolition of the existing buildings, an evaluation for bat usage shall be conducted by a qualified biologist. If no evidence of bat use is detected,	Project	CDD / Qualified Biologist	X	Notes shown on construction documents. Site inspection as needed.	Prior to issuance of demolition permit in either Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
then no further mitigation shall be required. If an active bat roost is found that would be impacted by construction, then the roost site shall be avoided and protected until the roost is no longer occupied. Natal roosts shall be avoided until the adults and young disperse from the site. Exclusionary measures may be implemented for non-natal roosts to avoid direct mortality of individuals. As such, avoiding disturbance to an active natal roost, and avoiding direct mortality from demolition would reduce potential impacts on roosting bats to a less-than-significant level.					
BIO-3. To reduce any potentially significant impact on the regional SJKF movement corridor, and avoid take of any SJKF from project construction, the following mitigation measures are recommended and can be completed for the entire project at once if part of the parcel map, or done by Phase if no parcel map: Prior to issuance of grading and/or construction permits, the applicant shall submit evidence to the City of Paso Robles Community Development Department that states that one or a combination of the following three San Joaquin kit fox compensatory mitigation measures has been implemented. The City in consultation with the CDFW will review the project site against the SJKF habitat evaluation form scoring and	Project	CDD	x	Notes shown on construction documents. Submit written evidence to Planning Department.	Prior to issuance of grading permit or parcel map.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
make a final determination of the appropriate ratio for project impact compensation for the loss of movement habitat within the corridor. The calculations below are for reference and assume a maximum 3:1 ratio will be required by CDFW. a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of 52.5 acres (17.5 acres of development multiplied by 3 as a result of an applied 3:1 mitigation ratio) of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, northwest of Highway 58), either on-site or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Wildlife and the City. This mitigation alternative (a.) requires that all aspects if this program must be in place before City permit issuance or initiation of any ground disturbing activities. b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
property in perpetuity. Mitigation alternative (b) above can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement between the CDFW and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The fee, payable to "The Nature Conservancy," would total: $131,250 (17.5 x 3 x $2,500). This fee is calculated based on the 2020 cost-per-unit of $2,500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of property in San Luis Obispo County; actual cost may increase (or decrease) depending on the timing of payment and final mitigation ratio required. This fee must be paid after the CDFW provides written notification about your mitigation options but prior to City permit issuance and initiation of any ground disturbing activities. c. Purchase credits in a CDFW-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the property in					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
perpetuity. Mitigation alternative (c) above can be completed by purchasing credits from the Palo Prieto Conservation Bank (see contact information below). The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the CEQA. The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank, would total: $131,250 (17.5 x 3 x $2,500). This fee is calculated based on the 2020 cost-per-credit of $2,500 per acre of mitigation. The fee is established by the conservation bank owner and may change at any time. Actual cost may increase (or decrease) depending on the timing of payment and final mitigation ratio required. Purchase of credits must be completed prior to City permit issuance and initiation of any ground disturbing activities.					
BIO-4. To avoid direct take of SJKF during construction in accordance with the San Luis Obispo County Guide to SJKF Mitigation Procedures Under CEQA, the project owner(s) shall adopt the Standard Kit Fox CEQA Mitigation Measures and shall be included on development plans. The following measures shall be implemented during each Phase of development:	Project	CDD / Qualified Biologist	X	Notes shown on construction documents. Verification from qualified biologist.	Prior to issuance of grading permit for each Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
• Within 30 days of initiation of site disturbance and/or construction, a qualified biologist shall conduct a pre-activity (i.e. pre-construction) survey for known or potential kit fox dens and submit a letter (or email) to the City reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any potential kit fox activity within the project limits. This may include implementing the 3-day tracking survey per the USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior To Or During Ground Disturbance (USFWS 2011) if deemed necessary by the qualified biologist. • A maximum 25 mph speed limit shall be required at the project site during construction activities. • All construction activities shall cease at dusk and not start before dawn. • A qualified biologist shall be on-site immediately prior to initiation of project activities to inspect for any large burrows (e.g., known and potential dens) and to ensure no wildlife are injured during project activities. If dens are encountered, they should be avoided as discussed below. • Exclusion zone boundaries shall be established around all known and potential kit fox dens.					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
• All excavations deeper than 2 feet shall be completely covered at the end of each working day. • All pipes, culverts, or similar structures shall be inspected for SJKF and other wildlife before burying, capping, or moving. • All exposed openings of pipes, culverts, or similar structures shall be capped or temporarily sealed prior to the end of each working day. • All food-related trash shall be removed from the site at the end of each work day. • Project-related equipment shall be prohibited outside of designated work areas and access routes. • No firearms shall be allowed in the project area. • Disturbance to burrows shall be avoided to the greatest extent feasible. • No rodenticides or herbicides should be applied in the project area. • Permanent fences shall allow for SJKF passage through or underneath (i.e., an approximate 4-inch passage gap shall remain at ground level). • Prior to issuance of grading and/or construction permit and within 30 days prior to initiation of site disturbance and/or construction, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the City, as well as any related biological report(s) prepared for the project. The applicant shall notify the City shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project. • During the site-disturbance and/or construction phase, any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and City. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the USFWS and CDFW by telephone. In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to CDFW for care, analysis, or disposition.					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
BIO-5. To fully mitigate proposed impacts to three native valley oaks, the project owner(s) shall implement the Mitigation Recommendations provided in the May 12, 2022, Tree Evaluation Letter prepared by Althouse and Mead.	Project	CDD	X	Notes shown on construction documents.	Prior to issuance of grading permit
BIO-6. Oak trees removed by the project shall be replaced in accordance with the City's Oak Tree Preservation Ordinance.	Project	CDD	X	Notes shown on construction documents.	Site inspection prior to final.
BIO-7. Tree Protection Zone Restrictions for Trees No. 4, 5 and 6: • No ground disturbance, grading, trenching, construction activities or structural development shall occur within the tree protection zone (TPZ; e.g., the dripline of protected trees) except as specifically authorized by the project's development permit and Project Arborist. • Setbacks for TPZ fencing may be adjusted under guidance of the Project Arborist. • All temporary vehicle and equipment access areas within TPZ boundaries will require a minimum 6-inch layer of wood chip mulch to mitigate soil compaction over the critical root zone (CRZ). Additionally, the Project Arborist may require the addition of plywood or rubber mats over the mulch in frequently traveled sensitive areas.	Project	CDD / Project Arborist	X	Notes shown on construction documents.	Prior to issuance of grading permit

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
• No equipment, soil, or construction materials shall be placed, staged, or stored within the TPZ. No oil, gasoline, chemicals, paints, solvents, or other damaging materials shall be deposited within the TPZ or in drainage channels, swales or areas that may lead to the TPZ. • Unless otherwise directed by the Project Arborist, all work done within the TPZ, including digging, trenching and planting, shall be done with hand tools or small hand-held power tools that are of a depth and design that will not cause root damage. • Where trenching or digging within the TPZ is specifically permitted, the work shall be conducted in a manner that minimizes root damage, as directed by the Arborist. All roots larger than 1-inch in diameter shall be clean cut with sharp pruning tools and not left ragged. • Any exposed roots shall be re-covered with soil the same day they were exposed if possible. If they cannot, they must be covered with burlap or another suitable material and wet down 2 times per day until reburied. • Grade changes outside of the TPZ shall not significantly alter drainage to protected trees. Grading within the TPZ shall use methods that minimize root damage and ensure that roots are not cut off from air. Where erosion may be a factor, return and protect the original grade or otherwise stabilize the soil.					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
• Protected trees shall not be used for posting signs, electrical wires or pulleys; for supporting structures; and shall be kept free of nails, screws, rope, wires, stakes and any other unauthorized fastening devices or attachments.					
BIO-8. Tree Protection Fencing. Fencing shall be temporary, readily visible, orange snow drift/construction fencing, and a minimum of 4-feet high. Fencing shall be secured to 6-foot t-posts, driven into the ground by 12 inches, and placed at intervals of 8 feet minimum. Fencing can be fastened to the t-posts with bailing wire or zip ties. Fencing shall be installed outside the CRZ unless modifications are approved by the Project Arborists. Fencing shall effectively: 1) keep the foliage, crown, branch structure and trunk clear from damage by equipment, materials or disturbances; 2) preserve roots and soil in an intact and non-compacted state; and 3) identify the TPZ. Fencing shall be maintained for the duration of construction. Fencing shall be removed as the last item of contract work.	Project	CDD / Project Arborist	X	Notes shown on construction documents.	Prior to issuance of grading permit
BIO-9. Signs. One English language and one Spanish language, readily visible, durable, waterproof sign shall be installed on tree protection fences in 4 equidistant locations around each individual protected tree or tree clusters. Signs placed on fencing around a stand of protected trees shall be placed at approximately 50- foot intervals. The	Project	CDD / Project Arborist	X	Notes shown on construction documents.	Prior to issuance of grading permit

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
size of each sign must be a minimum of 16 inches wide and must contain the wording below. The lettering in the word "WARNING" ("ADVERTENCIA") must be in capital letters at least 2 inches in height; the phrase "TREE PROTECTION ZONE" ("ZONA DE PROTECCIÓN DE ÁRBOLES") must be in capital letters at least 1 inch in height; all other lettering must be at least ½ inch in size.					
BIO-10. • Preconstruction. If construction is planned to occur between February 1 and September 15, a qualified biologist shall survey both Project trees and vegetation within 100 feet of Project area for nesting birds (300 feet for raptors) within one week of construction activities. If nesting birds are present the biologist will coordinate with Project manager to minimize impacts to nesting birds. • During Construction. An Arborist shall determine when to be onsite to monitor all grubbing, trenching, digging, and grading during construction activities within the TPZ. If required, the Arborist shall inform the City of Paso Robles Community Development Department when tree protective fencing may be removed. • Unanticipated Tree Damage Reporting. In the event that unanticipated or unauthorized impacts are inflicted on protected trees, the Project Arborist shall be immediately notified. The Project Arborist shall inspect	Project	CDD / Project Arborist	X	Notes shown on construction documents.	Prior to issuance of grading permit

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
damaged trees and prepare unanticipated damage reports with remediation recommendations to the Project Manager. Any damage or wounds to a tree shall be corrected within 24 hours of notification by a certified Arborist using International Society of Arboriculture (ISA) guidelines. • Post-Construction Arborist Monitoring and Reporting. Post-construction monitoring and reporting will be performed by the Arborist as required by the City of Paso Robles.					
CUL-1. A trained and qualified archaeological monitor should perform cultural resources monitoring of any ground disturbing activities associated with either Phase of the Project that has the potential to impact cultural resources (i.e. grading, trenching). Monitoring is not effective during activities where the soil matrix is not visually exposed (i.e. pile-driving for installation of solar pylons). The monitor will have the ability to redirect construction activities to ensure avoidance of significant impacts to cultural resources.	Project	CDD / Project Archaeologist	X	Notes on construction documents.	Prior to issuance of grading permits for each Phase.
CUL-2. During the initial vegetation removal and grading up to five feet below current ground surface of the site for each Phase of development, we recommend full time cultural resources monitoring. The project archaeologist, in coordination with the City of Paso	Project	CDD / Project Archaeologist	X	Notes on construction documents.	Ongoing during grading and construction for each Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
Robles, may re-evaluate the necessity for monitoring after the initial five feet of excavations have been completed.					
CUL-3. In the event that these resources are inadvertently discovered during ground-disturbing activities, work must be halted within 50 feet of the find until it can be evaluated by a qualified archaeologist. Construction activities could continue in other areas. If the discovery proves to be significant, additional work, such as data recovery excavation or fossil recovery, may be warranted and would be discussed in consultation with the appropriate regulatory agency(ies). Any potentially significant artifacts, sites or features observed shall be collected and recorded in conjunction with best management practices and professional standards. Any cultural items recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations. A report documenting the results of the monitoring efforts, including any data recovery activities and the significance of any cultural resources will be prepared and submitted to the appropriate City and County personnel.	Project	Project Archaeologist, SLO County Coroner, Native American Heritage Commission	X	As needed	Ongoing during grading and construction of each Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
Procedures of conduct following the discovery of human remains on non-federal lands have been mandated by California Health and Safety Code §7050.5, PRC §5097.98 and the California Code of Regulations (CCR) §15064.5(e). According to the provisions in CEQA, should human remains be encountered, all work in the immediate vicinity of the burial must cease, and any necessary steps to insure the integrity of the immediate area must be taken. The Orange County Coroner will be immediately notified. The Coroner must then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner has 24 hours to notify the NAHC, who will, in turn, notify the person they identify as the most likely descendent (MLD) of any human remains. Further actions will be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
GHG-1. In addition to implementation of Mitigation Measure AQ-3 and AQ-4 (noted above), the following additional measures shall be implemented: a. Proposed land uses shall elect to receive electricity from Central Coast Community Energy (3CE). b. Building mechanical equipment and appliances shall be electrically powered. The installation of natural-gas service/infrastructure shall be prohibited. c. The Project shall provide organic waste pick up and shall provide the appropriate on-site enclosures consistent with the provisions of the City of Paso Robles Development Standards for Solid Waste Services. d. Meet current CALGreen Tier 2 standards for electric vehicle (EV) parking spaces, except that all EV parking spaces required by the code shall be "EV-capable" instead of "EV-ready".	Project	CDD	X	Shown on building plans.	Before building permit issuance for each Phase.
GHG-2. The project shall provide carbon offsets sufficient to reduce project-generated GHG emissions to below applicable thresholds for each phase of development, calculated over the life of each phase of the project. Based on the modeling conducted, the project shall provide offsets in the total amount of 5,899 MTCO2e (3,929 MTCO2e for the Stravinski	Project	CDD	X	Shown on building plans. Submit verification from ARB approved registry	Prior to issuance of a grading permit for each Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
warehouse (Phase 1) and 1,970 MTCO2e for the Daou Warehouse(Phase 2). Under CEQA Guidelines Section 15126.4, subdivisions (c)(3) and (c)(4), a project's GHG emissions can be reduced through the application of off-site measures, which may include "Direct Reduction Activities" or the purchase of "Carbon Offset Credits", which are discussed as follows: <u>Direct Reduction Activities</u> Directly undertake or fund activities that will reduce or sequester GHG emissions. GHG reduction credits shall achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, in accordance with the criteria set forth in the ARB's most recent Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation (2013). GHG reduction credits shall be undertaken for the specific purpose of reduction project generated GHG emissions and shall not include reductions that would otherwise be required by law. All Direct Reduction Activities and associated reduction credits shall be confirmed by an independent, qualified third-party. The "Direct Reduction Activity" shall be registered with a California Air Resources Board (ARB)- approved registry and in compliance with ARB-approved					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
protocols. In accordance with the applicable Registry requirements, the Project applicant (or its designee) shall retain an independent, qualified third-party to confirm the GHG emissions reduction or sequestration achieved by the Direct GHG Reduction Activities against the applicable Registry protocol or methodology. The Project applicant (or its designee) will then apply for issuance of carbon credits in accordance with the applicable Registry rules. <u>Carbon Offsets</u> Obtain and retire "Carbon Offsets." Carbon Offsets shall achieve GHG reductions that are real, permanent, quantifiable, verifiable, and enforceable. Carbon offsets shall be purchased from ARB approved registries and shall comply with ARB-approved protocols to ensure that offset credits accurately and reliably represent actual emissions reductions. If the purchase of carbon offsets is selected, offsets shall be purchased according to the City of San Luis Obispo's preference, which is, in order of City preference: (1) within the City of San Luis Obispo; (2) within the SLOAPCD jurisdictional area; (3) within the State of California; then (4) elsewhere in the United States. In the event that a project or program providing offsets to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring offsets specific to					

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
the registry involved and shall purchase an equivalent number of credits to recoup the loss.					
N-1. Each phase of development shall provide a noise wall or berm of at least 7ft in height at specified locations to mitigate noise: • For Phase 1, the berm or wall must start at the eastern setback, and extend a minimum of 210 ft (64m) straight westward along the project's northern property line. • For Phase 2, the berm or wall must extend along the westerly property line.	Project	CDD	X	Shown on building plans.	Prior to issuance of a building permit for each phase.
T-1. For each phase, the project is prohibited from having outbound distribution trucks between the following times: • Monday through Thursday: 3 to 6 PM • Friday: 2 to 6 PM • Sunday: 10 AM to 2 PM At the time the Huer Huero Creek Bridge is constructed, there is no longer a prohibition on outbound distribution times.	Ongoing	CDD		Shown on building plans.	Ongoing enforcement.
T-2. The applicant of each phase must participate in one of the following improvements to be constructed to serve project truck trips:	Project	CDD / City Engineer		Shown on building plans.	Before building permit issuance for each Phase.

Mitigation Measure PD22-04 / PD22-09 / OTR22-06/ PR 22-0022	Type	Monitoring Department or Agency	Shown on Plans	Verified Implementation	Timing/Remarks
• Extend the eastbound median acceleration lane at the SR 46 E/Airport Road intersection and require trucks to use Airport Road; or • Accommodate westbound U-turns for STAA trucks on SR 46 E with Caltrans approval; or • Construct a Huer Huero Creek Bridge (by others) and require trucks to use Golden Hill Road. Truck levels to be evaluated after occupancy and construction of the bridge prior to removing the time restrictions listed above.					
T-3. The applicant of each phase will be required to participate in an agreement to share costs associated with construction and maintenance of other affected local roads as delineated included in the City's Development Impact Fees	Project	CDD / City Engineer		Shown on building plans.	Before building permit issuance for each Phase.

(add additional measures as necessary)

Explanation of Headings:

Type: ..... Project, ongoing, cumulative
Monitoring Department or Agency: ..... Department or Agency responsible for monitoring a particular mitigation measure
Shown on Plans: ..... When a mitigation measure is shown on the plans, this column will be initialed and dated.
Verified Implementation: ..... When a mitigation measure has been implemented, this column will be initialed and dated.
Remarks: ..... Area for describing status of ongoing mitigation measure, or for other information.

Attachment 5

AIR QUALITY & GREENHOUSE GAS IMPACT ASSESSMENT

FOR

THE STRAVINSKI-DAOU WAREHOUSES PROJECT

PASO ROBLES, CA

DECEMBER 2022

PREPARED BY:

AMBIENT
AIR QUALITY & NOISE CONSULTING
75 HIGUERA STREET, SUITE 105
SAN LUIS OBISPO, CA 93401

TABLE OF CONTENTS

Introduction 1
Proposed Project Summary 1
Air Quality 1
Existing Setting 1
Topography 1
Local and Regional Meteorology 1
Atmospheric Stability and Dispersion 3
Criteria Air Pollutants 5
Human Health & Welfare Effects 5
Odors 5
Toxic Air Contaminants 6
Asbestos 6
Ambient Air Quality 7
Air Quality Index 7
Regulatory Framework 10
Federal 10
State 10
Local 13
Impact Analysis 13
Thresholds of Significance 13
Methodology 15
Project Impacts and Mitigation Measures 16
Greenhouse Gases and Climate Change 29
Existing Setting 29
Regulatory Framework 33
Federal 33
State 33
Impact Analysis 38
Thresholds of Significance 38
Methodology 39
Project Impacts and Mitigation Measures 40
References 46

LIST OF TABLES

Table 1. Common Pollutants & Adverse Effects 5
Table 2. Summary of Ambient Air Quality Monitoring Data 7
Table 3. Air Quality Index Summary for Ozone & Related Health Effects 8
Table 4. Air Quality Index Summary for Fine Particulate Matter & Related Health Effects 9
Table 5. Air Quality Index Annual Historical Summary 9
Table 6. Summary of Ambient Air Quality Standards & Attainment Designations 12
Table 7. SLOAPCD Thresholds of Significance for Project-Level Construction Impacts 14
Table 8. SLOAPCD Thresholds of Significance for Project-Level Operational Impacts 14
Table 9. Project Consistency with SLOAPCD's CAP Transportation and Land Use Control Measures 17
Table 10. Daily Construction Emissions without Mitigation 18
Table 11. Quarterly Construction Emissions Without Mitigation 19
Table 12. Construction Emissions with Mitigation 21
Table 13. Quarterly Construction Emissions With Mitigation[1] 21
Table 14. Operational Emissions Without Mitigation 22
Table 15. Operational Emissions With Mitigation 25
Table 16. Global Warming Potential for Greenhouse Gases 30
Table 17. City of Paso Robles GHG Emissions Inventories 31
Table 18. Project-Level GHG Efficiency Threshold Calculation 39
Table 19. Construction-Generated GHG Emissions Without Mitigation 40
Table 20. Operational GHG Emissions Without Mitigation 41
Table 21. Project Consistency with the City's Climate Action Plan 45

LIST OF FIGURES

Figure 1 . Proposed Site Plan 2
Figure 2. Paso Robles Municipal Airport Wind Rose Plot 4
Figure 3. California GHG Emissions Inventory by Sector & Subsector (2019) 31
Figure 4. California Black Carbon Emissions Inventory (Year 2013) 32

Attachment 5

APPENDICES

Appendix A: Summary of Asbestos NESHAP Requirements

Appendix B: Emissions Modeling

LIST OF COMMON TERMS & ACRONYMS

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACM	Asbestos-Containing Material
APS	Alternative Planning Strategy
ARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
C_2F_6	Perfluoroethane
C_4F_{10}	Perfluorobutane
C_4F_8	Perfluorocyclobutane
C_5F_{12}	Perfluoropentane
C_6F1_4	Perfluorohexane
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CF_4	Perfluoromethane
CH_4	Methane
CMP	Congestion Management Program
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DPM	Diesel-Exhaust Particulate Matter or Diesel-Exhaust PM
EIR	Environmental Impact Report
EV	Electric Vehicle
FCAA	Federal Clean Air Act
GHG	Greenhouse Gases
GWP	Global Warming Potential
HAP	Hazardous Air Pollutant
HFC	Hydrofluorocarbons
ITE	Institute of Transportation Engineers
LNG	Liquefied Natural Gas
LOS	Level of Service
MBARD	Monterey Bay Air Resources District
MMT	Million Metric Tons
MPO	Metropolitan Planning Organization
$MTCO_2e$	Million Metric Tons of Carbon Dioxide
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NESHAPs	National Emission Standards for HAPs
NF_3	Nitrogen Trifluoride
NHTSA	National Highway Traffic Safety Administration
NO_2	Nitrogen Dioxide
NOA	Naturally-Occurring Asbestos
NO_x	Oxides of Nitrogen

O_3	Ozone
Pb	Lead
PFC	Perfluorocarbons
PM	Particulate Matter
PM_{10}	Particulate Matter (less than 10 µm)
$PM_{2.5}$	Particulate Matter (less than 2.5 µm)
ppb	Parts per Billion
ppm	Parts per Million
PV	Photovoltaic
ROC	Reactive Organic Compounds
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SBCAPCD	Santa Barbara County Air Pollution Control District
SMAQMD	Sacrament Metropolitan Air Quality Management District
SCS	Sustainable Communities Strategy
SF_6	Sulfur Hexafluoride
SLOCOG	San Luis Obispo Council of Governments
SLCP	Short-lived Climate Pollutant
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	Sulfur Dioxide
SP	Service Population
TAC	Toxic Air Contaminant
U.S. EPA	United State Environmental Protection Agency
VMT	Vehicle Miles Traveled
$\mu g/m^3$	Micrograms per cubic meter
µm	Micrometer

INTRODUCTION

This report provides an analysis of air quality and greenhouse gas impacts associated with the proposed redevelopment of the proposed Stravinski-Daou Warehouses Project (project). This report also provides a summary of existing conditions in the project area and the applicable regulatory framework pertaining to air quality and climate change.

PROPOSED PROJECT SUMMARY

The proposed project includes development of an approximate 194,304 square foot (sf) refrigerated warehouse for wine distribution by Stravinski Development Group and an approximate 181,211 sf wine production and storage warehouse for Daou Winery. The project does not include any public tasting rooms, event centers, retail operations, or any other use that would be open to the public. The proposed project's site plan is depicted in Figure 1.

AIR QUALITY

Existing Setting

The project is located in the City of Paso Robles, within the South Central Coast Air Basin (SCCAB) and within the jurisdiction of the San Luis Obispo County Air Pollution Control District (SLOAPCD). Air quality in the SCCAB is influenced by a variety of factors, including topography, local and regional meteorology.

Topography

The City of Paso Robles sits on the rolling hills of the eastern side of the Santa Lucia Mountain Range. It is bounded on the northwest by the Santa Lucia Mountain Range, which extends almost the entire length of the county. Rising sharply to about 3,000 feet at its northern boundary, the Santa Lucia Range gradually winds southward away from the coast, finally merging into a mass of rugged features on the north side of Cuyama Canyon. Point Buchon juts into the Pacific just south of Morro Bay to form the protective harbor of San Luis Obispo Bay. The Irish Hills are the dominant feature on this knob of land, rising abruptly from the shore to form steep cliffs and generally complex terrain from the Los Osos/Montana de Oro State Park area to Pismo Beach. These headlands have a pronounced influence on local wind flow patterns.

Estuaries are also a notable feature of the coastal areas, occurring wherever flowing streams meet the ocean. Morro Bay contains the region's largest estuary, with a saltwater marsh located on the east side where Chorro and Los Osos creeks enter the bay. This is one of the most significant wetlands remaining on the California coast and has been designated part of the National Estuary Program. It provides nesting habitat for blue herons, cranes and other important types of woodland birds and wildlife. Smaller coastal lagoons and marshes are also scattered along the county's shoreline.

Local and Regional Meteorology

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.

Figure 1 . Proposed Site Plan

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).

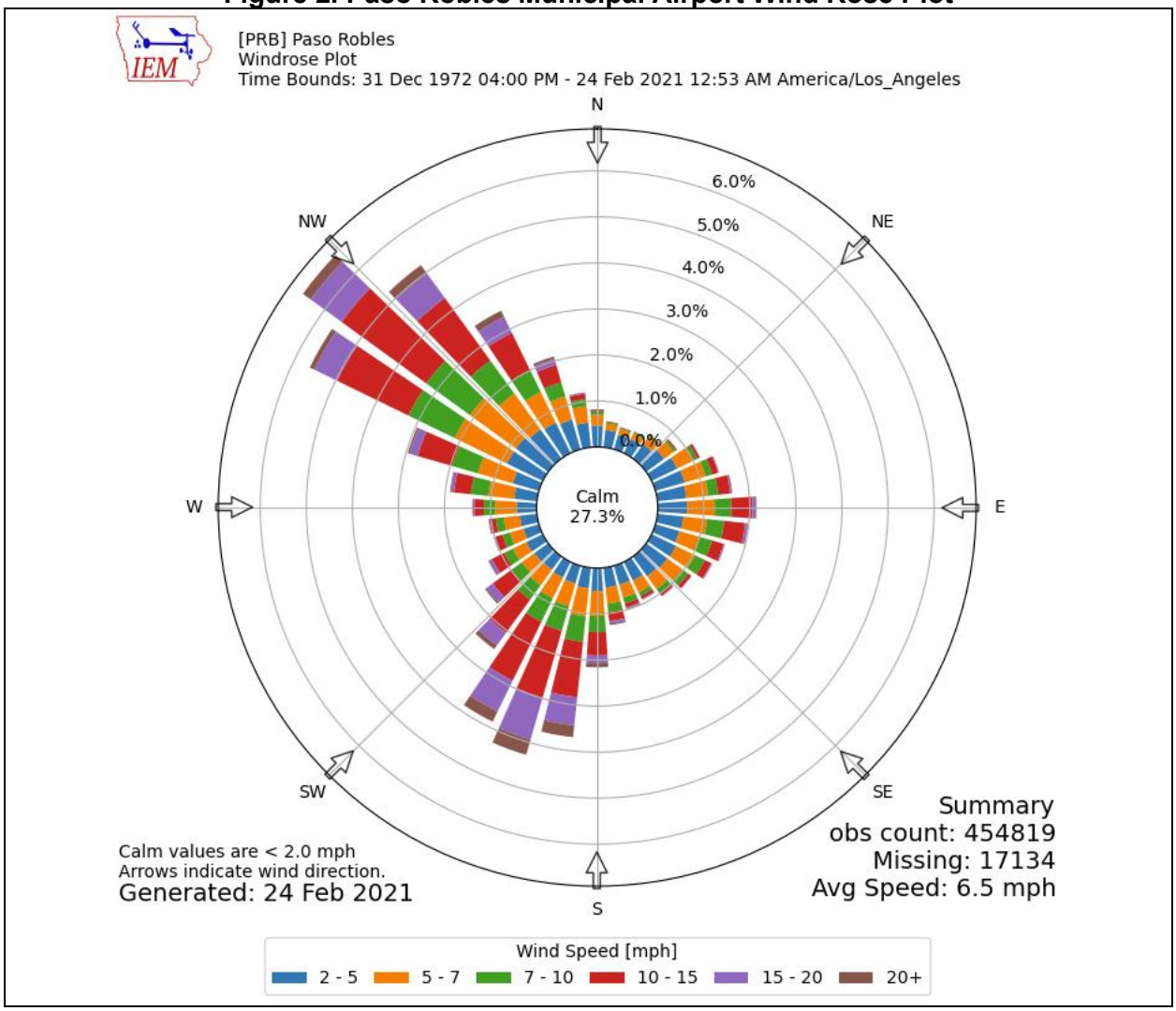
Predominant wind flow in the project area, based on historical meteorological data from the Paso Robles Municipal Airport, is depicted in Figure 2. As depicted, wind flow in the project area is predominantly from the northwest, averaging approximately 6.5 mph. Calm winds are present an average of approximately 27.3 percent of the time.

Atmospheric Stability and Dispersion

Air pollutant concentrations are primarily determined by the amount of pollutant emissions in an area and the degree to which these pollutants are dispersed into the atmosphere. The stability of the atmosphere is one of the key factors affecting pollutant dispersion. Atmospheric stability regulates the amount of vertical and horizontal air exchange or mixing, that can occur within a given air basin. Restricted mixing and low wind speeds are generally associated with a high degree of stability in the atmosphere. These conditions are characteristic of temperature inversions (SLOAPCD 2001).

In the atmosphere, air temperatures normally decrease as altitude increases. At varying distances above the earth's surface, however, a reversal of this gradient can occur. This condition termed an inversion, is simply a warm layer of air above a layer of cooler air, and it has the effect of limiting the vertical dispersion of pollutants. The height of the inversion determines the size of the mixing volume trapped below. Inversion strength or intensity is measured by the thickness of the layer and the difference in temperature between the base and the top of the inversion. The strength of the inversion determines how easily it can be broken by winds or solar heating (SLOAPCD 2001).

Figure 2. Paso Robles Municipal Airport Wind Rose Plot



Several types of inversions are common to this area. Weak, surface inversions are caused by radiational cooling of air in contact with the cold surface of the earth at night. In valleys and low lying areas, this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. Surface inversions are a common occurrence throughout the county during the winter, particularly on cold mornings when the inversion is strongest. As the morning sun warms the earth and the air near the ground, the inversion lifts, gradually dissipating as the day progresses. During the late spring and early summer months, cool air over the ocean can intrude under the relatively warmer air over land, causing a marine inversion. These inversions can restrict dispersion along the coast, but they are typically shallow and will dissipate with surface heating (SLOAPCD 2001).

In contrast, in the summertime, the presence of the Pacific high-pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms it to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, is common to all of coastal California and can act as a nearly impenetrable lid to the vertical mixing of pollutants. The base of the inversion typically ranges from 1000 to 2500 feet above sea level; however, levels as low as 250 feet, among the lowest anywhere in the state, have been recorded on the coastal plateau in San Luis Obispo county. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the buildup of pollutants. Highest or worst-case ozone levels are often associated with the presence of this type of inversion (SLOAPCD 2001).

Criteria Air Pollutants

For the protection of public health and welfare, the Clean Air Act (CAA) required that the United States Environmental Protection Agency (U.S. EPA) establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These pollutants are referred to as "criteria" pollutants because the US EPA 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 one hour, eight hours, 24 hours, or one 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. The air quality regulatory framework and ambient air quality standards are discussed in greater detail later in this report.

Human Health & Welfare Effects

Common air pollutants and associated adverse health and welfare effects are summarized in Table 1. Within the SCCAB, the air pollutants of primary concern, with regard to human health, include ozone, particulate matter (PM) and carbon monoxide (CO). As depicted in Table 1, exposure to increased pollutant concentrations of ozone, PM and CO can result in various heart and lung ailments, cardiovascular and nervous system impairment, and death.

Table 1. Common Pollutants & Adverse Effects

Pollutant	Human Health & Welfare Effects
Particulate Matter (PM_{10} & $PM_{2.5}$)	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Ozone (O_3)	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles, and dyes.
Sulfur Dioxide (SO_2)	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel; damage crops and natural vegetation. Impairs visibility. A precursor to acid rain.
Carbon Monoxide (CO)	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	Respiratory irritant; aggravates lung and heart problems. A precursor to ozone and acid rain. Contributes to global warming, and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: ARB 2018

Odors

Typically, odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (i.e. irritation, anger, or anxiety) to the physiological, including circulatory and respiratory effects, nausea, vomiting, and headache.

Neither the state nor the federal governments have adopted rules or regulations for the control of odor sources. The SLOAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be applicable to SLOAPCD's Rule 402, Nuisance. Any actions related to odors would be based on citizen complaints to local governments and the SLOAPCD. The SLOAPCD recommends that odor impacts be addressed in a qualitative manner. Such analysis shall determine if the project results in

excessive nuisance odors, as defined under the California Code of Regulations, Health & Safety Code Section 41700, air quality public nuisance.

Toxic Air Contaminants

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air, but due to their high toxicity, they may pose a threat to public health even at very low concentrations. Because there is no threshold level below which adverse health impacts are not expected to occur, TACs differ from criteria pollutants for which acceptable levels of exposure can be determined and for which state and federal governments have set ambient air quality standards. TACs, therefore, are not considered "criteria pollutants" under either the Federal Clean Air Act (FCAA) or the California Clean Air Act (CCAA) and are thus not subject to National or State AAQS. TACs are not considered criteria pollutants in that the federal and California Clean Air Acts do not address them specifically through the setting of National or State AAQS. Instead, the U.S. EPA and California Air Resources Board (ARB) regulate Hazardous Air Pollutants (HAPs) and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology to limit emissions. In conjunction with District rules, these federal and state statutes and regulations establish the regulatory framework for TACs. At the national levels, the U.S. EPA has established National Emission Standards for HAPs (NESHAPs), in accordance with the requirements of the FCAA and subsequent amendments. These are technology-based source-specific regulations that limit allowable emissions of HAPs.

Within California, TACs are regulated 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 ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

At the state level, the ARB has authority for the regulation of emissions from motor vehicles, fuels, and consumer products. Most recently, Diesel-exhaust particulate matter (DPM) was added to the ARB list of TACs. DPM is the primary TACs of concern for mobile sources. Of all controlled TACs, emissions of DPM are estimated to be responsible for about 70 percent of the total ambient TAC risk. The ARB has made the reduction of the public's exposure to DPM one of its highest priorities, with an aggressive plan to require cleaner diesel fuel and cleaner diesel engines and vehicles (ARB 2005).

At the local level, air districts have authority over stationary or industrial sources. All projects that require air quality permits from the SLOAPCD are evaluated for TAC emissions. The SLOAPCD limits emissions and public exposure to TACs through a number of programs. The SLOAPCD prioritizes TAC-emitting stationary sources, based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors. The SLOAPCD requires a comprehensive health risk assessment for facilities that are classified in the significant-risk category, pursuant to AB 2588. No major existing sources of TACs have been identified in the project area.

Asbestos

Asbestos is the common name for a group of naturally-occurring fibrous silicate minerals that can separate into thin but strong and durable fibers. Naturally-occurring asbestos, which was identified as a TAC in 1986 by ARB, is located in many parts of California and is commonly associated with ultramafic rock. The project site is not located within an area identified as having a potential for naturally-occurring ultramafic rock and serpentine soils.

Asbestos-containing material may be present in existing structures. The demolition of existing structures may be subject to regulatory requirements for the control of ACM.

Ambient Air Quality

Air pollutant concentrations are measured at several monitoring stations in the SCCAB. The Paso Robles-Santa Fe Avenue is the closest representative monitoring station with sufficient data to meet U.S. EPA and/or ARB criteria for quality assurance. Ambient monitoring data was obtained for the last three years of available measurement data (i.e., 2019 through 2021) and is summarized in Table 2. As depicted, the state and federal $PM_{2.5}$ standards were exceeded for 11 days in 2020. The state standard for PM_{10} was exceeded on 4 days in 2020. The national standard for 8-hour ozone concentration was exceeded on 2 days in 2020. Measured 1-hour ozone and NO_2 concentrations did not exceed the state and federal ambient air quality standards in the last three years of monitoring.

Table 2. Summary of Ambient Air Quality Monitoring Data

Pollutant	Monitoring Year		
	2019	2020	2021
Ozone (O_3)(1)			
Maximum concentration (1-hour/8-hour average; ppm)	0.077/0.064	0.092/0.073	0.070/0.064
Number of days state/national 1-hour standard exceeded	0/0	0/0	0/0
Number of days state/national 8-hour standard exceeded	NA/0	NA/2	NA/0
Nitrogen Dioxide (NO_2)(2)			
Maximum concentration (1-hour average; ppb)	34.0	33.0	44.0
Number of days state/national standard exceeded	0/0	0/0	0/0
Suspended Particulate Matter ($PM_{2.5}$)(2)			
Maximum 24-hour concentration (national/state; µg/m3)	17.3/17.3	242.1/242.1	19.1/19.1
Number of days national standard exceeded (measured/calculated)(3)	0/0	11/11.1	0/0
Suspended Particulate Matter (PM_{10})(1)			
Maximum concentration (national/state; µg/m3)	134.4/138.0	367.8/357.2	74.4/74.7
Number of days state standard exceeded (measured/calculated)(3)	9/NA	35/36	3/3.1
Number of days national standard exceeded (measured/calculated)(3)	0/0	4/4	0/0

ppm = parts per million by volume, µg/m³ = micrograms per cubic meter, NA=Not Available
1. Based on ambient concentrations obtained from the Paso Robles-Santa Fe Avenue. Monitoring Station.
2. Based on ambient concentrations obtained from the Atascadero-Lift Station #5 Monitoring Station.
3. Measured days are those days that an actual measurement was greater than the standard. Calculated days are estimated days that measurement would have exceeded the standard had measurements been collected every day.
Source: ARB 2021

Air Quality Index

The health effects of ambient air pollutant concentrations can be evaluated and presented in various ways. The most common method is the use of the Air Quality Index (AQI). The U.S. EPA developed the AQI as an easy-to-understand measure of health impacts based on measured ambient air quality in comparison to established ambient air quality standards. Tables 3 and 4 present a summary of the health impacts for ozone and fine particulate matter ($PM_{2.5}$), respectively, based on the U.S. EPA's AQI.

A summary of the annual air quality index for the project area, based on monitoring data obtained from the Paso Robles monitoring station for the last three years of available data, is provided in Table 5. As depicted in Table 5, the project area typically experiences "good" air quality with the total number of days ranging from 209 to 230 days per year. Days classified as "moderate" AQI ranged from 104 to 148 days per year. Over the last three years of available data, the area has experience a total of 32 days classified as "Unhealthy for Sensitive Groups", 8 days classified as "Unhealthy", and 2 days classified as "Very Unhealthy". Over the past three years, the area has not experienced air quality conditions within the "Hazardous" range (U.S. EPA 2022).

Table 3. Air Quality Index Summary for Ozone & Related Health Effects

Air Quality Index / 8-hour Ozone Concentration	Health Effects Description
AQI 51-100: Moderate Ambient Ozone Concentrations: 55-70 ppb	Sensitive Groups: Children and people with asthma are the groups at most risk. Health Effects Statements: Unusually sensitive individuals may experience respiratory symptoms. Cautionary Statements: Unusually sensitive people should consider limiting prolonged outdoor exertion.
AQI 101-150: Unhealthy for Sensitive Groups Ambient Ozone Concentrations: 71-85 ppb	Sensitive Groups: Children and people with asthma are the groups at most risk. Health Effects Statements: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory disease, such as asthma. Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
AQI 151–200: Unhealthy Ambient Ozone Concentrations: 86-105 ppb	Sensitive Groups: Children and people with asthma are the groups at most risk. Health Effects Statements: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population. Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
AQI 201-300: Very Unhealthy Ambient Ozone Concentrations: 106-200 ppb	Sensitive Groups: Children and people with asthma are the groups at most risk. Health Effects Statements: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid outdoor exertion; everyone else, especially children, should limit outdoor exertion.
An AQI of 50 and below is categorized as "Good" and air quality is satisfactory, and poses little or no risk. An AQI of 301 or higher is categorized as "Hazardous" having a health warning of emergency conditions: everyone is more likely to be affected. Outdoor activities should be avoided for all individuals. *Source: U.S. EPA 2022*	

Table 4. Air Quality Index Summary for Fine Particulate Matter & Related Health Effects

AIR QUALITY INDEX / 8-HOUR OZONE CONCENTRATION	Health Effects Description
AQI 51-100: Moderate Ambient Concentrations: 12.1-35.4 µg/m³	Sensitive Groups: Some people who may be unusually sensitive to particulate Health Effects Statements: Unusually sensitive people should consider reducing prolonged or heavy exertion. Cautionary Statements: Unusually sensitive people: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.
AQI 101-150: Unhealthy for Sensitive Groups Ambient Concentrations: 35.5-55.4 µg/m³	Sensitive Groups: People with heart or lung disease, older adults, children, and teenagers. Health Effects Statements: Increasing likelihood of respiratory symptoms for sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and the elderly. Cautionary Statements: If you have heart disease: Symptoms such as palpations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact a health care provider.
AQI 151–200: Unhealthy Ambient Concentrations: 55.5-150.4 µg/m³	Sensitive Groups: Everyone. Health Effects Statements: Increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and the elderly; increased respiratory effects in general population. Cautionary Statements: Sensitive groups: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling. Everyone else: Reduce prolonged or heavy exertion. Take more breaks during outdoor activities.
AQI 201-300: Very Unhealthy Ambient Concentrations: 150.5-250.4 µg/m³	Sensitive Groups: Everyone. Health Effects Statements: Significant aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease, and the elderly; significant increase in respiratory effects in general population. Cautionary Statements: Sensitive groups: Avoid all physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better. Everyone else: Avoid prolonged or heavy exertion. Consider moving activities indoors or reschedule to a time when air quality is better.
An AQI of 50 and below is categorized as "Good" and air quality is satisfactory, and poses little or no risk. An AQI of 301 or higher is categorized as "Hazardous" having a health warning of emergency conditions: everyone is more likely to be affected. Outdoor activities should be avoided for all individuals. *Source: U.S. EPA 2022*	

Table 5. Air Quality Index Annual Historical Summary

Year	Air Quality Index (AQI) - Number of Days					
	Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy	Very Unhealthy	Hazardous
2021	209	148	8	0	0	0
2020	211	124	21	8	2	0
2019	230	132	3	0	0	0

Based on monitoring for the Paso Robles monitoring station. Represents overall air quality taking into account all criteria pollutants measured.
Source: U.S, EPA 2022

Regulatory Framework

Air quality within the SCCAB is regulated by several jurisdictions including the U.S. EPA, ARB, and the SLOAPCD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation.

Federal

U.S. ENVIRONMENTAL PROTECTION AGENCY

At the federal level, the U.S. EPA has been charged with implementing national air quality programs. The U.S. EPA's air quality mandates are drawn primarily from the FCAA, which was signed into law in 1970. Congress substantially amended the FCAA in 1977 and again in 1990.

FEDERAL CLEAN AIR ACT

The FCAA required the US EPA to establish National Ambient Air Quality Standards (NAAQS or National AAQS), and also set deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions. NAAQS are summarized in Table 6.

State

CALIFORNIA AIR RESOURCES BOARD

The ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA of 1988. Other ARB 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. The CAAQS are summarized in Table 6. The emission standards established for motor vehicles differ depending on various factors including the model year, and the type of vehicle, fuel, and engine used.

CALIFORNIA CLEAN AIR ACT

The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for Ozone, CO, SO_2, and NO_2 by the earliest practicable date. The CCAA specifies that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. Each district plan is required to either (1) achieve a five percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each non-attainment pollutant or its precursors, or (2) to provide for the implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

ASSEMBLY BILLS 1807 & 2588 - TOXIC AIR CONTAMINANTS

Within California, TACs are regulated primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics Hot Spots Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

IN-USE OFF-ROAD DIESEL VEHICLE REGULATION

On July 26, 2007, the ARB adopted a regulation to reduce DPM and NOx emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The regulation applies to self-propelled diesel-fueled vehicles that cannot be registered and licensed to drive on-road, as well as two-engine vehicles that drive on road,

with the limited exception of two-engine sweepers. Examples include loaders, crawler tractors, skid steers, backhoes, forklifts, airport ground support equipment, water well drilling rigs, and two-engine cranes. Such vehicles are used in construction, mining, and industrial operations. The regulation does not apply to stationary equipment or portable equipment such as generators. The off-road vehicle regulation establishes emissions performance requirements, reporting, disclosure, and labeling requirements for off-road vehicles, and limits unnecessary idling.

CALIFORNIA BUILDING CODE

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 California Building Code is adopted every three years by the Building Standards Commission (BSC). In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

GREEN BUILDING STANDARDS

In essence, green buildings standards are indistinguishable from any other building standards. Both standards are contained in the California Building Code and regulate the construction of new buildings and improvements. The only practical distinction between the two is that whereas the focus of traditional building standards has been protecting public health and safety, the focus of green building standards is to improve environmental performance.

AB 32, which mandates the reduction of GHG emissions in California to 1990 levels by 2020, increased the urgency around the adoption of green building standards. In its scoping plan for the implementation of AB 32, ARB identified energy use as the second largest contributor to California's GHG emissions, constituting roughly 25 percent of all such emissions. In recommending a green building strategy as one element of the scoping plan, ARB estimated that green building standards would reduce GHG emissions by approximately 26 MMT of CO2e by 2020.

The green buildings standards were most recently updated on May 2018. Referred to as the 2019 Building Energy Efficiency Standards, this most recent update 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. The ventilation measures improve indoor air quality, protecting homeowners from air pollution originating from outdoor and indoor sources. Under the newly adopted standards, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades. The recently updated 2019 Building Energy Efficiency Standards also require new homes built after January 1, 2020 to be equipped with solar photovoltaic (PV) systems. The solar PV systems are to be sized based on the buildings annual electricity demand, the building square footage, and the climate zone within which the home is located. However, under the 2019 Building Energy Efficiency Standards, homes may still rely on other energy sources, such as natural gas. Compliance with the 2019 Building Energy Efficiency Standards, including the solar PV system mandate, residential dwellings will use approximately 50 to 53 percent less energy than those under the 2016 standards. Actual reduction will vary depending on various factors (e.g., building orientation, sun exposure). Non-residential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2019).

The recently updated 2022 Building Energy Efficiency Standards (2022 Standards), which were approved in December 2021, encourages efficient electric heat pumps, establishes electric-ready requirements when natural gas is installed and to support the future installation of battery storage, and further expands solar photovoltaic and battery storage standards. The 2022 Standards extend solar PV system requirements, as well as battery storage capabilities for select land uses, including high-rise multi-family and non-residential land uses, such as office buildings, schools, restaurants, warehouses, theaters, grocery stores, and more. Depending on the land use and other factors, solar systems should be sized to meet targets of up to 60 percent of the structure's loads. These new solar requirements will become effective January 1, 2023 and contribute to California's goal of reaching net-zero carbon footprint by 2045 (CEC 2022).

Table 6. Summary of Ambient Air Quality Standards & Attainment Designations

Pollutant	Averaging Time	California Standards****		Federal Standards****	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	Non-Attainment	–	Non-Attainment Eastern SLO County - Attainment Western SLO County***
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)******	
Respirable Particulate Matter (PM10)	24 Hour	50 µg/m³	Non-Attainment	150 µg/m³	Unclassified*/ Attainment
	Annual Arithmetic Mean	20 µg/m³		–	
Fine Particulate Matter (PM2.5)	24 Hour	No State Standard	Attainment	35 µg/m³	Unclassified*/ Attainment
	Annual Arithmetic Mean	12 µg/m³		12.0 µg/m³ *****	
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m³)	Attainment	9 ppm (10 mg/m³)	Unclassified*
	1 Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	Attainment	0.053 ppm (100 µg/m³)	Unclassified*
	1 Hour	0.18 ppm (330 µg/m³)		100 ppb (196 mg/m³)	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	Attainment	0.030 ppm (80 µg/m³)	Unclassified*
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (365 µg/m³)	
	3 Hour	–		0.5 ppm (1300 µg/m³)**	
	1 Hour	0.25 ppm (655 µg/m³)		75 ppb (196 mg/m³)	
Lead*	30 Day Average	1.5 µg/m³	Attainment	–	No Attainment Information
	Calendar Quarter	–		1.5 µg/m³	
	Rolling 3-Month Average*	–		0.15 µg/m³	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer – visibility of ten miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.	Attainment	No Federal Standards	
Sulfates	24 Hour	25 µg/m³	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Attainment		
Vinyl Chloride*	24 Hour	0.01 ppm (26 µg/m³)	No Attainment Information		

* Unclassified (EPA/Federal definition): Any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for that pollutant. ** Secondary Standard

*** San Luis Obispo County has been designated non-attainment east of the -120.4 deg Longitude line, in areas of SLO County that are south of latitude 35.45 degrees, and east of the -120.3 degree Longitude line, in areas of SLO County that are north of latitude 35.45 degrees. Map of non-attainment area is available upon request from the APCD. **** For more information on standards visit: http://ww.arb.ca.gov.research/aaqs/aaqs2.pdf

Attainment (EPA/Federal definition): Any area that meets the national primary or secondary ambient air quality standard for that pollutant. (CA definition): State standard was not exceeded during a three year period. ***** Federal PM2.5 Secondary Standard is 15µg/m³

Non-Attainment (EPA/Federal definition): Any area that does not meet, or contributes to an area that does not meet the national primary or secondary ambient air quality standard for that pollutant. (CA definition): State standard was exceeded at least once during a three year period. ******The 2008 NAAQS for 8hr ozone is 0.075 ppm. The 2015 NAAQS for 8hr ozone is 0.070 ppm. The attainment status shown in this table relates to the 2008 and 2015 NAAQS. SLO County has been designated non-attainment of the 2015 NAAQS. NAAQS is National Ambient Air Quality Standards H:\OUTREACH\Attainment\Status Revised January 29, 2019

Source: SLOAPCD 2020a

Local

COUNTY OF SAN LUIS OBISPO AIR POLLUTION CONTROL DISTRICT

The SLOAPCD is the agency primarily responsible for ensuring that 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 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 the FCAA and the CCAA.

CITY OF PASO ROBLES

The City of Paso Roble's General Plan includes numerous policies related to air quality. These policies address emissions generated by mobile and non-mobile sources and land use compatibility. The General Plan includes the following policies related to air quality:

- *Circulation Element - Policy CE-1A*. Circulation Master Plan. Revise/update the City's Circulation Master Plan to address the mobility needs of all users of the streets, roads and highways including motorists, movers of commercial goods, seniors, children, pedestrians, disabled persons, users of public transportation, and bicyclists.
- *Circulation Element - Policy CE-1B. Reduce Vehicle Miles Traveled (VMT). The City shall strive to reduce VMT generated per household per weekday by making efficient use of existing transportation facilities and by providing direct routes for pedestrians and bicyclists through the implementation of sustainable planning principles.*
- *Circulation Element - Policy CE-1C. Airport. Improve/expand transportation to and from the Paso Robles Municipal Airport as set forth in the Airport Master Plan*
- *Circulation Element - Policy CE-1D. Transit. Improve and expand transit services.*
- *Circulation Element - Policy CE-1E. Rail. Promote regional, interstate and intra-state rail service.*
- *Circulation Element - Policy CE-1F. Pedestrian and Bicycle Access. Provide safe and convenient pedestrian and bicycle access to all areas of the City.*
- *Conservation Element - Policy C-2A. Traffic Congestion Reduction. Implement circulation systems improvements to reduce congestion and associated air contaminant emissions.*
- *Conservation Element - Policy C-2B. VMT Reduction. Implement programs to reduce the number of VMT, especially by single occupant vehicles, including providing opportunities for mixed-use projects.*
- *Conservation Element - Policy C-2C.* Emissions Reduction. Take steps to reduce creation of air contaminant emissions.

Impact Analysis

Thresholds of Significance

In accordance with Appendix G of the *State CEQA Guidelines,* air quality impacts associated with the proposed project would be considered significant if it would:

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.

To assist in the evaluation of air quality impacts, the SLOAPCD has developed recommended significance thresholds, which are contained in the SLOAPCD's *CEQA Air Quality Handbook* (2012). For the purposes of this analysis, project emissions are considered potentially significant impacts if any of the following SLOAPCD thresholds are exceeded:

Construction Impacts

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for a project's short-term construction emissions are presented in Table 7 and discussed, as follows (SLOAPCD 2012):

Table 7. SLOAPCD Thresholds of Significance for Project-Level Construction Impacts

Pollutant	Threshold (1)		
	Daily (lbs/day)	Quarterly Tier 1 (tons)	Quarterly Tier 2 (tons)
Ozone Precursors (ROG + NO_X)	137	2.5	6.3
Diesel Particulate Matter (DPM)	7	0.13	0.32
Fugitive Particulate Matter (PM_{10}), Dust (2)	--	2.5	--

1. Daily and quarterly emissions thresholds are based on the California Health & Safety Code and the ARB Carl Moyer Guidelines.
2. Any project with a grading area greater than 4.0 acres of a worked area can exceed the 2.5 tons PM10 quarterly threshold.
Source: SLOAPCD 2012

ROG and NOx Emissions

Daily: For construction projects exceeding the 137 lbs/day threshold requires Standard Mitigation Measures;

Quarterly – Tier 1: For construction projects exceeding the 2.5 tons/quarter threshold, require Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. Off-site mitigation may be required if feasible mitigation measures are not implemented, or if no mitigation measures are feasible for the project.

Quarterly – Tier 2: For construction projects exceeding the 6.3 tons/quarter threshold, require Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP) and off-site mitigation are required.

Diesel Particulate Matter (DPM) Emissions

Daily: For construction projects exceeding the 7 lbs/day threshold, require Standard Mitigation Measures;

Quarterly - Tier 1: For construction projects lasting more than one quarter, exceedance of the 0.13 tons/quarter threshold requires Standard Mitigation Measures, BACT for construction equipment; and,

Quarterly - Tier 2: For construction projects exceeding the 0.32 tons/quarter threshold, require Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

Fugitive Particulate Matter (PM10), Dust Emissions

Quarterly- Tier 1: For construction projects exceeding the 2.5 tons/quarter threshold requires Fugitive PM_{10} Mitigation Measures and may require the implementation of a CAMP.

Operational Impacts

Criteria Air Pollutants

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for long-term operational emissions from a project are presented in Table 8.

Table 8. SLOAPCD Thresholds of Significance for Project-Level Operational Impacts

Pollutant	Threshold 1	
	Daily (lbs/day)	Annual (tons/year)
Ozone Precursors (ROG + NO_X)	25	25
Diesel Particulate Matter (DPM)[2]	1.25	--
Fugitive Particulate Matter (PM_{10}), Dust	25	25
CO	550	--

1. Daily and annual emissions thresholds are based on the California Health & Safety Code Division 26, Part 3, Chapter 10, Section 40918 and the ARB Carl Moyer Guidelines for DPM.
2. Applies to on-site emissions. DPM is seldom emitted from individual projects in quantities which lead to local or regional air quality attainment violations.
Source: SLOAPCD 2012

Toxic Air Contaminants

If a project has the potential to emit toxic or hazardous air pollutants, or is located in close proximity to sensitive receptors, impacts may be considered significant due to increased cancer risk for the affected population, even at a very low level of emissions. For the evaluation of new proposed land use projects that generate toxic air contaminants, such as diesel-fueled engines, the SLOAPCD has defined the excess cancer risk significance threshold at 10 in a million.

Localized CO Concentrations

Localized CO concentrations associated with the proposed project would be considered a less-than-significant impact if: (1) Traffic generated by the proposed project would not result in deterioration of signalized intersection level of service (LOS) to LOS E or F; or (2) the project would not contribute additional traffic to a signalized intersection that already operates at LOS of E or F (Caltrans 1996).

Odors

Screening of potential odor impacts is typically recommended for the following two situations:

- Projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate; and
- Residential or other sensitive receptor projects or other projects that may attract people locating near existing odor sources.

If the proposed project would locate receptors and known odor sources within one mile of each other, a full analysis of odor impacts is recommended. Known odor sources of primary concern, as identified by the SLOAPCD include landfills, transfer stations, asphalt batch plants, rendering plants, petroleum refineries, and painting/coating operations, as well as, composting, food processing, wastewater treatment, chemical manufacturing, and feedlot/dairy facilities.

Methodology

Emissions associated with the construction of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0 computer program. To be conservative, construction of the proposed warehouses were assumed to occur simultaneously. Construction phase durations were based on model defaults, with the exception of the building construction phase. Based on project-specific information received, building construction would occur over an estimated six-month period. Approximately 5,093 square feet (sf) of existing structure would be demolished. A combined total of approximately 1,510 cubic yards (cy) of fill material would be imported. Additional construction information such as off-road equipment use, worker vehicle trips, and equipment load factors were based on default parameters contained in the model. Modeling assumptions and output files are included in Appendix B of this report.

Long-term operational emissions were calculated using the CalEEMod, version 2020.4.0 based, in part, on vehicle trip-generation rates, vehicle distribution percentages, and vehicle miles traveled (VMT) derived from the traffic analysis prepared for this project (CCTC 2022). Warehouse vehicle trip distances were based on calculated travel distances of 3.7 miles for worker trips and 13 miles for truck trips for a combined average vehicle trip length of 7 miles. Based on vehicle percentages obtained from the traffic analysis, approximately 35 percent of total vehicle trips were assumed to be trucks and the remaining 65 percent were assumed to be light-duty vehicles associated with worker trips. Truck trips were assumed to consist of a mix of medium-heavy-duty trucks (MHDT) and heavy-heavy-duty trucks (HHDT). Worker trips were assumed to be light-duty vehicles defined as a mix of light-duty automobiles (LDA), light-duty trucks (LDT1 and LDT2) and medium-duty trucks (MDT) per ARB's definition. The default fleet mix identified in CalEEMod was adjusted to reflect this increase in truck trips. All other vehicle categories were based on model defaults. Water and energy usage rates were based on model defaults. Based on information provided by the project applicants, off-road equipment used within both warehouses, such as forklifts, would be electrically powered.

VOC emissions associated with onsite wine fermentation and the proposed wastewater pond were calculated using the winery calculation worksheet obtained from the Monterey Bay Air Resources District (MBARD). The worksheet utilizes ARB's wine fermentation methodology to estimate ethanol emissions associated with wine fermentation along with methodologies used by other air districts (e.g., San Joaquin

Valley Air Pollution Control District, Santa Barbara County Air Pollution Control District) for wine production. This worksheet also includes estimation of emissions associated with wastewater ponds used in the wine production process (MBARD 2018). Emissions were calculated based on an estimated annual wine production rate of 2,335,800 gallons/year and a wastewater throughput of 3,596,000 gallons/year provided by the project applicant. It is important to note that new or expanding wineries with storage capacity of 26,000 gallons per year, or more, are required to obtain a Permit to Operate from SLOAPCD. Based on the proposed processing rate, proposed wine production processes associated with the Daou warehouse would be subject to SLOAPCD permitting requirements. Emission modeling assumptions and results are included in Appendix B.

Project Impacts and Mitigation Measures

Impact AQ-A. Conflict with or obstruct implementation of the applicable air quality plan?

SLOAPCD Clean Air 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 SLOAPCD's 2001 Clean Air Plan (CAP) addresses the attainment and maintenance of state and federal ambient air quality standards. The CAP was adopted by SLOAPCD's on March 26, 2002.

The SLOAPCD's CAP outlines the District's strategies to reduce ozone-precursor pollutants (i.e., ROG and NO_X) from a wide variety of sources. The SLOAPCD's CAP includes a stationary-source control program, which includes control measures for permitted stationary sources; as well as transportation and land use management strategies to reduce motor vehicle emissions and use. The stationary-source control program is administered by SLOAPCD. Transportation and land use control measures are implemented at the local or regional level, by promoting and facilitating the use of alternative transportation options, increased pedestrian access and accessibility to community services and local destinations, reductions in vehicle miles traveled, and promotion of congestion management efforts. In addition, local jurisdictions also prepare population forecasts, which are used by SLOAPCD to forecast population-related emissions and air quality attainment, including those contained in the SLOAPCD's CAP. As a result, consistency with the SLOAPCD's CAP has been evaluated based on the proposed project's consistency with the land use management strategies and transportation control measures identified in the CAP. This analysis also provides an analysis of regional vehicle miles traveled (VMT) and consistency with regional VMT-reduction efforts. Regional VMT estimates are relied upon for regional air quality planning purposes. Regional VMT and growth projections are used to determine the strategies to be implemented sufficient to reach the emission reduction targets set by the California Air Resources Board through SB 375 which is transportation legislation that supports the broader 2030 emission reduction targets required in SB 32.

Transportation and Land Use Control Measures

The SLOAPCD's 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 control measures applicable to the proposed project are summarized in Table 9. As noted the proposed project would be considered consistent with these applicable measures.

Table 9. Project Consistency with SLOAPCD's CAP Transportation and Land Use Control Measures

Control Measures	Project Consistency
Land Use Planning Strategies	
L-3 Balancing Jobs and Housing. • Within cities and unincorporated communities, the gap between the availability of jobs and housing should be narrowed and should not be allowed to expand.	Consistent. The proposed project is located within the City's limits and would not result in the development of residential land uses. The project would, however, result in the creation of new jobs, which would help to reduce the gap between jobs and housing. Improvements in a jobs-to-housing imbalance would be anticipated to help support and promote local and regional improvements related to increased transportation mobility and potential reductions in VMT (SLOCOG 2019). The proposed project would be consistent with this measure.
Transportation Control Measures	
T-2B Regional Public Transit Improvements. • The goal of this measure is to improve transit service and facilities that will promote increased public transit use instead of a private automobile.	Consistent with Mitigation Incorporated. • Existing transit services do not have a route that passes the project location. • The Project supports the use of bicycle and pedestrian access. Mitigation Measure AQ-3 would require implementation of additional measures to reduce operational emissions, including the installation of bicycle storage in exceedance of current building code requirements.
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.	
T-8 Teleworking, Teleconferencing, and Telelearning. • The objective of this measure is to reduce the number of trips and miles traveled by employees and students by promoting teleworking, tele-conferencing and telelearning.	• Mitigation Measure AQ-3 includes measures to promote reductions in worker VMT.

Projected Population, Employment & VMT Growth

The project would not result in an increase in residents. The project would, however, result in an increase in employment. According to the Regional Housing Needs Assessment, the City of Paso Robles has about 14 percent more housing units than jobs, indicative of a "jobs-poor" community. The City's jobs to housing ratio is estimated to increase from a year 2015 ratio of 0.87 jobs/housing to a ratio of 0.89 jobs/housing by year 2035. The City of Paso Robles is projected to reduce the imbalance between jobs and housing units. The proposed project would result in increased employment and would not result in an increase in housing. As a result, the proposed project would be anticipated to improve the jobs-housing imbalance. In addition, based on the traffic analysis prepared for this project, the project is forecast to have a work VMT per employee that is below the threshold of 85% of the regional average work VMT per employee (i.e., 11.56 work VMT/employee) (CCTC 2022). Accordingly, the increase would not be considered to conflict with regional VMT-reduction efforts and associated reductions in mobile-source emissions accounted for in the SLOAPCD's Clean Air Plan. As a result, this impact would be considered less than significant.

Particulate Matter Report – Implementation of SB 656 Requirements

In July 2005, SLOAPCD adopted the *Particulate Matter Report* (PM Report). The PM Report 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 in Impact AQ-B, uncontrolled fugitive dust generated during construction may result in localized pollutant concentrations that may result in increased nuisance concerns to nearby land uses. Therefore, construction-generated emissions of PM would be considered to have a *potentially significant* impact with regard to air quality planning efforts.

<u>Mitigation Measures</u>

Implement Mitigation Measures AQ-1 through AQ-2 (refer to Impact AQ-B).

Significance After Mitigation

Implementation of Mitigation Measures AQ-1 and AQ-2 would include measures to reduce construction-generated emissions. Additional mitigation measures have been included that would further reduce project-related operational emissions. Together these measures would help to reduce PM emissions and provide consistency with SLOAPCD's airborne PM-reduction efforts as well as measures identified in the SLOAPCD's Clean Air Plan. With mitigation, this impact would be considered *less than significant.*

Impact AQ-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?

Short-term Construction Emissions

Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. Construction of the proposed project would result in the temporary generation of emissions associated with demolition, site grading and excavation, paving, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., ROG and NO_X) and emissions of PM. Emissions of ozone-precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities and can result in increased concentrations of PM that can adversely affect nearby sensitive land uses.

Estimated maximum daily and quarterly emissions associated with construction of the proposed project are presented in Table 10 and Table 11, respectively. Construction generated emissions were compared to SLOAPCD's recommended significance thresholds (Daily, Quarterly Tier 1, and Quarterly Tier 2). As depicted in Table 10, maximum daily emissions associated with project construction would total approximately 122.3 lbs/day of ROG+NO_X and 1.4 lbs/day of exhaust PM_{10}. As depicted in Table 11, maximum quarterly construction-generated emissions would total approximately 0.89 tons/quarter of ROG+NO_X, 0.1 tons/quarter of fugitive PM_{10}, and 0.02 tons/quarter of exhaust PM_{10}.

Table 10. Daily Construction Emissions without Mitigation

Construction Activity	Emissions (lbs/day)[1]					
	ROG	NO_X	ROG+NO_X	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}
Demolition	2.3	21.7	24.0	0.4	1.0	1.4
Site Preparation	2.7	27.6	30.3	19.8	1.3	21.1
Grading	3.4	35.6	39.0	9.5	1.4	11.0
Building Construction	2.3	17.8	20.1	2.2	0.7	2.9
Paving	1.3	10.2	11.5	0.2	0.5	0.7
Architectural Coating [3]	89.3	1.4	90.7	0.4	0.1	0.4
Maximum Daily Emissions[2]:	92.9	35.6	122.3	19.8	1.4	21.1
SLOAPCD Significance Thresholds:	--	--	137	--	7	--
Exceeds Thresholds?	--	--	No	--	No	--

1. *Emissions were quantified using the CalEEMod, v2020.4.0, computer program.*
2. *Maximum daily emissions assumes some activities (e.g., building construction, paving, architectural coating application) could potentially occur simultaneously on any given day.*
3. *Includes the use of low-VOC content paint (50 g/L, or less)*

lbs/day = pounds per day; ROG =Reactive Organic Gases; NO_X = oxides of nitrogen; CO = carbon monoxide;
PM_{10} = respirable particulate matter (10 micrometers or less)
Refer to Appendix B for emissions modeling assumptions and results.

Table 11. Quarterly Construction Emissions Without Mitigation

Quarter	Maximum Quarterly Emissions (tons)[1]			
	$ROG+NO_X$	PM_{10}		
		Fugitive	Exhaust	Total
Year 2023 - Quarter 1	0.33	0.1	0.02	0.1
Year 2023 - Quarter 2	0.89	0.1	0.02	0.1
Year 2023 - Quarter 3	0.65	0.1	0.02	0.1
Year 2023 – Quarter 4	0.31	0.1	0.02	0.1
Maximum Quarterly Emissions:	0.89	0.1	0.02	0.1
SLOAPCD Quarterly Tier 1/Tier 2 Thresholds (tons/quarter)	2.5/6.3	2.5/None	0.13/0.32	None
Exceeds SLOAPCD Tier 1/Tier 2 Thresholds?	No/No	No/--	No /No	--

To be conservative, total exhaust PM_{10} emissions were compared to SLOAPCD's DPM threshold. Totals may not sum due to rounding. Refer to Appendix B for modeling assumptions and results. NA=Not Applicable

1. *Maximum quarterly emissions include on-site and off-site emissions.*

Maximum daily and quarterly construction emissions would not exceed SLOAPCD's daily or quarterly significance thresholds. Emissions would be largely a result of mobile-source emissions associated with construction vehicle and equipment operations anticipated to occur during the grading. However, if uncontrolled, fugitive dust generated during construction may result in localized pollutant concentrations that could exceed ambient air quality standards and result in increased nuisance concerns to nearby land uses. For this reason, construction-generated emissions would be considered to have a *potentially significant impact*.

Mitigation Measures

AQ-1: The following mitigation measures shall be implemented to reduce construction generated fugitive dust. These measures shall be shown on grading and building plans.

a. Reduce the amount of disturbed area where possible.
b. Use water trucks, SLOAPCD-approved dust suppressants (see Section 4.3 in the CEQA Air Quality Handbook), or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the 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 mph. Reclaimed (non-potable) water should be used whenever possible. Please note that since water use is a concern due to drought conditions, the contractor or builder shall consider the use of an APCD-approved dust suppressant where possible to reduce the amount of water used for dust control. For a list of suppressants, see Section 4.3 of the CEQA Air Quality Handbook.
c. All dirt stockpile areas should be sprayed daily or covered with tarps or other dust barriers as needed.
d. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
e. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between the top of load and top of trailer) in accordance with CVC Section 23114.
f. "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 CVC Section 23113 and California Water Code 13304. To prevent 'track out', designate access points and require all employees, subcontractors, and others to use them. Install and operate a 'track-out prevention device' 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.

g. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities.
h. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established.
i. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD.
j. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where possible. Roads shall be pre-wetted prior to sweeping when possible.
l. The burning of vegetative material shall be prohibited. Effective February 25, 2000, the APCD prohibited developmental burning of vegetative material within San Luis Obispo County. If you have any questions regarding these requirements, contact the SLOAPCD Engineering & Compliance Division at (805) 781-5912.
m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent the transport of dust off-site. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition.

AQ-2: The following measures shall be implemented to reduce construction emissions from on and off-road construction equipment (NOx, ROG, and DPM) and area sources. These measures shall be shown on grading and building plans:

a. Maintain all construction equipment in proper tune according to manufacturer's specifications.
b. Heavy-duty (50 horsepower or greater) diesel-fueled construction equipment shall meet, at a minimum, ARB's Tier 3 certified engines, or cleaner, off-road heavy-duty diesel engines; be fitted with diesel exhaust particulate filters in accordance with manufacturer recommendations; and, comply with the State Off-Road Regulation. Heavy-duty equipment with Tier 4 engines shall be used to the extent locally available. Where Tier 3, or cleaner, equipment is not available, incorporate diesel emission control strategies/retrofits, such that emission reductions achieved equal or exceed that of a Tier 3 engine. Installing California Verified Diesel Emission Control Strategies. Verified diesel emissions control strategies can be found at: arb.ca.gov/diesel/verdev/vt/cvt.htm.
c. When applicable, portable equipment, 50 horsepower (hp) or greater, used during construction activities shall be registered with the California statewide portable equipment registration program (issued by the California Air Resources Board) or be permitted by the APCD. Such equipment may include power screens, conveyors, internal combustion engines, crushers, portable generators, tub grinders, trammel screens, and portable plants (e.g., aggregate plant, asphalt plant, concrete plant). For more information, contact the SLOAPCD Engineering & Compliance Division at (805) 781-5912.
d. Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation.
e. All on and off-road diesel equipment shall not idle when not in use. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5-minute idling limit.
f. Construction equipment staging areas shall be located at the furthest distance possible from nearby sensitive land uses.
g. To the extent locally available, electrified or alternatively powered construction equipment shall be used.
h. Construction of the proposed project shall use low-VOC content paints (e.g., 50 grams VOC per liter, or less).
i. To the extent locally available, use prefinished building materials or materials that do not require the application of architectural coatings.

j. Meet or exceed Cal Green Tier 2 standards for reducing cement use in concrete mix as allowed by local ordinance and conditions.

Significance After Mitigation

Implementation of Mitigation Measures AQ-1 and AQ-2 include SLOAPCD-recommended standard and best available control measures to reduce construction-generated emissions of fugitive dust, mobile-source emissions associated with construction vehicles and equipment, and evaporative emissions from architectural coasting (e.g. low VOC-emission paint). Mitigated daily and quarterly emissions are summarized in Table 12 and Table 13, respectively. With mitigation, this impact would be considered *less than significant.*

Table 12. Construction Emissions with Mitigation

Construction Activity	Emissions (lbs/day)[1]					
	ROG	NO_X	ROG+NO_X	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}
Demolition	1.0	18.5	19.5	0.3	0.9	1.2
Site Preparation	1.0	19.1	20.1	7.9	1.0	8.9
Grading	1.6	31.1	32.7	3.9	1.3	5.2
Building Construction	1.4	17.7	19.1	2.2	0.9	3.1
Paving	0.8	11.3	12.1	0.2	0.6	0.8
Architectural Coating [4]	89.2	1.5	90.6	0.4	0.1	0.5
Maximum Daily Emissions with Tier 3 Off-Road Equipment & Fugitive Dust Control Measures[2]:	91.4	31.1	121.8	7.9	1.0	8.9
SLOAPCD Significance Thresholds:	--	--	137	--	7	--
Exceeds Thresholds?	--	--	No	--	No	--

1. Emissions were quantified using the CalEEMod, v2020.4.0, computer program.
2. Maximum daily emissions assumes some activities could potentially occur simultaneously on any given day.
3. Includes use of off-road equipment meeting Tier 3 emissions standards and fugitive dust control measures.
4. Includes the use of low-VOC content paint (50 g/L or less)
lbs/day = pounds per day; ROG = Reactive Organic Gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter (10 micrometers or less); DPFs = Diesel particulate filters
Refer to Appendix B for emissions modeling assumptions and results.

Table 13. Quarterly Construction Emissions With Mitigation[1]

Quarter	Maximum Quarterly Emissions (tons)[2]			
	ROG+NO_X	PM_{10}		
		Fugitive	Exhaust	Total
Year 2023 - Quarter 1	0.25	0.6	0.03	0.6
Year 2023 - Quarter 2	0.77	0.6	0.03	0.6
Year 2023 - Quarter 3	0.62	0.6	0.03	0.6
Year 2023 – Quarter 4	0.30	0.6	0.03	0.6
Maximum Quarterly Emissions:	0.77	0.6	0.03	0.6
SLOAPCD Quarterly Tier 1/Tier 2 Thresholds (tons/quarter)	2.5/6.3	2.5/None	0.13/0.32	None

To be conservative, total exhaust PM_{10} emissions were compared to SLOAPCD's DPM threshold. Totals may not sum due to rounding. Refer to Appendix B for modeling assumptions and results. NA=Not Applicable
1. Includes the use of off-road equipment meeting Tier 3 emission standards and fugitive dust control measures.
2. Maximum quarterly emissions include on-site and off-site emissions.
lbs/day = pounds per day; ROG = Reactive Organic Gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter (10 micrometers or less); DPF = Diesel Particulate Filter

Long-term Operational Emissions

Long-term operational emissions associated with the proposed project would be predominantly associated with mobile sources. To a lesser extent, emissions associated with area sources, such as landscape maintenance activities, as well as use of electricity and natural gas would also contribute to increased operational emissions.

Unmitigated operational emissions associated with the proposed project are summarized in Table 14. As depicted, daily operational emission from non-permitted sources (excluding wine production emissions) would total approximately 25.4 lbs/day of ROG+NO_x, 16.1 lbs/day of CO, 3.5 lbs/day of fugitive PM_{10}, and 0.1 lbs/day of exhaust PM_{10}.

Table 14. Operational Emissions Without Mitigation

Operational Period/Source	Emissions[1]						
	ROG/ VOC	NO_X	ROG/VOC +NO_X	CO	PM_{10}		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	10.5	<0.1	10.5	0.1	0	<0.1	<0.1
Energy Use	<0.1	0.4	0.4	0.3	0	<0.1	<0.1
Mobile	1.9	12.5	14.4	15.7	3.5	0.1	3.6
Wine Fermentation[2]	39.4	0	0	0	0	0	0
Wastewater Pond[2]	2.3	0	0	0	0	0	0
Total (Excluding Permitted Sources):	12.5	12.9	25.4	16.1	3.5	0.1	3.6
Total (Including Permitted Sources):	54.2	12.9	67.1	16.1	3.5	0.1	3.6
SLOAPCD Significance Thresholds	--	--	25	550	25	1.25	--
Exceeds SLOAPCD Thresholds?	--	--	Yes	No	No	No	--
Annual Emissions (tons/year)							
Total (Excluding Permitted Sources):	2.2	1.9	4.1	2.4	0.5	0.0	0.5
Total (Including Permitted Sources):	9.9	1.9	11.8	2.4	0.5	0.0	0.5
SLOAPCD Significance Thresholds	--	--	25	--	25	--	--
Exceeds SLOAPCD Thresholds?	--	--	No	--	No	--	--

1. *Emissions quantified using CalEEMod, v2020.4.0. Totals may not sum due to rounding. Refer to Appendix B for modeling output files and assumptions.*
2. *Calculated using MBARD's Winery Emissions Calculator based on an estimated annual production rate of 2,335,800 gallons and an estimated wastewater throughput of 3,596,000 gallons/year, based on data provided by the project applicant. It is important to note that new or expanding wineries with storage capacity of 26,000 gallons per year, or more, would be required to obtain a Permit to Operate from SLOAPCD for VOC-related emissions associated with wine production/storage and associated wastewater ponds.*

Permitted Emission Sources

The Daou warehouse would also result in additional emissions of VOCs (ethanol) associated with wine production, including fermentation during the production process and evaporative emissions associated with the onsite wastewater pond. Emissions from these sources would be subject to SLOAPCD permitting requirements. Assuming an estimated annual production rate of 2,335,800 gallons, VOC emissions from wine fermentation would total approximately 39.4 lbs/day and 7.2 tons/year. Evaporative VOCs from the onsite wastewater storage pond would total approximately 2.3 lbs/day and 0.4 tons/year.

As noted in Table 14, maximum daily emissions, with and without the inclusion of onsite permitted sources, would exceed SLOAPCD's corresponding daily significance threshold of 25 lbs/day. As a result, this impact would be considered *potentially significant*.

Health Effects of Project-Generated Regional Emissions

Project-generated emissions are evaluated based on the pollutants potential to affect local or regional air quality. As noted earlier in this report, regional pollutants of concern typically include ozone and particulate matter. Whereas, for development project, localized pollutants of primary concern often include carbon monoxide, toxic air contaminants, as well as, airborne particulates. The health effects of these pollutants are discussed earlier in this report and summarized in Table 1.

For localized pollutants, health impacts can be evaluated using screening criteria or through dispersion modeling. However, for regional pollutants such as ozone, the change in health effects associated with an individual project is a secondary pollutant created by NO_X and ROG (also commonly referred to as VOCs). As previously discussed earlier in this report, ozone is not a directly emitted pollutant. NO_X and ROG are not criteria air pollutants but, when in the presence of sunlight, they can form ozone and also contribute to the formation of secondary $PM_{2.5}$. Because ozone is not a directly emitted pollutant and is created under specific meteorological conditions over a wide transport area, ozone concentrations are typically evaluated at a regional level using complex photochemical models. These models are capable of predicting concentrations that take into account variations amounts of precursor emissions (e.g., ROG, NO_X), temperature, inversions, sunlight, hourly variations, ambient conditions, and wind flow over long distances (e.g., miles). At the project level of analysis, evaluation of ozone concentrations is "not practicable and not likely [to] yield valid information" (SJVAPCD 2015).

Of the criteria pollutants identified, ozone and $PM_{2.5}$ have the most critical health effects. As a result, concentrations of these pollutants are typically relied upon for determining public health effects. In comparison to modeled regional emissions, the emissions associated with most individual projects would be negligible and too small to produce a measurable change in regional ozone or $PM_{2.5}$ concentrations or associated public health effects. In addition, the Sacramento Metropolitan Air Quality Management District (SMAQMD) has recently conducted regional emissions modeling analyses using a chemical transport model to evaluate changes in emissions and associated health effects associated with an individual project. The modeling was based on very conservative assumptions representative of the largest projects, which assumed up to approximately eight times the threshold of significance (up to 656 lbs/day) of NO_X, ROG and PM. This level of emissions would be more representative of large community plan projects. Based on the modeling conducted by SMAQMD, even these large projects would have "low overall health effects" (SMAQMD 2020).

It is important to reiterate that the health effects of criteria air pollutants are taken into consideration when the U.S, EPA establishes the NAAQS for individual pollutants. The health effects of a particular pollutant are analyzed on a regional basis based on the areas attainment of the NAAQS. As previously discussed in this report, the AQI is one common method of evaluating public health impacts for criteria air pollutants of primary concern. Local air districts establish significance thresholds that are based on evaluation of an individual project's contribution to reginal air quality conditions and associated health effects. Based on the above discussion and given that project-generated criteria pollutants would not exceed applicable significance thresholds, project-generated emissions of regional criteria pollutants (e.g., ROG, NO_X, PM) would have a minimal effect on public health. In addition, refer to Impact AQ-C for a discussion of localized air quality impacts.

<u>Mitigation Measures</u>

AQ-3: The following mitigation measures shall be implemented to reduce the operational emissions generated by the project:

a. For the proposed Stravinski refrigerated warehouse, the use of diesel-fueled transport refrigeration units (TRUs) or auxiliary power units shall not be used. All truck TRUs to be used by the building tenant(s) shall be plug-in capable.
b. Electrical main service panel shall for both warehouses shall be designed to accommodate the potential future installation of electric charging stations for haul trucks.
c. Heavy-duty trucks to be owned by the project applicants shall be model year 2014, or later. To the extent available, zero-emission vehicles should be used.
d. Warehouse service equipment (e.g., yard hostlers, yard equipment, forklifts, pallet jacks) shall be zero-emission.
e. In accordance with ARB's *Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*, Heavy-duty diesel-fueled truck idle time shall be limited to 5-minutes/truck when not in use. Signage shall be posted at loading dock areas to advise drivers of this requirement.

f. Provide a pedestrian-friendly and interconnected streetscape with good access to/from the development for pedestrians, bicyclists, and transit users to make alternative transportation more convenient, comfortable, and safe.
g. Implement programs to reduce employee vehicle miles traveled (e.g. incentives, SLO Regional Rideshare trip reduction program, vanpools, remote working, alternative schedules.)
h. Provide employee lockers and showers to promote bicycle and pedestrian use. One shower and 5 lockers for every 25 new employees is recommended.
i. Exceed Cal Green standards by 25% for providing on-site bicycle parking: both short-term racks and long-term lockers, or a locked room with standard racks and access limited to bicyclists only.
j. Reduce fugitive dust from roads and parking areas with the use of paving or other materials.
k. Exceed Cal Green Tier 2 standards for building energy efficiency.
l. Exceed Cal Green Tier 2 standards for utilizing recycled content materials.
m. Exceed Cal Green Tier 2 standards for the use of greywater, rainwater, or recycled water where applicable/available.
n. Exceed Cal Green Tier 2 standards for using shading, trees, plants, cool roofs, etc. to reduce "heat island" effect.
o. Exceed Cal Green building standards at the time of development for water conservation (e.g. use of low flow water fixtures, water efficient irrigation systems, and draught tolerant landscaping.)
p. All built-in appliances shall be Energy Star certified or equivalent.
q. Design roof trusses to handle dead weight loads of standard solar-heated water and photovoltaic panels.
r. To the extent available, use paints and cleaning products that are low-VOC content (e.g., 50 grams/liter VOC content, or less).
s. Utilize on-site renewable energy system (e.g. solar, wind, geothermal, biomass and/or bio-gas) to offset at least 10% of the project's electricity use.

AQ-4: Prior to Project construction, the SLOAPCD shall be consulted to identify applicable permitting limitations and requirements for wine production and the proposed wastewater pond. A Permit to Operate (PTO) shall be obtained from the SLOAPCD prior to installation of permitted equipment or processes.

Significance After Mitigation

Implementation of Mitigation Measures AQ-3 includes SLOAPCD-recommended measures to reduce operational-generated emissions. Additional mitigation measures recommended by the ARB for the control of emissions associated with warehouse operations have also been included. Mitigated operational emissions are summarized in Table 15. With mitigation, operational emissions of ROG+NO_X would not exceed SLOAPCD significance thresholds. Mitigation Measure AQ-4 would also require that a PTO be obtained from SLOAPCD for proposed permitted sources, including wine production. Permitted sources exceed the SLOAPCD's permitting limitation would be subject to Best Available Control Technology requirements. Depending on the amount of emissions generated, wine production facilities may also be subject to offset requirements. Compliance with SLOAPCD permit requirements would ensure that emissions from permitted sources would not exceed applicable thresholds. With mitigation, this impact would be considered *less than significant.*

Table 15. Operational Emissions With Mitigation

Operational Period/Source	Emissions[1]						
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	8.0	<0.1	8.0	0.1	0	<0.1	<0.1
Energy Use	<0.1	0.4	0.4	0.3	0	<0.1	<0.1
Mobile	1.9	12.5	14.4	15.7	3.5	0.1	3.6
Total (Excluding Permitted Sources):	12.5	12.9	22.8	16.1	3.5	0.1	3.6
SLOAPCD Significance Thresholds	--	--	25	550	25	1.25	--
Exceeds SLOAPCD Thresholds?	--	--	No	No	No	No	--
Annual Emissions (tons/year)							
Total (Excluding Permitted Sources):	2.2	1.9	4.1	2.4	0.5	0.0	0.5
SLOAPCD Significance Thresholds	--	--	25	--	25	--	--
Exceeds SLOAPCD Thresholds?	--	--	No	--	No	--	--

1. *Emissions quantified using CalEEMod, v2020.4.0. Totals may not sum due to rounding. Includes use of low-VOC content paints, use of low-flow water fixtures, installation of drought-tolerant landscaping and water-efficient irrigation systems. Additional mitigation measures, such as promoting the use of alternative means of transportation for workers, would result in additional reductions. Does not include emissions from permitted sources (e.g., wine production). Refer to Appendix B for modeling output files and assumptions.*

Impact AQ-C. Expose sensitive receptors to substantial pollutant concentrations?

The proposed project would result in localized increases of pollutant concentrations during project construction and long-term operation. The proposed project's potential contribution to localized air pollutants is discussed, as follows:

Short-Term Construction Activities

Naturally-Occurring Asbestos

Naturally-occurring asbestos (NOA) has been identified as a toxic air contaminant by the ARB. In accordance with ARB Air Toxics Control Measure (ATCM), prior to any grading activities, a geologic evaluation should be conducted to determine if NOA is present within the area that will be disturbed. If NOA is not present, an exemption request form, along with a copy of the geologic report, must be filed with the SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM.

Based on a review of the SLOAPCD's map depicting potential areas of NOA, the project site is not located in or near an area that has been identified as having a potential for NOA. As a result, this impact would be considered *less than significant*.

Asbestos-Containing Materials

Demolition activities can have potential negative air quality impacts, including issues surrounding the proper handling, demolition, and disposal of asbestos-containing material (ACM). ACM could be encountered during the demolition of existing buildings, particularly older structures constructed prior to 1970. Asbestos can also be found in various building products, including (but not limited to) utility pipes/pipelines (transit pipes or insulation on pipes). If a project will involve the disturbance or potential disturbance of ACM, various regulatory requirements may apply, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M-Asbestos NESHAP). These requirements include but are not limited to: 1) notification, within at least 10 business days of activities commencing, to the APCD, 2) an asbestos survey conducted by a Certified Asbestos Consultant, and, 3) applicable removal and disposal requirements of identified ACM.

The proposed project would include the demolition of approximately 5,093 sf of existing on-site structures. The demolition of existing structures may result in disturbance of ACM. This impact is considered *potentially significant*.

Lead-Coated Materials

Demolition of structures coated with lead-based paint can have potential negative air quality impacts and may adversely affect the health of nearby individuals. Improper demolition can result in the release of lead-containing particles from the site. Sandblasting or removal of paint by heating with a heat gun can result in significant emissions of lead. In such instances, proper abatement of lead before demolition of these structures must be performed in order to prevent the release of lead from the site. Depending on the removal method, a SLOAPCD permit may be required. The demolition of existing structures may result in the disturbance of lead-containing materials. This impact is considered *potentially significant*.

Localized Construction PM Concentrations

Fugitive dust emissions would be primarily associated with building demolition, site preparation, grading, and vehicle travel on unpaved and paved surfaces. On-site off-road equipment and trucks would also result in short-term emissions of diesel-exhaust PM, which could contribute to elevated localized concentration at nearby receptors. Uncontrolled emissions of fugitive dust may also contribute to potential increases in nuisance impacts to nearby receptors. Short-term exposure to airborne particulates can result in irritation of eyes and the respiratory system and may affect sensitive individuals, including those suffering from asthma and other medical conditions. For these reasons, localized uncontrolled concentrations of construction-generated PM would be considered to have a *potentially significant* impact.

Long-term Operations

Localized CO Concentrations

Localized concentrations of CO are of primary concern in areas located near congested roadway intersections. Of particular concern are signalized intersections that are projected to operate at unacceptable levels of service (LOS) E or F (Caltrans 1996). With implementation of the recommended traffic mitigation measures, signalized intersections primarily affected by the proposed project would operate as low as LOS D, or better (CCTC 2022). As a result, implementation of the proposed project would not be anticipated to result in or contribute to localized CO concentrations that would exceed applicable ambient air quality standards. This impact is considered *less than significant*.

Localized Operational DPM Concentrations

Toxic air contaminants associated with long-term operation of the proposed project would consist primarily of DPM associated with the operation of diesel trucks at the proposed warehouses. Primary sources of truck related DPM emissions include the operation of truck refrigeration units (TRUs). To a somewhat lesser extent, onsite diesel idling and truck travel also contribute to overall onsite DPM emissions. Although TRUs have relatively small diesel-powered engines, their emissions can pose a significant health risk to nearby individuals. Other sources of on-site DPM include truck travel to and from the warehouse.

In 2005, ARB release an *Air Quality and Land Use Handbook* that recommended not siting sensitive land uses within 1,000 feet of distribution centers/warehouses. This recommendation was based on year 2000 truck emission rates and included the on-site operation of TRUs. By year 2020, taking into account projected reductions in truck emission rates, this recommended distance was reduced to approximately 225 feet (ARB 2005). Since the release of this document, the ARB has adopted two airborne toxic control measures to reduce DPM emissions associated with truck operations at distribution centers/warehouses. The first measure prohibits idling of a vehicle more than five minutes at any one location. The second measure requires that TRUs operating in California become cleaner over time. The elimination of unnecessary idling and implementation of TRU emission standards significantly reduces localized impacts caused by DPM, as well as other toxic air contaminants contained in diesel vehicle exhaust. It is also important to note that implementation of Mitigation Measure AQ-3 and AQ-4 includes measures that would significantly reduce DPM emissions associated with project operations, including restriction on idling, and electrification of the loading dock to power TRUs.

No sensitive land uses have been identified within 225 feet of the project site. As a result, potential exposure to DPM and associated health risks would be considered *less than significant*.

Mitigation Measures

In addition to Mitigation Measures AQ-1 through AQ-4, the following measures shall be implemented:

AQ-5: The following mitigation measures shall be implemented to reduce the disturbance of asbestos and lead. Strategies include but are not limited to the following:

a. Demolition of on-site structures shall comply with the National Emission Standards for Hazardous Air Emissions requirements (NESHAP, 40 CFR, Part 61, Subpart M) for the demolition of existing structures. The SLOAPCD is delegated authority by the Environmental Protection Agency (EPA) to implement the Federal Asbestos NESHAP. Prior to demolition of on-site structures, the SLOAPCD shall be notified, per NESHAP requirements. Additional information may be obtained at website URL: http://slocleanair.org/ business/asbestos.php.

b. If during the demolition of existing structures, paint is separated from the construction materials (e.g. chemically or physically), the paint waste will be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed of in accordance with local, state and federal regulations. According to the Department of Toxic Substances Control (DTSC), if the paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as construction debris (a non-hazardous waste). The landfill operator will be contacted prior to disposal of building material debris to determine any specific requirements the landfill may have regarding the disposal of lead-based paint materials. The disposal of demolition debris shall comply with any such requirements. Contact the SLOAPCD Enforcement Division at (805) 781-5912 for more information. Approval of a lead work plan and permit may be required. Lead work plans, if required, will need to be submitted to SLOAPCD ten days prior to the start of demolition.

c. Prior to any grading activities, a geologic evaluation shall be conducted to determine if naturally occurring asbestos (NOA) is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM. These requirements may include but are not limited to:

   1) Development of an Asbestos Dust Mitigation Plan which must be approved by the SLOAPCD before operations begin, and,
   2) Development and approval of an Asbestos Health and Safety Program (required for some projects).

Significance After Mitigation

With the implementation of Mitigation Measure AQ-1 through AQ-2 construction-related emissions, including fugitive dust, would be substantially reduced. In addition, Mitigation Measure AQ-4 would require compliance with SLOAPCD permitting requirements for stationary sources. In accordance with SLOAPCD permitting requirements, a permit to operate would not be issued unless associated health risks have been reduced to within acceptable levels. Compliance with SLOAPCD permitting requirements would ensure that health risks associated with on-site permitted sources would be reduced to below SLOAPCD-recommended significance thresholds. Mitigation Measure AQ-5 would ensure compliance with applicable regulatory requirements pertaining to exposure to asbestos and lead-based paints. (Refer to Appendix A for additional information regarding Asbestos NESHAP requirements.) With mitigation, short-term exposure to localized pollutants would be considered to have a *less-than-significant impact*.

Impact AQ-D. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

Short-term construction activities may involve processes that could result in short-term and temporary generation of odors, including the application of pavement coatings and architectural coatings used during project construction. However, construction-generated emissions would be short-term, would occur intermittently throughout the workday and would dissipate rapidly with increasing distance from the source. As a result, short-term construction activities would not expose a substantial number of people to frequent odorous emissions.

Odorous emissions associated with long-term operations would be primarily associated with on-site wine production. Wine production facilities can result in nuisance odors during various steps of the production process. Odor generation potential is primarily associated with anaerobic processes that mix with ambient air which can result in offsite nuisance odor transport. However, compliance with SLOAPCD permitting requirements and implementation of proven methods for handling wastewater discharge and grape skin waste would minimize the occurrence of anaerobic processes that mix with ambient air which can result in offsite nuisance odor transport. If uncontrolled, odors associated with onsite wine production could result in nuisance impacts to nearby sensitive land uses. As a result, this impact is considered *potentially significant*.

Mitigation Measures

Implement Mitigation Measure AQ-4.

Significance After Mitigation

Mitigation Measure AQ-4 would require compliance with SLOAPCD permitting requirements for stationary sources. In accordance with SLOAPCD permitting requirements, would substantially reduce odors associated with on-site wine processing processes. With mitigation, this impact would be considered *less than significant*.

GREENHOUSE GASES AND CLIMATE CHANGE

Existing Setting

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the greenhouse gases (GHGs) that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Primary GHGs attributed to global climate change, are discussed, as follows:

- Carbon Dioxide. Carbon dioxide (CO_2) is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere (U.S. EPA 2018).

- Methane. Methane (CH_4) is a colorless, odorless gas that is not flammable under most circumstances. CH_4 is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (enteric fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of methane to the atmosphere. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. Methane's atmospheric lifetime is about 12 years (U.S. EPA 2018).

- Nitrous Oxide. Nitrous oxide (N_2O) is a clear, colorless gas with a slightly sweet odor. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 114 years (U.S. EPA 2018).

- Hydrofluorocarbons. Hydrofluorocarbons (HFCs) are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 270 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years) (U.S. EPA 2018).

- Perfluorocarbons. Perfluorocarbons (PFCs) are colorless, highly dense, chemically inert, and non-toxic. There are seven PFC gases: perfluoromethane (CF_4), perfluoroethane (C_2F_6), perfluoropropane (C_3F_8), perfluorobutane (C_4F_{10}), perfluorocyclobutane (C_4F_8), perfluoropentane (C_5F_{12}), and perfluorohexane (C_6F1_4). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past; however, the largest current source is aluminum production, which releases CF_4 and C_2F_6 as byproducts. The estimated atmospheric lifetimes for PFCs ranges from 2,600 to 50,000 years (U.S. EPA 2018).

- Nitrogen Trifluoride. Nitrogen trifluoride (NF_3) is an inorganic, colorless, odorless, toxic, nonflammable gas used as an etchant in microelectronics. Nitrogen trifluoride is predominantly employed in the cleaning of the plasma-enhanced chemical vapor deposition chambers in the production of liquid crystal displays and silicon-based thin-film solar cells. It has a global warming potential of 16,100 carbon dioxide equivalents (CO_2e). While NF_3 may have a lower global warming potential than other chemical etchants, it is still a potent GHG. In 2009, NF_3 was listed by California as a high global warming potential GHG to be listed and regulated under Assembly Bill (AB) 32 (Section 38505 Health and Safety Code).
- Sulfur Hexafluoride. Sulfur hexafluoride (SF_6) is an inorganic compound that is colorless, odorless, non-toxic, and generally non-flammable. SF_6 is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF_6 produced worldwide. Leaks of SF_6 occur from aging equipment and during equipment maintenance and servicing. SF_6 has an atmospheric life of 3,200 years (U.S. EPA 2018).
- Black Carbon. Black carbon is the strongest light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Black carbon contributes to climate change both directly by absorbing sunlight and indirectly by depositing on snow and by interacting with clouds and affecting cloud formation. Black carbon is considered a short-lived species, which can vary spatially and, consequently, it is very difficult to quantify associated global-warming potentials. The main sources of black carbon in California are wildfires, off-road vehicles (locomotives, marine vessels, tractors, excavators, dozers, etc.), on-road vehicles (cars, trucks, and buses), fireplaces, agricultural waste burning, and prescribed burning (planned burns of forest or wildlands) (CCAC 2018, U.S. EPA 2018).

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Often, estimates of GHG emissions are presented in CO_2e, which weight each gas by its global warming potential (GWP). Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. Table 16 provides a summary of the GWP for GHG emissions of typical concern with regard to community development projects, based on a 100-year time horizon. As indicated, Methane traps over 25 times more heat per molecule than CO_2, and N_2O absorbs roughly 298 times more heat per molecule than CO_2. Additional GHG with high GWP includes Nitrogen trifluoride, Sulfur hexafluoride, Perfluorocarbons, and black carbon.

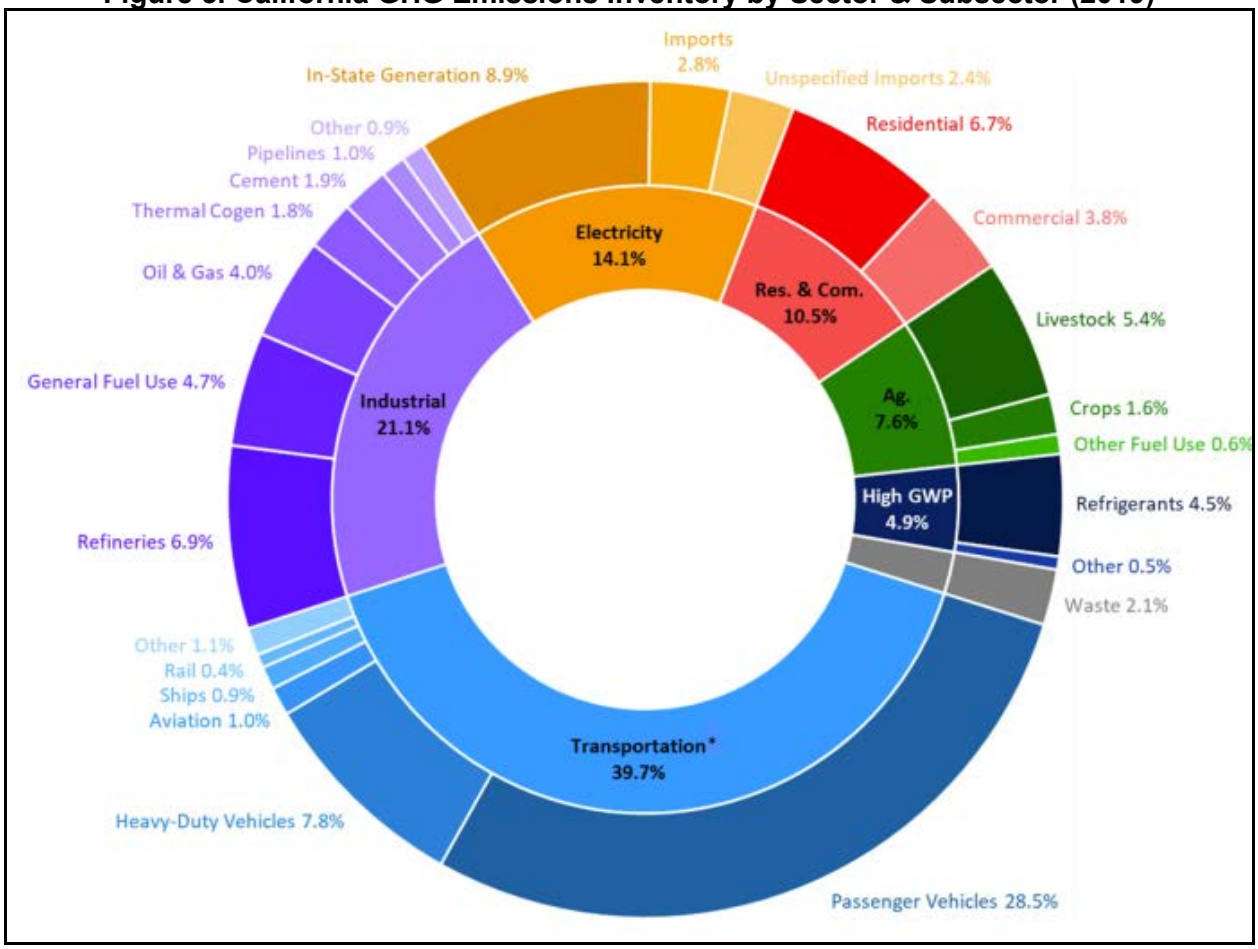
Table 16. Global Warming Potential for Greenhouse Gases

Greenhouse Gas	Global Warming Potential (100-year)
Carbon Dioxide (CO_2)	1
Methane (CH_4)	25
Nitrous Dioxide (N_2O)	298
Based on IPCC GWP values for 100-year time horizon. *Source: IPCC 2007*	

Statewide GHG Emissions

In 2019, GHG emissions within California totaled 418.1 million metric tons (MMT) of CO_2e. GHG emissions, by sector, are summarized in Figure 3. Within California, the transportation sector is the largest contributor, accounting for approximately 39.7 percent of the total state-wide GHG emissions. Emissions associated with industrial uses are the second-largest contributor, totaling roughly 21.1 percent. Electricity generation totaled roughly 14.1 percent. Other major emission sources included commercial uses, residential uses, agriculture, refrigerants, and waste (ARB 2022).

Figure 3. California GHG Emissions Inventory by Sector & Subsector (2019)



Source: ARB 2022

City of Paso Robles GHG Emissions Inventories

The City has completed a community-wide inventory of GHG emissions for years 2005 and 2012, which are summarized in Table 17. As shown, a majority of the City's emissions are associated with mobile sources. Remaining GHG emissions are predominantly associated with energy use and solid waste generation. In comparison to year 2005 community-wide emissions, year 2016 emissions decreased by a total of approximately 12 percent (City of Paso Robles 2013).

Table 17. City of Paso Robles GHG Emissions Inventories

Sector	Year 2005 ($MTCO_2e$)	Year 2020 ($MTCO_2e$)	Percent Change from 2005 to 2020
Residential	40,188	46,828	17%
Commercial/Industrial	33,536	30,551	-9%
Transportation	67,801	92,913	37%
Off-Road	13,205	15,878	20%
Solid Waste	13,343	16,653	17%
Wastewater	70	82	17%
Aircraft	1,324	1,543	17%
Total	169,557	203,448	20%

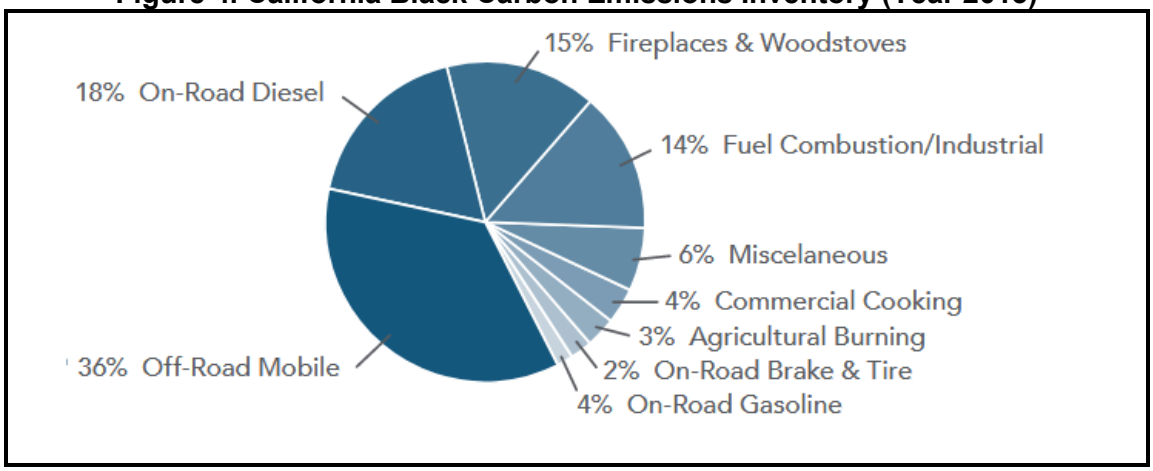
Source: City of Paso Robles Climate Action Plan 2013

Short-Lived Climate Pollutants

Short-lived climate pollutants (SLCPs), such as black carbon, fluorinated gases, and methane also have a dramatic effect on climate change. Though short-lived, these pollutants create a warming influence on the climate that is many times more potent than that of carbon dioxide.

As part of the ARB's efforts to address SLCPs, the ARB has developed a statewide emission inventory for black carbon. The black carbon inventory will help support the implementation of the SLCP Strategy, but it is not part of the State's GHG Inventory that tracks progress towards the State's climate targets. The most recent inventory for year 2013 conditions is depicted in Figure 4. As depicted, off-road mobile sources account for a majority of black carbon emissions totaling roughly 36 percent of the inventory. Other major anthropogenic sources of black carbon include on-road transportation, residential wood burning, fuel combustion, and industrial processes (ARB 2020).

Figure 4. California Black Carbon Emissions Inventory (Year 2013)



Source: ARB 2020

Effects of Global Climate Change

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea-level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, increased air pollution episodes, and the consequence of these effects on the economy.

Within California, climate changes would likely alter the ecological characteristics of many ecosystems throughout the state. Such alterations would likely include increases in surface temperatures and changes in the form, timing, and intensity of precipitation. For instance, historical records are depicting an increasing trend toward earlier snowmelt in the Sierra Nevada. This snowpack is a principal supply of water for the state, providing roughly 50 percent of the state's annual runoff. If this trend continues, some areas of the state may experience an increased danger of floods during the winter months and possible exhaustion of the snowpack during spring and summer months. Earlier snowmelt would also impact the State's energy resources. Currently, approximately 20 percent of California's electricity comes from hydropower. Early exhaustion of the Sierra snowpack may force electricity producers to switch to more costly or non-renewable forms of electricity generation during spring and summer months. A changing climate may also impact agricultural crop yields, coastal structures, and biodiversity. As a result, changes in climate will likely have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry.

Regulatory Framework

Federal

EXECUTIVE ORDER 13514

Executive Order 13514 is focused on reducing GHGs internally in federal agency missions, programs, and operations. In addition, the executive order directs federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

On April 2, 2007, in Massachusetts v. U.S. EPA, 549 U.S. 497 (2007), the Supreme Court found that GHGs are air pollutants covered by the FCAA and that the U.S. EPA has the authority to regulate GHG. The Court held that the U.S. EPA Administrator must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision.

On December 7, 2009, the U.S. EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator found that the current and projected concentrations of the six key well-mixed GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

Although these findings did not themselves impose any requirements on industry or other entities, this action was a prerequisite to finalizing the U.S. EPA's Proposed Greenhouse Gas Emission Standards for Light-Duty Vehicles, which was published on September 15, 2009. On May 7, 2010, the final Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards was published in the Federal Register.

The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations. These steps were outlined by President Obama in a Presidential Memorandum on May 21, 2010.

The final combined U.S. EPA and NHTSA standards that make up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile (the equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements). Together, these standards will cut GHG emissions by an estimated 960 MMT and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). On August 28, 2012, U.S. EPA and NHTSA issued their joint rule to extend this national program of coordinated GHG and fuel economy standards to model years 2017 through 2025 passenger vehicles.

State

EXECUTIVE ORDER NO. S-3-05

Executive Order S-3-05 (State of California) proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

The Executive Order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary will also submit biannual reports to the governor and state legislature describing (1) progress made toward reaching the emission targets, (2) impacts of global warming on California's resources, and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the secretary of CalEPA created a Climate Action Team made up of members from various state agencies and commissions. The Climate Action Team released its first report in March 2006 and continues to release periodic reports on progress. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government, and community actions, as well as through state incentive and regulatory programs.

ASSEMBLY BILL 32 - CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006

AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599) requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. The gases that are regulated by AB 32 include CO_2, CH_4, N_2O, HFCs, PFCs, NF_3, and SF_6. The reduction to 1990 levels will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB 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 ARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that ARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap, institute a schedule to meet the emissions cap, and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

CLIMATE CHANGE SCOPING PLAN

In October 2008, ARB published its *Climate Change Proposed Scoping Plan,* which is the State's plan to achieve GHG reductions in California required by AB 32. This initial Scoping Plan contained the main strategies to be implemented in order to achieve the target emission levels identified in AB 32. The Scoping Plan included ARB-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, and the widespread development of combined heat and power systems, and developing a renewable portfolio standard for electricity production.

The Scoping Plan states that land use planning and urban growth decisions will play important roles in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions. ARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emissions sectors. With regard to land use planning, the Scoping Plan expects approximately 5.0 MMT CO_2e will be achieved associated with the implementation of Senate Bill 375, which is discussed further below.

The initial Scoping Plan was first approved by ARB on December 11, 2008, and is updated every five years. The first update of the Scoping Plan was approved by the ARB on May 22, 2014, which looked past 2020 to set mid-term goals (2030-2035) on the road to reaching the 2050 goals., The most recent update released by ARB is the *2017 Climate Change Scoping Plan*, which was released on November 2017. The *2017 Climate Change Scoping Plan* incorporates strategies for achieving the 2030 GHG-reduction target established in SB 32 and EO B-30-15. Most notably, the *2017 Climate Change Scoping Plan* encourages zero net increases in GHG emissions. However, the *2017 Climate Change Scoping Plan* recognizes that achieving net zero increases in GHG emissions may not be possible or appropriate for all projects and that the inability of a project to mitigate its GHG emissions to zero would not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.

The 2022 Climate Change Scoping Plan update is currently being prepared. The 2022 Scoping Plan Update will assess progress towards achieving the SB 32 year 2030 target and will lay out a path to achieve carbon neutrality by mid-century.

SENATE BILL 1078 AND GOVERNOR'S ORDER S-14-08

Senate Bill 1078 (Public Utilities Code Sections 387, 390.1, 399.25 and Article 16) addresses electricity supply and requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide a minimum 20 percent of their supply from renewable sources by 2017. This Senate Bill will affect statewide GHG emissions associated with electricity generation. In 2008, Governor Schwarzenegger signed Executive Order S-14-08, which set the Renewables Portfolio Standard target to 33 percent by 2020. It directed state government agencies and retail sellers of electricity to take all appropriate actions to implement this target. Executive Order S-14-08 was later superseded by Executive Order S-21-09 on September 15, 2009. Executive Order S-21-09 directed the ARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. Statute SB X1-2 superseded this Executive Order in 2011, which obligated all California electricity providers, including investor-owned utilities and publicly owned utilities, to obtain at least 33 percent of their energy from renewable electrical generation facilities by 2020.

ARB is required by current law, AB 32 of 2006, to regulate sources of GHGs to meet a state goal of reducing GHG emissions to 1990 levels by 2020 and an 80 percent reduction of 1990 levels by 2050. The California Energy Commission and California Public Utilities Commission serve in advisory roles to help ARB develop the regulations to administer the 33 percent by 2020 requirement. ARB is also authorized to increase the target and accelerate and expand the time frame.

MANDATORY REPORTING OF GHG EMISSIONS

The California Global Warming Solutions Act (AB 32, 2006) requires the reporting of GHGs by major sources to the ARB. Major sources required to report GHG emissions include industrial facilities, suppliers of transportation fuels, natural gas, natural gas liquids, liquefied petroleum gas, and carbon dioxide, operators of petroleum and natural gas systems, and electricity retail providers and marketers.

CAP-AND-TRADE REGULATION

The cap-and-trade regulation is a key element in California's climate plan. It sets a statewide limit on sources responsible for 85 percent of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The cap-and-trade rules came into effect on January 1, 2013, and apply to large electric power plants and large industrial plants. In 2015, fuel distributors, including distributors of heating and transportation fuels, also became subject to the cap-and-trade rules. At that stage, the program will encompass around 360 businesses throughout California and nearly 85 percent of the state's total GHG emissions.

Under the cap-and-trade regulation, companies must hold enough emission allowances to cover their emissions and are free to buy and sell allowances on the open market. California held its first auction of GHG allowances on November 14, 2012. California's GHG cap-and-trade system is projected to reduce GHG emissions to 1990 levels by the year 2020 and would achieve an approximate 80 percent reduction from 1990 levels by 2050.

SENATE BILL 32

SB 32 was signed by Governor Brown on September 8, 2016. SB 32 effectively extends California's GHG emission-reduction goals from year 2020 to year 2030. This new emission-reduction target of 40 percent below 1990 levels by 2030 is intended to promote further GHG-reductions in support of the State's ultimate goal of reducing GHG emissions by 80 percent below 1990 levels by 2050. SB 32 also directs the ARB to update the Climate Change Scoping Plan to address this interim 2030 emission-reduction target.

SENATE BILL 97

Senate Bill 97 (SB 97) was enacted in 2007. SB 97 required OPR to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHG emissions. Those CEQA Guidelines amendments clarified several points, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects and must reach a conclusion regarding the significance of those emissions.
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions.
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change.
- Lead agencies may significantly streamline the analysis of GHGs on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria.
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply and ways to reduce energy demand, including through the use of efficient transportation alternatives.

As part of the administrative rulemaking process, the California Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the CEQA Guidelines amendments. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010.

SENATE BILL 100

Senate Bill 100 (SB 100) was signed by Governor Jerry Brown on September 10, 2018. SB 100 sets a goal of phasing out all fossil fuels from the state's electricity sector by 2045. SB 100 increases to 60 percent, from 50 percent, how much of California's electricity portfolio must come from renewables by 2030. It establishes a further goal to have an electric grid that is entirely powered by clean energy by 2045, which could include other carbon-free sources, like nuclear power, that are not renewable.

SENATE BILL 375

SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will address land-use allocation in that MPOs regional transportation plan. ARB, in consultation with MPOs, establishes regional reduction targets for GHGs emitted by passenger cars and light trucks for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, funding for transportation projects may be withheld. In 2018, ARB adopted updated SB 375 targets.

CALIFORNIA BUILDING CODE

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 California Building Code is adopted every three years by the Building Standards Commission (BSC). In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

CALIFORNIA GREEN BUILDING STANDARDS

In essence, green buildings standards are indistinguishable from any other building standards, are contained in the CBC, and regulate the construction of new buildings and improvements. Whereas the focus of traditional building standards has been protecting public health and safety, the focus of green building standards is to improve environmental performance.

The 2019 Building Energy Efficiency Standards (2019 Standards), adopted in May 2018, addressed 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 non-residential lighting requirements. The 2019 Standards required new residential and non-residential construction; as well as major alterations to existing structures, to include electric vehicle (EV)-capable parking spaces which have electrical panel capacity and conduit to accommodate future installation. In addition, the 2019 Standards also required the installation of solar photovoltaic (PV) systems for low-rise residential dwellings, defined as single-family dwellings and multi-family dwellings up to three-stories in height. These requirements are based on various factors, including the floor area of the home, sun exposure, and climate zone. Under the 2019 standards, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

The recently updated 2022 Building Energy Efficiency Standards (2022 Standards), which were approved in December 2021, encourages efficient electric heat pumps, establishes electric-ready requirements when natural gas is installed and to support the future installation of battery storage, and further expands solar photovoltaic and battery storage standards. The 2022 Standards extend solar PV system requirements, as well as battery storage capabilities for select land uses, including high-rise multi-family and non-residential land uses, such as office buildings, schools, restaurants, warehouses, theaters, grocery stores, and more. Depending on the land use and other factors, solar systems should be sized to meet targets of up to 60 percent of the structure's loads. These new solar requirements will become effective January 1, 2023, and contribute to California's goal of reaching net-zero carbon footprint by 2045 (CEC 2022).

SHORT-LIVED CLIMATE POLLUTANT REDUCTION STRATEGY

In March 2017, the ARB adopted the *Short-Lived Climate Pollutant Reduction Strategy* (*SLCP Strategy*) establishing a path to decrease GHG emissions and displace fossil-based natural gas use. Strategies include avoiding landfill methane emissions by reducing the disposal of organics through edible food recovery, composting, in-vessel digestion, and other processes; and recovering methane from wastewater treatment facilities, and manure methane at dairies, and using the methane as a renewable source of natural gas to fuel vehicles or generate electricity. The *SLCP Strategy* also identifies steps to reduce natural gas leaks from oil and gas wells, pipelines, valves, and pumps to improve safety, avoid energy losses, and reduce methane emissions associated with natural gas use. Lastly, the *SLCP Strategy* also identifies measures that can reduce hydrofluorocarbon (HFC) emissions at national and international levels, in addition to State-level action that includes an incentive program to encourage the use of low-GWP refrigerants, and limitations on the use of high-GWP refrigerants in new refrigeration and air-conditioning equipment (ARB 2017).

SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT

The 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.

CITY OF PASO ROBLES CLIMATE ACTION PLAN

The City of Paso Robles Climate Action Plan (CAP) is a long-range plan to reduce GHG emissions from City government operations and community activities. The CAP will also help achieve multiple community goals such as lowering energy costs, reducing air pollution, supporting local economic development. The CAP includes measures to reduce community-wide GHG emissions by 15 percent below 2005 levels by 2020 (City of Paso Robles 2013).

COUNTY OF SAN LUIS OBISPO 2019 REGIONAL TRANSPORTATION PLAN/ SUSTAINABLE COMMUNITIES STRATEGY

The 2019 Regional Transportation Plan (RTP) was adopted by the SLOCOG Board in June 2019. The RTP includes the region's Sustainable Communities' Strategy (SCS), which outlines how the region will exceed its GHG reduction targets as required by SB 375 through the promotion of a variety of transportation demand management & system management tools and techniques to maximize the efficiency of the transportation network. Consistency with the requirement of SB 375 ensures consistency with the GHG-reduction targets set by ARB. The 2019 SCS was found to be consistent with the requirement of SB 375 and is also consistent with the general plans of the region's jurisdictions (SLOCOG 2019).

Impact Analysis

Thresholds of Significance

In accordance with Appendix G of the *State CEQA Guidelines,* increased GHG emissions associated with the implementation of the proposed project would be considered significant if it would:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

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

The SLOAPCD has adopted recommended GHG significance thresholds. These thresholds are based on AB 32 GHG emission reduction goals, which take into consideration the emission reduction strategies outlined in ARB's Scoping Plan. Accordingly, if a project complies with a Qualified Greenhouse Gas Reduction Strategy that is CAP is based on AB 32 GHG reductions for year 2020 operational conditions and has not yet been specifically applicable to the project, such as the City of Paso Robles Climate Action Plan, then the project would be considered to have a less-than-significant impact. The City of Paso Robles CAP includes a "Consistency Worksheet", which identifies various measures designed to reduce project-related GHG emissions. The CAP Consistency Worksheet can be used to demonstrate project-level compliance with the CAP. However, it is important to note that the City's CAP has not been updated to reflect SB 32 GHG reductions for target year 2030 conditions. As a result, this analysis provides an analysis of consistency with the currently adopted City CAP; however, consistency with year 2030 GHG reductions, per SB 32, and the State's Scoping Plan have been evaluated using an efficiency threshold, taking into account the City's 2030 GHG-reduction target mandated by SB 32 and the City's baseline GHG inventory, as identified in the City's existing CAP. The GHG-efficiency threshold was calculated by dividing the GHG emissions inventory goal (allowable emissions), by the City's estimated service population (SP) for year 2030 conditions. The service population includes estimated population and employment for the City.

Emissions sectors that do not apply to the proposed project (i.e., agriculture) were excluded from the calculation. The GHG emissions inventory for the land use sectors applicable to the proposed project were then divided by the projected SP for future year 2030. The methodology used for quantification of the target efficiency threshold applied to the proposed project is summarized in Table 18. Accordingly, project-generated GHG emissions that would exceed the efficiency threshold of 1.9 $MTCO_2e$/SP/year in 2030 would be considered to have a potentially significant impact on the environment that could conflict with GHG-reduction planning efforts. To be conservative, amortized construction-generated GHG emissions were included in annual operational GHG emissions estimates for comparison to this threshold, consistent with SLOAPCD-recommended methodologies.

Table 18. Project-Level GHG Efficiency Threshold Calculation

Operational Year	2030
Land Use Sectors GHG Emissions Target[1]	100,940
Population[2]	37,700
Employment[3]	16,017
Service Population (SP)	53,717
GHG Efficiency Threshold ($MTCO_2e$/SP/yr)	1.9

Note: Employment data for interim years are estimated based on proportionality with population trends based on historical data.
1. Based on Business-as-Usual (year 2005) emissions inventory and the State's target reductions of 40 percent below BAU baseline GHG emissions inventory by 2030. Emissions inventory reflects locally-appropriate emissions sectors.
2.. Based on population data derived from the City of Paso Robles Demographic website. Website url: https://www.prcity.com/244/Demographics.
3. Based on employment data derived from the California Employment Development Department. Labor Force and Unemployment Rates for Cities and Census Designated Places. Website url: https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html.

Methodology

Emissions associated with the construction of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0 computer program. To be conservative, construction of the proposed warehouses were assumed to occur simultaneously. Construction phase durations were based on model defaults, with the exception of the building construction phase. Based on project-specific information received, building construction would occur over an estimated six-month period. Approximately 5,093 square feet (sf) of existing structure would be demolished. A combined total of approximately 1,510 cubic yards (cy) of fill material would be imported. Additional construction information such as off-road equipment use, worker vehicle trips, and equipment load factors were based on default parameters contained in the model. Modeling assumptions and output files are included in Appendix B of this report.

Long-term operational emissions were calculated using the CalEEMod, version 2020.4.0 based, in part, on vehicle trip-generation rates, vehicle distribution percentages, and vehicle miles traveled (VMT) derived from the traffic analysis prepared for this project (CCTC 2022). Warehouse vehicle trip distances were based on calculated travel distances of 3.7 miles for worker trips and 13 miles for truck trips for a combined average vehicle trip length of 7 miles. Based on vehicle percentages obtained from the traffic analysis, approximately 35 percent of total vehicle trips were assumed to be trucks and the remaining 65 percent were assumed to be light-duty vehicles associated with worker trips. Truck trips were assumed to consist of a mix of medium-heavy-duty trucks (MHDT) and heavy-heavy-duty trucks (HHDT). Worker trips were assumed to be light-duty vehicles defined as a mix of light-duty automobiles (LDA), light-duty trucks (LDT1 and LDT2) and medium-duty trucks (MDT) per ARB's definition. The default fleet mix identified in CalEEMod was adjusted to reflect this increase in truck trips. All other vehicle categories were based on model defaults. Water and energy usage rates were based on model defaults. Based on information provided by the project applicants, off-road equipment used within both warehouses, such as forklifts, would be electrically powered.

GHG emissions associated with onsite wine fermentation were calculated based on methodologies derived from the Santa Barbara County Air Pollution Control District (SBCAPCD). Emissions were calculated based on an estimated annual wine production rate of 2,335,800 gallons/year provided by the project applicant. It is important to note that new or expanding wineries with storage capacity of 26,000 gallons per year, or more, are typically required to obtain a Permit to Operate from SLOAPCD. Permitted sources of GHGs are evaluated in comparison to the SLOAPCD's GHG significance threshold for permitted sources of 10,000 $MTCO_2e$/year. Emission modeling assumptions and results are included in Appendix B.

Project Impacts and Mitigation Measures

Impact GHG-A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 from mobile sources. To a lesser extent, other GHG pollutants, such as CH_4 and N_2O, would also be generated. Short-term and long-term GHG emissions associated with the development of the proposed project are discussed in greater detail, as follows:

Short-term Construction GHG Emissions

Estimated increases in GHG emissions associated with the construction of the proposed project are summarized in Table 19. Based on the modeling conducted, construction-related GHG emissions would total approximately 460.4 $MTCO_2e$. Amortized GHG emissions, when averaged over the assumed 25-year minimum life of the project, would total approximately 18.4 $MTCO_2e$/year. There would also be a small amount of GHG emissions from waste generated during construction; however, this amount is speculative. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted. Amortized construction-generated GHG emissions are included in the operational GHG emissions impact discussion provided below.

Table 19. Construction-Generated GHG Emissions Without Mitigation

Construction Year	GHG Emissions ($MTCO_2e$/Year)
2023	460.4
Amortized Construction Emissions:	18.4
Amortized emissions are quantified based on a minimum 25-year project life. Refer to Appendix B for modeling assumptions and results.	

Long-term Operational GHG Emissions

Estimated long-term increases in GHG emissions associated with the proposed project for future year 2030 conditions are summarized in Table 20. For informational purposes, opening year 2024 emissions were also calculated and included in Table 20. As depicted, operational GHG emissions for the proposed project, with the inclusion of amortized construction GHGs, would total approximately 1,1,358 $MTCO_2e$/year under operational year 2030 conditions. A majority of the operational GHG emissions would be associated with motor vehicle use and energy use. To a lesser extent, operational GHG emissions would also be associated with solid waste generation and water use. As depicted in Table 20, total emissions would equate to 2.8 $MTCO_2e$/SP, which would exceed the significance threshold of 1.9 $MTCO_2e$/SP. As a result, this impact is considered *potentially significant*.

Permitted Emission Sources

The proposed Daou warehouse would also include wine production, which can result in additional emissions of CO_2 during the wine fermentation process. As previously noted, the facility would have a maximum production rate of 2,335,800 gallons/year and would be subject to SLOAPCD's permitting requirements. The SLOAPCD's GHG significance threshold for permitted sources of 10,000 $MTCO_2e$/year. Assuming a maximum production rate of 2,335,800 gallons/year, the Daou warehouse would result in an estimated 934 $MTCO_2e$/year, which would not exceed SLOAPCD's significance threshold. Emissions from permitted sources would be considered to have a *less-than-significant* impact.

Table 20. Operational GHG Emissions Without Mitigation

Operational Year/Source	GHG Emissions ($MTCO_2e$/Year)	
	Opening Year 2024	Future Operational Year 2030
Energy Use[1]	306	306
Motor Vehicles	876	782
Waste[2]	89	89
Water	163	163
Amortized Construction Emissions:	18	18
Total Emissions:	1,471	1,358
Total $MTCO_2e$/SP:		2.8
GHG Efficiency Significance Threshold:		1.9
Exceeds Threshold?		Yes

1. Includes natural gas use. Assumes use of PG&E for energy supplier and default electricity intensity factors contained in CalEEMod. Includes emissions from non-permitted sources. Permitted sources are evaluated separately in comparison to SLOAPCD's GHG significance threshold of 10,000 $MTCO_2e$/year.
2. Includes a minimum 50% diversion rate.
3. Based on an ITE estimated total 484 employees.
Refer to Appendix B for modeling assumptions and results.

Mitigation Measures

GHG-1: In addition to implementation of Mitigation Measure AQ-3 and AQ-4, the following additional measures shall be implemented:

a. Proposed land uses shall elect to receive electricity from Central Coast Community Energy (3CE).
b. Building mechanical equipment and appliances shall be electrically powered. The installation of natural-gas service/infrastructure shall be prohibited.
c. The Project shall provide organic waste pick up and shall provide the appropriate on-site enclosures consistent with the provisions of the City of Paso Robles Development Standards for Solid Waste Services.
d. Meet current CALGreen Tier 2 standards for electric vehicle (EV) parking spaces, except that all EV parking spaces required by the code shall be "EV-capable" instead of "EV-ready".

GHG-2: The project shall provide carbon offsets sufficient to reduce project-generated GHG emissions to below applicable thresholds, calculated over the life of the project. Based on the modeling conducted, the project shall provide offsets in the total amount of 5,899 $MTCO_2e$ (3,929 $MTCO_2e$ for the Stravinski warehouse and 1,970 $MTCO_2e$ for the Daou warehouse). Under CEQA Guidelines Section 15126.4, subdivisions (c)(3) and (c)(4), a project's GHG emissions can be reduced through the application of off-site measures, which may include "Direct Reduction Activities" or the purchase of "Carbon Offset Credits", which are discussed as follows:

Direct Reduction Activities

Directly undertake or fund activities that will reduce or sequester GHG emissions. GHG reduction credits shall achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, in accordance with the criteria set forth in the ARB's most recent Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation (2013). GHG reduction credits shall be undertaken for the specific purpose of reduction project-generated GHG emissions and shall not include reductions that would otherwise be required by law. All Direct Reduction Activities and associated reduction credits shall be confirmed by an independent, qualified third-party.

The "Direct Reduction Activity" shall be registered with a California Air Resources Board (ARB)-approved registry and in compliance with ARB-approved protocols. In accordance with the applicable Registry requirements, the Project applicant (or its designee) shall retain an

independent, qualified third-party to confirm the GHG emissions reduction or sequestration achieved by the Direct GHG Reduction Activities against the applicable Registry protocol or methodology. The Project applicant (or its designee) will then apply for issuance of carbon credits in accordance with the applicable Registry rules.

Carbon Offsets

Obtain and retire "Carbon Offsets." Carbon Offsets shall achieve GHG reductions that are real, permanent, quantifiable, verifiable, and enforceable. Carbon offsets shall be purchased from ARB-approved registries and shall comply with ARB-approved protocols to ensure that offset credits accurately and reliably represent actual emissions reductions. If the purchase of carbon offsets is selected, offsets shall be purchased according to the City of San Luis Obispo's preference, which is, in order of City preference: (1) within the City of San Luis Obispo; (2) within the SLOAPCD jurisdictional area; (3) within the State of California; then (4) elsewhere in the United States. In the event that a project or program providing offsets to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring offsets specific to the registry involved and shall purchase an equivalent number of credits to recoup the loss.

Significance After Mitigation

Implementation of Mitigation Measures AQ-3 would require implementation of numerous measures to reduce long-term operational emissions, including implementation of measures to reduce project-generated VMT, as well as on-site measures to reduce operational emissions. Mitigation Measures AQ-4 would require the project to obtain permits from the SLOAPCD for applicable emission sources. Mitigation Measure GHG-1 would include additional measures that would result in substantial reductions in GHG emissions associated with energy use. With implementation of these measures, project generated emissions would be reduced to approximately 2.1 $MTCO_2e/SP$ under operational year 2030 conditions, which would still exceed the significance threshold of 1.9 $MTCO_2e/SP$. Mitigation Measure GHG-2 would require carbon offsets sufficient to reduce project-generated GHG emissions to below applicable GHG thresholds, calculated over the estimated 25-year life of the project. With mitigation, this impact would be considered *less than significant*.

Impact GHG-B	*Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

As noted in Table 20, operational GHG emissions attributable to the proposed project would be primarily associated with mobile sources. Applicable GHG-reduction plans related to reducing operational GHG emissions include the *City of Paso Robles CAP*, the *County of San Luis Obispo's Regional Transportation Plan/Sustainable Communities Strategy,* and California's *2017 Climate Change Scoping Plan*. The project's consistency with these plans is discussed in greater detail, as follows:

City of Paso Robles Climate Action Plan

The City's CAP is a long-range plan to reduce GHG emissions from City government operations and community activities within the community. The City's CAP 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 City's CAP is based on year 2020 GHG-reduction targets and has not yet been updated to reflect year 2030 GHG-reduction targets, per SB32. Nonetheless, a summary of the proposed Project's consistency with the measures identified in the City's CAP are summarized in Table 21. As noted and with implementation of proposed mitigation measures, the project would be consistent with the GHG-reduction measures identified in the City's currently adopted CAP (City of Paso Robles 2013).

County of San Luis Obispo 2019 Regional Transportation Plan/Sustainable Communities Strategy

The 2019 Regional Transportation Plan (RTP) was adopted by the SLOCOG Board in June 2019. The RTP includes the region's Sustainable Communities' Strategy (SCS), which outlines how the region will meet or exceed its GHG reduction targets as required by SB 375 through the promotion of a variety of transportation demand management & system management tools and techniques to maximize the efficiency of the transportation network. Consistency with the requirement of SB 375 ensures consistency with the GHG-

reduction targets set by ARB. The 2019 SCS was found to be consistent with the requirement of SB 375 and is also consistent with the general plans of the region's jurisdictions (SLOCOG 2019).

According to the Regional Housing Needs Assessment, the City of Paso Robles has about 15 percent more housing units than jobs, indicative of a "jobs-poor" community. The City's housing to jobs ratio is estimated to decrease from a year 2015 ratio of 1.15 jobs/housing to a ratio of 1.112 jobs/housing by year 2035, thereby decreasing the imbalance between jobs and housing units. The proposed project would result in increased employment and would not result in an increase in housing. As a result, the proposed project would be anticipated to improve the jobs-housing imbalance. In addition, based on the VMT analysis prepared for the project, project-generated VMT would not exceed the City's VMT significance threshold. As a result, the project would not be considered to conflict with regional VMT-reduction efforts.

California's 2017 Climate Change Scoping Plan

As previously noted, ARB's *2017 Climate Change Scoping Plan* reflects the new statewide GHG emissions reductions of 40 percent below 1990 emissions levels by 2030, as mandated by SB 32. A significant part of achieving the SB 32 goals are strategies to promote sustainable communities, such as the promotion of zero net energy buildings, and improved transportation choices that result in reducing VMT. Other measures include the increased use of low-carbon fuels and cleaner vehicles.

To support the State's GHG emissions reduction goals, including the goals mandated by SB 32, California established the Sustainable Communities and Climate Protection Act (SB 375). SB 375 requires regional metropolitan planning organizations, such as SBCAG, to develop SCSs which align transportation, housing, and land use decisions toward achieving the State's GHG emissions-reduction targets. Under SB 375, the development and implementation of SCSs, which link transportation, land use, housing, and climate policy at the regional level, are designed to reduce per capita mobile-source GHG emissions, which is accomplished through implementation of measures that would result in reductions in per capita VMT.

In 2018, ARB adopted more aggressive SB 375 targets as one measure to support progress toward the 2017 Scoping Plan goals. SB 375 aims to achieve, a 19 percent reduction in statewide per capita GHG emissions from passenger vehicles by year 2035 (relative to year 2005). To achieve this reduction, ARB sets target reductions for various regions throughout the state to be included in the RTP and SCS prepared for these regions. As discussed above, the proposed project would not exceed applicable VMT thresholds. As a result, the proposed project would not conflict with regional VMT-reduction goals. However, as noted in Impact GHG-1, the proposed project would exceed the efficiency threshold of 1.9 $MTCO_2e$/SP/year, which is based on achieving SB-32 year 2030 GHG-reduction targets, consistent with ARB's 2017 Climate Change Scoping Plan. For these reasons, without mitigation, the proposed project could conflict with the *2017 Climate Change Scoping Plan.*

It is also important to note that the ARB has recently released its *Draft 2022 Climate Change Scoping Plan Update* (ARB 2022). Consistent with the current 2017 Scoping Plan, the Draft 2022 Scoping Plan assesses the State's progress towards meeting its target of reducing statewide GHG emissions to 40 percent below the 1990 levels by 2030. The Draft 2022 Scoping Plan also lays out a path for achieving carbon neutrality no later than 2045, per the goal identified in Executive Order B-55-18. The draft Scoping Plan is anticipated to be approved in the fall of 2022.

For land use development projects, additional reductions in GHG emissions may be required in order to meet the project's fair share of the statewide reductions required to achieve carbon neutrality, consistent with Executive Order B-55-18 and ARB's Draft 2022 Scoping Plan Update. Neither the SBCAPCD nor the City of Paso Robles have developed recommended thresholds of significance that are based on achieving carbon neutrality by year 2045. However, the Bay Area Air Quality Management District (BAAQMD) has recently released recommended GHG significance thresholds that are based on a "fair share" approach for achieving carbon neutrality goals. Consistent with this approach, new land use development projects would be considered to be consistent with the State's carbon neutrality goals and would be considered to have a less than significant impact if: 1) the project is deemed consistent with regional VMT-reduction targets; 2) the project prohibits the installation of natural gas infrastructure; and 3) the project would not result in a wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. Similarly, the Sacramento Metropolitan Air Quality Management District (SMAQMD) has also recently released Best Management Practices (BMPs), which also include the prohibited installation of natural gas infrastructure for development projects, as well

as, a requirement that project's meet current CALGreen Tier 2 standards for electric vehicle (EV) spaces, except that *EV-capable* spaces shall instead be *EV ready*. This additional requirement requires the installation of electrical infrastructure sufficient to service the future installation of EV chargers. The BAAQMD and SMAQMD thresholds are based on an approach endorsed by the Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015). Although not located within these jurisdictions, development in Santa Maria and associated GHG emissions are comparable to those generated by developments within other areas of the state, including the BAAQMD and SMAQMD jurisdictions. Given that climate change is inherently a cumulative impact that occurs on a global scale, these BMPs would, likewise, be considered representative of the project's "fair share" of what would be required to meet the State's long-term climate goals, including achieving carbon neutrality by 2045, as identified by the BAAQMD and the SMAQMD.

As noted above, the proposed project would be consistent with the regional VMT-reduction targets. However, as noted in Impact GHG-1, the proposed project would exceed the efficiency threshold of 1.9 $MTCO_2e$/SP/year, which is based on achieving SB-32 year 2030 GHG-reduction targets, consistent with ARB's 2017 Climate Change Scoping Plan. For these reasons, without mitigation, the proposed project could conflict with the *2017 Climate Change Scoping Plan. In addition,* the proposed project does not include BMPs that would constitute its "fair share" of what would be required to meet the State's long-term climate goals, including achieving carbon neutrality by 2045. Specifically, the project does not prohibit the installation of natural gas-fired appliances/equipment, nor require that current CALGreen Tier 2 compliant EV spaces to be *EV ready*, as opposed to *EV capable*. As a result, this impact would be considered potentially significant.

Mitigation Measures

Implement Mitigation Measures AQ-3, AQ-4, GHG-1 and GHG-2.

Significance After Mitigation

Implementation of Mitigation Measure AQ-3 would include various measures that would help to promote the use of alternative means of transportation along with reductions in GHG emissions associated with energy use, water use, waste generation, and mobile sources. Mitigation Measures AQ-4 would require the project to obtain permits for emissions sources subject to SLOAPCD permitting requirements, which would be anticipated to result in additional reduction in onsite GHG emissions. Implementation of Mitigation Measures GHG-1 and GHG-2 would result in further reductions in on-site and off-site GHG emissions.

In addition, Mitigation Measure GHG-1 would require the project to receive electricity from Central Coast Community Energy (3CE). Central Coast Community Energy (3CE) is a locally-controlled public agency supplying clean and renewable electricity for residents and businesses in Monterey, San Benito, parts of San Luis Obispo, Santa Barbara, and Santa Cruz Counties. 3CE is based on a local energy model called Community Choice Energy that 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 striving to provide 100 percent electricity from renewable sources by 2030.

Additional measures have also been included to require the installation of EV-ready parking spaces and to prohibit the installation of natural gas-fired appliance/equipment, in accordance with recommended BMPs for achieving fair-share reductions in GHGs in support of the State's carbon neutrality goals. With regard to CALGreen EV parking requirements, "EV Capable" is defined as including the installation of "raceway" (the enclosed conduit that forms the physical pathway for electrical wiring to protect it from damage) and adequate future installation of a dedicated branch circuit and charging station(s). "EV Ready" includes "EV Capable" requirements plus addition of dedicated branch circuit(s) (electrical pre-wiring), circuit breakers, and other electrical components, including a receptacle (240-volt outlet) or blank cover needed to support future installation of one or more charging stations. With mitigation, the project would be considered consistent with the local, regional, and state GHG-reduction planning efforts. With mitigation, this impact would be considered *less than significant.*

Table 21. Project Consistency with the City's Climate Action Plan

CAP Measures	Project Consistency
Energy Measures	
Does the Project include an operational commitment to reduce energy demand and increase on-site energy supply?	Consistent with Mitigation. Mitigation measures have been included to reduce on-site energy use/demand and to increase on-site energy supply by requiring the installation of renewable energy systems.(refer to Mitigation Measure AQ-3).
Does the Project exclusively include "All-electric buildings"?	Consistent with Mitigation. A mitigation measure has been included to encourage the installation of electrically-powered appliances in place of natural gas to the extent possible. In addition, mitigation has also been included to require the installation of infrastructure to facilitate the future installation of alternative energy sources, such as the installation of photovoltaic systems (refer to Mitigation Measure AQ-3 and GHG-1).
If the Project/Plan includes a new mixed-fuel building or buildings (plumbed for the use of natural gas as fuel for space heating, water heating, cooking or clothes drying appliances) does that building/those buildings exceed the City's Energy Reach code?	
Transportation and Land Use Measures	
Does the Project comply with requirements in the City's Municipal Code with no exceptions, including bicycle parking, bikeway design, and EV charging stations?	Consistent with Mitigation. Mitigation measures have been included to require compliance with applicable building codes related to bicycle parking, bikeway design, and EV charging stations (refer to Mitigation Measures AQ-3).
Is the estimated Project-generated Vehicle Miles Traveled (VMT) within the City's adopted thresholds, as confirmed by the City's Transportation Division?	Consistent. Based on the traffic analysis prepared for this project, project-generated VMT is within the City's adopted thresholds.
If "No", does the Project/Plan include VMT mitigation strategies and/or a Transportation Demand Management (TDM) Plan approved by the City's Transportation Division?	
Does the Project demonstrate consistency with the City's Bicycle Network Plan?	Consistent with Mitigation. Mitigation measures have been included to require the project to incorporate features to promote alternative means of transportation, including the installation of bicycle facilities (refer to Mitigation Measures AQ-3).
Off-Road Measure	
Will the Project work to reduce GHG emissions by reducing off-road equipment and vehicle usage and idling?	Consistent with Mitigation. Mitigation measures have been included to require the Project restrict idling and vehicle usage when feasible and to use alternatively-powered equipment where possible (refer to Mitigation Measures AQ-2 and GHG-1).
Water Measure	
Does the Project comply with water efficiency and conservation requirements?	Consistent with Mitigation. A mitigation measure has been included to require the use of low-flow water fixtures, water-efficient irrigation systems, and drought-tolerant landscaping (refer to Mitigation Measure AQ-3).
Waste Measure	
Does the Project include an operational commitment to reduce the amount of trash and other waste and recycle as many materials as possible?	Consistent. The Project shall provide organic waste pick up and shall provide the appropriate on-site enclosures consistent with the provisions of the City of Paso Robles Development Standards for Solid Waste Services (refer to Mitigation Measure GHG-1).
Tree Planting Measure	
Does the Project include an operational commitment to maintain a healthy urban forest and incorporate native drought tolerant trees?	Consistent with Mitigation. Mitigation measures have been included to require the installation of trees and drought tolerant landscaping (refer to Mitigation Measure AQ-3).

REFERENCES

California Air Resources Board (ARB). Accessed January 20,2018. *ARB Health-Related Fact Sheets*. Website URL: http://www.arb.ca.gov/research/health/fs/fs.htm.

California Air Resources Board (ARB). Accessed January 20, 2017. California Green Building Strategy. Website URL: http://www.arb.ca.gov/cc/greenbuildings/greenbuildings.htm.

California Air Resources Board (ARB). Accessed January 20, 2019. *California Greenhouse Gas Emissions Inventory*. Website URL: https://ww3.arb.ca.gov/cc/inventory/data/data.htm.

California Air Resources Board (ARB). *California's 2017 Climate Change Scoping Plan*. Website URL: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

California Air Resources Board (ARB). Accessed December 12, 2020. *Short Lived Climate Pollutants*. Website URL: https://ww2.arb.ca.gov/our-work/programs/slcp.

California Air Resources Board (ARB). Accessed December 16, 2021. *Air Quality Standards and Area Designations*. Website URL: https://www.arb.ca.gov/desig/desig.htm.

California Air Resources Board (ARB). 2022. *California Greenhouse Gas Emissions Inventory: 2000-2019*. Available at website url: https://ww2.arb.ca.gov/sites/default/files/classic/cc/ca_ghg_inventory_trends_2000-2019.pdf.

California Air Resources Board (ARB). April 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.*

California Air Resources Board (ARB). August 2015. Technology Assessment: Transport Refrigerators. Available at website URL: https://ww2.arb.ca.gov/sites/default/files/2020-06/TRU%20Tech%20Assessment%20Report%20ada.pdf

California Air Resources Board (ARB). Accessed January 27, 2022. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Available at website URL: https://ww3.arb.ca.gov/msprog/truck-idling/13ccr2485_09022016.pdf

California Energy Commission (CEC). 2019. *2019 Building Energy Efficiency Standards*. Website url: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

California Employment Development Department. *Labor Force and Unemployment Rate for Cities and Census Designated Places*. Website url: https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html

Central Coast Transportation Consulting (CCTC). September 2022. *Stravinski-Daou Draft Transportation Analysis.*

City of Paso Robles. 2013. *City of Paso Robles Climate Action Plan*. Available at Website url: https://www.prcity.com/DocumentCenter/View/14729/Climate-Action-Plan-PDF.

City of Paso Robles. Accessed September 13, 2022. *Demographics*. Website URL: https://www.prcity.com/244/Demographics.

Intergovernmental Panel on Climate Change (IPCC). 2007. *Fourth Assessment Report, Climate Change 2007: Impacts, Adaptation and Vulnerability.* Available at website url: https://www.ipcc.ch/site/assets/uploads/2018/03/ar4_wg2_full_report.pdf.

Monterey Bay Air Resources District (MBARD). 2018. *Winery Emission Factor Guidance*.

Office of Environmental Health Hazard Assessment (OEHHA). February 2015. Guidance Manual for Preparation of Health Risk Assessments. Available at website URL: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

San Luis Obispo County Council of Governments (SLOCOG). 2019. *Regional Housing Needs Assessment*.

San Luis Obispo Council of Governments (SLOCOG). 2019. *SLOCOG 2019 Regional Transportation Plan*. Available at website url: file:///C:/Users/Kurt/Downloads/__FINAL%202019%20RTP.pdf.

San Luis Obispo County Air Pollution Control District (SLOAPCD). December 2001. *Clean Air Plan.*

San Luis Obispo County Air Pollution Control District (SLOAPCD). April 2012. *CEQA Air Quality Handbook*. Available at website url: https://www.slocleanair.org/rules-regulations/land-use-ceqa.php.

San Luis Obispo County Air Pollution Control District (SLOAPCD). *2017 Clarification Memo related to the CEQA Air Quality Handbook*. Available at website url: https://www.slocleanair.org/rules-regulations/land-use-ceqa.php.

San Luis Obispo County Air Pollution Control District (SLOAPCD). 2018. *APCD Naturally Occurring Asbestos Map*. Available at website url: https://www.slocleanair.org/rules-regulations/land-use-ceqa.php.

Santa Barbara County Air Pollution Control District (SBCAPCD). Winery CO2 Calc. Website url: https://www.ourair.org/wp-content/uploads/WineryCO2Calcs.pdf.

United States Environmental Protection Agency (U.S. EPA). Accessed: August 20, 2018. *Overview of Greenhouse Gases*. Website URL: *https://www.epa.gov/ghgemissions/overview-greenhouse-gases.*

United States Environmental Protection Agency (U.S. EPA).2022. *AirNow*. Website url: https://www.airnow.gov/.

Attachment 5

APPENDIX A

SUMMARY OF NESHAP ASBESTOS REQUIREMENTS

Asbestos NESHAP

Asbestos Projects and NESHAP

- Asbestos is not banned and may be present even in new construction.
- An asbestos survey is **required** prior to any tenant improvement/renovation or demolition of a **regulated structure**. The survey must be performed by a Certified Asbestos Contractor (CAC).
- Regulated structures include: all commercial structures and many residential structures.
- **For all demolitions of regulated structures, reporting and fee requirements always apply, even if the survey finds no asbestos.**
- **For renovations and tenant improvement (TI), reporting and fee requirements may apply,** depending on the results of the survey and the scope of the project.

The San Luis Obispo County Air Pollution Control District (District) implements the asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) regulation. Unlike lead-based paint, there is no cut-off date for the use of asbestos in building materials. Therefore, all regulated structures, prior to a renovation, TI, or demolition, require a survey. This survey must be completed before any work is done. Depending on the nature of the project as well as the results of the survey, the project may be subject to notification and fee requirements. For more information on the NESHAP regulation, select one of the drop-down tabs.

Notification Requirements, Forms, & Fees

A notification and appropriate fee for a project is required under the following circumstances:

- All demolitions of regulated structures, regardless of the presence of RACM.
- Renovations/TI's of regulated structure in which greater than 260 linear feet, 160 square feet, or 35 cubic feet of RACM is disturbed.

All notification forms shall be submitted with a complete survey. For more information, view the Survey Checklist.

Click here to see the APCD's PDF of our Asbestos Demolition/Renovation Notification Form and General Information.

For additional information, an Asbestos NESHAP Notification Form, or other Asbestos related issues, visit **SLOAPCD's** website at www.slocleanair.org/rules-regulations/asbestos.php or call the SLOAPCD at 805-781-5912.

Attachment 5

Minimum Requirements for an Asbestos Survey

The federal asbestos NESHAP regulation (40CFR61, Subpart M) requires an owner or operator of a demolition or renovation activity to "thoroughly inspect" the facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing materials.

To meet this federal standard, the District requires the asbestos survey report to contain the following minimum sections/information. Failure to provide the **required information** could result in project delays and/or rejection of the asbestos report.

APCD Required	Asbestos Survey Documentation Requirements	40CFR763
Yes	Thoroughly inspect the facility for ACM where the demolition/renovation will occur	85a
Yes	Identify all friable and non-friable types of ACM and presumed ACM	85a4
Yes	Quantify all identified friable and non-friable ACM and presumed ACM	
Yes	Submit a CAC signed survey report with the company contact information and CAC/SST number of sampler/preparer	85a4viA
Optional	Document the name, address and phone number of the person(s) that performed the inspection(s)	85a4viA
Yes	Include lab reports and signed chain of custody	85a4viA
Yes	Document the dates the survey was performed	85a4viA
Yes	List all suspect ACM samples collected and a sample location map of where the samples were taken	85a4viB
Yes	Document the name, address and phone # of the lab used for sample analysis	87d
Optional	Document the site/sample locations with photographs	87a
Yes	Include a Point Count analysis for all RACM < 10% if applicable	86 & 87
Yes	Provide a facility description to include any structural damage (fire, demo, partial renovation, etc.)	-
Yes	Provide proof of Cal/OSHA certification as a Certified Asbestos Consultant (CAC)	85a4viA
Yes	Sample the suspect ACM in accordance with the AHERA inspection protocol (i.e. 3,5,7)	86
Optional	Assess the ACM condition for damage type	88b&c
Yes	Analyze samples at a NVLAP lab by PLM	87
Optional	Include a table summary of findings listing all ACM and non-ACM materials	85a4viB

For additional information, an Asbestos NESHAP Notification Form, or other Asbestos related issues, visit SLOAPCD's website at www.slocleanair.org/rules-regulations/asbestos.php or call the SLOAPCD at 805-781-5912.

Attachment 5

APPENDIX B

EMISSIONS MODELING

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stravinski-Daou Warehouses Project

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	194.30	1000sqft	9.20	194,304.00	0
Refrigerated Warehouse-No Rail	183.87	1000sqft	9.20	183,871.00	0
Parking Lot	160.00	Space	1.44	64,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Warehouses-No Rail. 194.304 KSF, 181.21 KSF. Parking area assumes max 160 parking spaces

Construction Phase - Construction based on model defaults and information provided. Tilt=up construction assumes 6 month building construction period.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults

Demolition - 5093 sf of building floor area to be demo'd

Grading - Import of 815 cy for Dauo warehouse and 695 cy for Stravinski warehouse. 1510 cy total. No export.

Architectural Coating - Arch coating based on model defaults. Assumes use of low-VOC (50 g/L or less) content arch paint

Vehicle Trips - Operational trip gen 1.71/KSF derived from the traffic analysis prepared for the project. Trip distances based on total avg of 7 miles/trip per traffic VMT analysis.

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - Assumes 50%CE for unpaved roads, 61%CE for graded surfaces, 15mph onsite speed limit, T3 equipment included for informational purposes

Area Mitigation - Includes the use of low-VOC content products

Water Mitigation - Includes installation of low-flow water fixtures and water-efficient irrigation systems

Waste Mitigation - Assumes minimum waste reduction of 50%

Fleet Mix - Adjusted to reflect estimated 35% truck (MHD & HHD). Emp trips assumes LDA, LDT1, LDT2, MDV adjusted equally to account for increased truck trips. All other veh cats based on model defaults.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	120.00
tblConstructionPhase	PhaseEndDate	12/5/2022	1/27/2023
tblConstructionPhase	PhaseEndDate	12/19/2022	2/10/2023
tblConstructionPhase	PhaseEndDate	1/30/2023	3/24/2023
tblConstructionPhase	PhaseEndDate	3/25/2024	9/8/2023
tblConstructionPhase	PhaseEndDate	4/22/2024	10/6/2023
tblConstructionPhase	PhaseEndDate	5/20/2024	11/3/2023
tblConstructionPhase	PhaseStartDate	11/8/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	12/6/2022	1/30/2023
tblConstructionPhase	PhaseStartDate	12/20/2022	2/13/2023
tblConstructionPhase	PhaseStartDate	1/31/2023	3/27/2023
tblConstructionPhase	PhaseStartDate	3/26/2024	9/11/2023
tblConstructionPhase	PhaseStartDate	4/23/2024	10/9/2023
tblFleetMix	HHD	5.9960e-003	0.18
tblFleetMix	HHD	5.9960e-003	0.18
tblFleetMix	LDA	0.49	0.30
tblFleetMix	LDA	0.49	0.30

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.20	0.13
tblFleetMix	LDT2	0.20	0.13
tblFleetMix	MDV	0.15	0.09
tblFleetMix	MDV	0.15	0.09
tblFleetMix	MHD	8.2600e-003	0.18
tblFleetMix	MHD	8.2600e-003	0.18
tblGrading	MaterialImported	0.00	1,510.00
tblLandUse	LandUseSquareFeet	194,300.00	194,304.00
tblLandUse	LotAcreage	4.22	9.20
tblLandUse	LotAcreage	4.46	9.20
tblVehicleTrips	CC_TL	5.00	7.00
tblVehicleTrips	CC_TL	5.00	7.00
tblVehicleTrips	CNW_TL	5.00	7.00
tblVehicleTrips	CNW_TL	5.00	7.00
tblVehicleTrips	CW_TL	13.00	7.00
tblVehicleTrips	CW_TL	13.00	7.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	ST_TR	2.12	1.71
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	1.71
tblVehicleTrips	WD_TR	2.12	1.71

2.0 Emissions Summary

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	89.2856	35.5890	28.7985	0.0677	19.8350	1.4338	21.1018	10.1497	1.3194	11.3152						6,679.4408
Maximum	**89.2856**	**35.5890**	**28.7985**	**0.0677**	**19.8350**	**1.4338**	**21.1018**	**10.1497**	**1.3194**	**11.3152**						**6,679.4408**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	89.1534	31.0516	37.4699	0.0677	7.8442	1.3087	8.7912	3.9872	1.3083	4.9341						6,679.4408
Maximum	**89.1534**	**31.0516**	**37.4699**	**0.0677**	**7.8442**	**1.3087**	**8.7912**	**3.9872**	**1.3083**	**4.9341**						**6,679.4408**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.15**	**12.75**	**-30.11**	**0.00**	**60.45**	**8.72**	**58.34**	**60.72**	**0.84**	**56.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.5292	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Energy	0.0403	0.3662	0.3076	2.2000e-003		0.0278	0.0278		0.0278	0.0278						442.0759
Mobile	1.9064	12.4907	15.7301	0.0622	3.4764	0.0891	3.5655	0.9562	0.0849	1.0410						6,822.6422
Total	**12.4758**	**12.8575**	**16.0926**	**0.0644**	**3.4764**	**0.1171**	**3.5935**	**0.9562**	**0.1129**	**1.0690**						**7,264.8435**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.0031	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Energy	0.0403	0.3662	0.3076	2.2000e-003		0.0278	0.0278		0.0278	0.0278						442.0759
Mobile	1.9064	12.4907	15.7301	0.0622	3.4764	0.0891	3.5655	0.9562	0.0849	1.0410						6,822.6422
Total	**9.9498**	**12.8575**	**16.0926**	**0.0644**	**3.4764**	**0.1171**	**3.5935**	**0.9562**	**0.1129**	**1.0690**						**7,264.8435**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	20.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/30/2023	2/10/2023	5	10	
3	Grading	Grading	2/13/2023	3/24/2023	5	30	
4	Building Construction	Building Construction	3/27/2023	9/8/2023	5	120	
5	Paving	Paving	9/11/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	10/9/2023	11/3/2023	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 1.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 567,263; Non-Residential Outdoor: 189,088; Striped Parking Area: 3,840 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	23.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	189.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	72.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	37.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2588	0.0000	0.2588	0.0392	0.0000	0.0392						0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280						3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**0.2588**	**0.9975**	**1.2563**	**0.0392**	**0.9280**	**0.9672**						**3,773.2183**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.1600e-003	0.1883	0.0369	7.1000e-004	0.0201	1.5200e-003	0.0216	5.5100e-003	1.4600e-003	6.9700e-003						81.6052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0474	0.0314	0.4090	1.2500e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400						129.2270
Total	**0.0506**	**0.2197**	**0.4459**	**1.9600e-003**	**0.1684**	**2.2300e-003**	**0.1706**	**0.0448**	**2.1200e-003**	**0.0470**						**210.8322**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1009	0.0000	0.1009	0.0153	0.0000	0.0153						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,773.2183
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**0.1009**	**0.8627**	**0.9636**	**0.0153**	**0.8627**	**0.8780**						**3,773.2183**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.1600e-003	0.1883	0.0369	7.1000e-004	0.0201	1.5200e-003	0.0216	5.5100e-003	1.4600e-003	6.9700e-003						81.6052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0474	0.0314	0.4090	1.2500e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400						129.2270
Total	**0.0506**	**0.2197**	**0.4459**	**1.9600e-003**	**0.1684**	**2.2300e-003**	**0.1706**	**0.0448**	**2.1200e-003**	**0.0470**						**210.8322**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025						0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647						3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**						**3,717.1219**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0569	0.0376	0.4908	1.5000e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480						155.0724
Total	**0.0569**	**0.0376**	**0.4908**	**1.5000e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**						**155.0724**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0381		0.9462	0.9462		0.9462	0.9462						3,717.1219
Total	**0.9312**	**19.0656**	**22.9600**	**0.0381**	**7.6662**	**0.9462**	**8.6124**	**3.9400**	**0.9462**	**4.8861**						**3,717.1219**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0569	0.0376	0.4908	1.5000e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480						155.0724
Total	**0.0569**	**0.0376**	**0.4908**	**1.5000e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**						**155.0724**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2129	0.0000	9.2129	3.6552	0.0000	3.6552						0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.2129**	**1.4245**	**10.6373**	**3.6552**	**1.3105**	**4.9657**						**6,060.0836**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0173	1.0316	0.2020	3.9100e-003	0.1102	8.3300e-003	0.1185	0.0302	7.9700e-003	0.0382						447.0546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0632	0.0418	0.5453	1.6700e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533						172.3027
Total	**0.0805**	**1.0734**	**0.7473**	**5.5800e-003**	**0.3079**	**9.2800e-003**	**0.3172**	**0.0826**	**8.8400e-003**	**0.0915**						**619.3572**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5930	0.0000	3.5930	1.4255	0.0000	1.4255						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994						6,060.0836
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5930**	**1.2994**	**4.8924**	**1.4255**	**1.2994**	**2.7249**						**6,060.0836**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0173	1.0316	0.2020	3.9100e-003	0.1102	8.3300e-003	0.1185	0.0302	7.9700e-003	0.0382						447.0546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0632	0.0418	0.5453	1.6700e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533						172.3027
Total	**0.0805**	**1.0734**	**0.7473**	**5.5800e-003**	**0.3079**	**9.2800e-003**	**0.3172**	**0.0826**	**8.8400e-003**	**0.0915**						**619.3572**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**						**2,570.4061**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0855	2.8848	0.9360	0.0107	0.3345	0.0168	0.3514	0.0964	0.0161	0.1125						1,194.9623
Worker	0.5876	0.3889	5.0714	0.0155	1.8388	8.8200e-003	1.8476	0.4877	8.1300e-003	0.4958						1,602.4147
Total	**0.6731**	**3.2737**	**6.0074**	**0.0262**	**2.1734**	**0.0256**	**2.1990**	**0.5841**	**0.0242**	**0.6083**						**2,797.3770**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,570.4061
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,570.4061**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0855	2.8848	0.9360	0.0107	0.3345	0.0168	0.3514	0.0964	0.0161	0.1125						1,194.9623
Worker	0.5876	0.3889	5.0714	0.0155	1.8388	8.8200e-003	1.8476	0.4877	8.1300e-003	0.4958						1,602.4147
Total	**0.6731**	**3.2737**	**6.0074**	**0.0262**	**2.1734**	**0.0256**	**2.1990**	**0.5841**	**0.0242**	**0.6083**						**2,797.3770**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694						2,225.4336
Paving	0.1886					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**1.2214**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**						**2,225.4336**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0474	0.0314	0.4090	1.2500e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400						129.2270
Total	**0.0474**	**0.0314**	**0.4090**	**1.2500e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**						**129.2270**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093						2,225.4336
Paving	0.1886					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.7496**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**						**2,225.4336**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0474	0.0314	0.4090	1.2500e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400						129.2270
Total	**0.0474**	**0.0314**	**0.4090**	**1.2500e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**						**129.2270**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	88.9771					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						281.8690
Total	**89.1687**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						**281.8690**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1169	0.0774	1.0088	3.0900e-003	0.3658	1.7500e-003	0.3675	0.0970	1.6200e-003	0.0986						318.7599
Total	**0.1169**	**0.0774**	**1.0088**	**3.0900e-003**	**0.3658**	**1.7500e-003**	**0.3675**	**0.0970**	**1.6200e-003**	**0.0986**						**318.7599**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	88.9771					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.8690
Total	**89.0365**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.8690**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1169	0.0774	1.0088	3.0900e-003	0.3658	1.7500e-003	0.3675	0.0970	1.6200e-003	0.0986						318.7599
Total	**0.1169**	**0.0774**	**1.0088**	**3.0900e-003**	**0.3658**	**1.7500e-003**	**0.3675**	**0.0970**	**1.6200e-003**	**0.0986**						**318.7599**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9064	12.4907	15.7301	0.0622	3.4764	0.0891	3.5655	0.9562	0.0849	1.0410						6,822.6422
Unmitigated	1.9064	12.4907	15.7301	0.0622	3.4764	0.0891	3.5655	0.9562	0.0849	1.0410						6,822.6422

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	332.25	0.00	0.00	564,142	564,142
Refrigerated Warehouse-No Rail	314.42	314.42	0.00	640,635	640,635
Total	646.67	314.42	0.00	1,204,777	1,204,777

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	7.00	7.00	7.00	59.00	0.00	41.00	92	5	3
Refrigerated Warehouse-No	7.00	7.00	7.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.486418	0.056693	0.203223	0.148945	0.038507	0.009459	0.008260	0.005996	0.000952	0.000366	0.033245	0.001002	0.006934
Unrefrigerated Warehouse-No Rail	0.304002	0.035433	0.127011	0.093089	0.038507	0.009459	0.175000	0.175000	0.000952	0.000366	0.033245	0.001002	0.006934

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Refrigerated Warehouse-No Rail	0.304002	0.035433	0.127011	0.093089	0.038507	0.009459	0.175000	0.175000	0.000952	0.000366	0.033245	0.001002	0.006934

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0403	0.3662	0.3076	2.2000e-003		0.0278	0.0278		0.0278	0.0278						442.0759
NaturalGas Unmitigated	0.0403	0.3662	0.3076	2.2000e-003		0.0278	0.0278		0.0278	0.0278						442.0759

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Refrigerated Warehouse-No Rail	1904.2	0.0205	0.1867	0.1568	1.1200e-003		0.0142	0.0142		0.0142	0.0142						225.3546
Unrefrigerated Warehouse-No Rail	1831.25	0.0198	0.1795	0.1508	1.0800e-003		0.0136	0.0136		0.0136	0.0136						216.7213
Total		**0.0403**	**0.3662**	**0.3076**	**2.2000e-003**		**0.0278**	**0.0278**		**0.0278**	**0.0278**						**442.0759**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Refrigerated Warehouse-No Rail	1.9042	0.0205	0.1867	0.1568	1.1200e-003		0.0142	0.0142		0.0142	0.0142						225.3546
Unrefrigerated Warehouse-No Rail	1.83125	0.0198	0.1795	0.1508	1.0800e-003		0.0136	0.0136		0.0136	0.0136						216.7213
Total		**0.0403**	**0.3662**	**0.3076**	**2.2000e-003**		**0.0278**	**0.0278**		**0.0278**	**0.0278**						**442.0759**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.0031	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Unmitigated	10.5292	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.4085					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.1156					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	5.0600e-003	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Total	**10.5291**	**5.0000e-004**	**0.0549**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**						**0.1255**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4876					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	7.5105					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	5.0600e-003	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Total	**8.0031**	**5.0000e-004**	**0.0549**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**						**0.1255**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stravinski-Daou Warehouses Project

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	194.30	1000sqft	9.20	194,304.00	0
Refrigerated Warehouse-No Rail	183.87	1000sqft	9.20	183,871.00	0
Parking Lot	160.00	Space	1.44	64,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Warehouses-No Rail. 194.304 KSF, 181.21 KSF. Parking area assumes max 160 parking spaces

Construction Phase - Construction based on model defaults and information provided. Tilt=up construction assumes 6 month building construction period.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults

Demolition - 5093 sf of building floor area to be demo'd

Grading - Import of 815 cy for Dauo warehouse and 695 cy for Stravinski warehouse. 1510 cy total. No export.

Architectural Coating - Arch coating based on model defaults. Assumes use of low-VOC (50 g/L or less) content arch paint

Vehicle Trips - Operational trip gen 1.71/KSF derived from the traffic analysis prepared for the project. Trip distances based on total avg of 7 miles/trip per traffic VMT analysis.

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - Assumes 50%CE for unpaved roads, 61%CE for graded surfaces, 15mph onsite speed limit, T3 equipment included for informational purposes

Area Mitigation - Includes the use of low-VOC content products

Water Mitigation - Includes installation of low-flow water fixtures and water-efficient irrigation systems

Waste Mitigation - Assumes minimum waste reduction of 50%

Fleet Mix - Adjusted to reflect estimated 35% truck (MHD & HHD). Emp trips assumes LDA, LDT1, LDT2, MDV adjusted equally to account for increased truck trips. All other veh cats based on model defaults.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	120.00
tblConstructionPhase	PhaseEndDate	12/5/2022	1/27/2023
tblConstructionPhase	PhaseEndDate	12/19/2022	2/10/2023
tblConstructionPhase	PhaseEndDate	1/30/2023	3/24/2023
tblConstructionPhase	PhaseEndDate	3/25/2024	9/8/2023
tblConstructionPhase	PhaseEndDate	4/22/2024	10/6/2023
tblConstructionPhase	PhaseEndDate	5/20/2024	11/3/2023
tblConstructionPhase	PhaseStartDate	11/8/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	12/6/2022	1/30/2023
tblConstructionPhase	PhaseStartDate	12/20/2022	2/13/2023
tblConstructionPhase	PhaseStartDate	1/31/2023	3/27/2023
tblConstructionPhase	PhaseStartDate	3/26/2024	9/11/2023
tblConstructionPhase	PhaseStartDate	4/23/2024	10/9/2023
tblFleetMix	HHD	5.9960e-003	0.18
tblFleetMix	HHD	5.9960e-003	0.18
tblFleetMix	LDA	0.49	0.30
tblFleetMix	LDA	0.49	0.30

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.20	0.13
tblFleetMix	LDT2	0.20	0.13
tblFleetMix	MDV	0.15	0.09
tblFleetMix	MDV	0.15	0.09
tblFleetMix	MHD	8.2600e-003	0.18
tblFleetMix	MHD	8.2600e-003	0.18
tblGrading	MaterialImported	0.00	1,510.00
tblLandUse	LandUseSquareFeet	194,300.00	194,304.00
tblLandUse	LotAcreage	4.22	9.20
tblLandUse	LotAcreage	4.46	9.20
tblVehicleTrips	CC_TL	5.00	7.00
tblVehicleTrips	CC_TL	5.00	7.00
tblVehicleTrips	CNW_TL	5.00	7.00
tblVehicleTrips	CNW_TL	5.00	7.00
tblVehicleTrips	CW_TL	13.00	7.00
tblVehicleTrips	CW_TL	13.00	7.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	ST_TR	2.12	1.71
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	1.71
tblVehicleTrips	WD_TR	2.12	1.71

2.0 Emissions Summary

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	89.2978	35.6242	28.7885	0.0676	19.8350	1.4338	21.1018	10.1497	1.3194	11.3152						6,672.7627
Maximum	**89.2978**	**35.6242**	**28.7885**	**0.0676**	**19.8350**	**1.4338**	**21.1018**	**10.1497**	**1.3194**	**11.3152**						**6,672.7627**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	89.1655	31.0868	37.4599	0.0676	7.8442	1.3087	8.7912	3.9872	1.3083	4.9341						6,672.7627
Maximum	**89.1655**	**31.0868**	**37.4599**	**0.0676**	**7.8442**	**1.3087**	**8.7912**	**3.9872**	**1.3083**	**4.9341**						**6,672.7627**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.15**	**12.74**	**-30.12**	**0.00**	**60.45**	**8.72**	**58.34**	**60.72**	**0.84**	**56.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.5292	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Energy	0.0403	0.3662	0.3076	2.2000e-003		0.0278	0.0278		0.0278	0.0278						442.0759
Mobile	1.8660	12.9691	16.7515	0.0617	3.4764	0.0894	3.5658	0.9562	0.0851	1.0413						6,770.5585
Total	**12.4354**	**13.3358**	**17.1140**	**0.0639**	**3.4764**	**0.1174**	**3.5938**	**0.9562**	**0.1132**	**1.0693**						**7,212.7598**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	8.0031	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Energy	0.0403	0.3662	0.3076	2.2000e-003		0.0278	0.0278		0.0278	0.0278						442.0759
Mobile	1.8660	12.9691	16.7515	0.0617	3.4764	0.0894	3.5658	0.9562	0.0851	1.0413						6,770.5585
Total	**9.9094**	**13.3358**	**17.1140**	**0.0639**	**3.4764**	**0.1174**	**3.5938**	**0.9562**	**0.1132**	**1.0693**						**7,212.7598**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	20.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/30/2023	2/10/2023	5	10	
3	Grading	Grading	2/13/2023	3/24/2023	5	30	
4	Building Construction	Building Construction	3/27/2023	9/8/2023	5	120	
5	Paving	Paving	9/11/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	10/9/2023	11/3/2023	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 1.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 567,263; Non-Residential Outdoor: 189,088; Striped Parking Area: 3,840 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	23.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	189.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	72.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	37.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2588	0.0000	0.2588	0.0392	0.0000	0.0392						0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280						3,773.2183
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**0.2588**	**0.9975**	**1.2563**	**0.0392**	**0.9280**	**0.9672**						**3,773.2183**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0100e-003	0.1937	0.0374	7.2000e-004	0.0201	1.5200e-003	0.0216	5.5100e-003	1.4600e-003	6.9700e-003						81.6704
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0523	0.0356	0.3993	1.2000e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400						123.9505
Total	**0.0553**	**0.2293**	**0.4367**	**1.9200e-003**	**0.1684**	**2.2300e-003**	**0.1706**	**0.0448**	**2.1200e-003**	**0.0470**						**205.6209**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1009	0.0000	0.1009	0.0153	0.0000	0.0153						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,773.2183
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**0.1009**	**0.8627**	**0.9636**	**0.0153**	**0.8627**	**0.8780**						**3,773.2183**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0100e-003	0.1937	0.0374	7.2000e-004	0.0201	1.5200e-003	0.0216	5.5100e-003	1.4600e-003	6.9700e-003						81.6704
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0523	0.0356	0.3993	1.2000e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400						123.9505
Total	**0.0553**	**0.2293**	**0.4367**	**1.9200e-003**	**0.1684**	**2.2300e-003**	**0.1706**	**0.0448**	**2.1200e-003**	**0.0470**						**205.6209**

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025						0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647						3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**						**3,717.1219**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0628	0.0427	0.4791	1.4400e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480						148.7406
Total	**0.0628**	**0.0427**	**0.4791**	**1.4400e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**						**148.7406**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0381		0.9462	0.9462		0.9462	0.9462						3,717.1219
Total	**0.9312**	**19.0656**	**22.9600**	**0.0381**	**7.6662**	**0.9462**	**8.6124**	**3.9400**	**0.9462**	**4.8861**						**3,717.1219**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0628	0.0427	0.4791	1.4400e-003	0.1780	8.5000e-004	0.1788	0.0472	7.9000e-004	0.0480						148.7406
Total	**0.0628**	**0.0427**	**0.4791**	**1.4400e-003**	**0.1780**	**8.5000e-004**	**0.1788**	**0.0472**	**7.9000e-004**	**0.0480**						**148.7406**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2129	0.0000	9.2129	3.6552	0.0000	3.6552						0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**9.2129**	**1.4245**	**10.6373**	**3.6552**	**1.3105**	**4.9657**						**6,060.0836**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0165	1.0611	0.2050	3.9200e-003	0.1102	8.3500e-003	0.1185	0.0302	7.9900e-003	0.0382						447.4118
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0698	0.0475	0.5323	1.6000e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533						165.2673
Total	**0.0863**	**1.1086**	**0.7373**	**5.5200e-003**	**0.3079**	**9.3000e-003**	**0.3172**	**0.0826**	**8.8600e-003**	**0.0915**						**612.6791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5930	0.0000	3.5930	1.4255	0.0000	1.4255						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994						6,060.0836
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5930**	**1.2994**	**4.8924**	**1.4255**	**1.2994**	**2.7249**						**6,060.0836**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0165	1.0611	0.2050	3.9200e-003	0.1102	8.3500e-003	0.1185	0.0302	7.9900e-003	0.0382						447.4118
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0698	0.0475	0.5323	1.6000e-003	0.1977	9.5000e-004	0.1987	0.0524	8.7000e-004	0.0533						165.2673
Total	**0.0863**	**1.1086**	**0.7373**	**5.5200e-003**	**0.3079**	**9.3000e-003**	**0.3172**	**0.0826**	**8.8600e-003**	**0.0915**						**612.6791**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**						**2,570.4061**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0836	2.9813	0.9724	0.0107	0.3345	0.0169	0.3515	0.0964	0.0162	0.1126						1,196.9866
Worker	0.6487	0.4415	4.9507	0.0149	1.8388	8.8200e-003	1.8476	0.4877	8.1300e-003	0.4958						1,536.9857
Total	**0.7323**	**3.4227**	**5.9232**	**0.0256**	**2.1734**	**0.0258**	**2.1991**	**0.5841**	**0.0243**	**0.6084**						**2,733.9724**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,570.4061
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,570.4061**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0836	2.9813	0.9724	0.0107	0.3345	0.0169	0.3515	0.0964	0.0162	0.1126						1,196.9866
Worker	0.6487	0.4415	4.9507	0.0149	1.8388	8.8200e-003	1.8476	0.4877	8.1300e-003	0.4958						1,536.9857
Total	**0.7323**	**3.4227**	**5.9232**	**0.0256**	**2.1734**	**0.0258**	**2.1991**	**0.5841**	**0.0243**	**0.6084**						**2,733.9724**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694						2,225.4336
Paving	0.1886					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**1.2214**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**						**2,225.4336**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0523	0.0356	0.3993	1.2000e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400						123.9505
Total	**0.0523**	**0.0356**	**0.3993**	**1.2000e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**						**123.9505**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093						2,225.4336
Paving	0.1886					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.7496**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**						**2,225.4336**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0523	0.0356	0.3993	1.2000e-003	0.1483	7.1000e-004	0.1490	0.0393	6.6000e-004	0.0400						123.9505
Total	**0.0523**	**0.0356**	**0.3993**	**1.2000e-003**	**0.1483**	**7.1000e-004**	**0.1490**	**0.0393**	**6.6000e-004**	**0.0400**						**123.9505**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	88.9771					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						281.8690
Total	**89.1687**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						**281.8690**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1291	0.0878	0.9848	2.9600e-003	0.3658	1.7500e-003	0.3675	0.0970	1.6200e-003	0.0986						305.7445
Total	**0.1291**	**0.0878**	**0.9848**	**2.9600e-003**	**0.3658**	**1.7500e-003**	**0.3675**	**0.0970**	**1.6200e-003**	**0.0986**						**305.7445**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	88.9771					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.8690
Total	**89.0365**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.8690**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1291	0.0878	0.9848	2.9600e-003	0.3658	1.7500e-003	0.3675	0.0970	1.6200e-003	0.0986						305.7445
Total	**0.1291**	**0.0878**	**0.9848**	**2.9600e-003**	**0.3658**	**1.7500e-003**	**0.3675**	**0.0970**	**1.6200e-003**	**0.0986**						**305.7445**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8660	12.9691	16.7515	0.0617	3.4764	0.0894	3.5658	0.9562	0.0851	1.0413						6,770.5585
Unmitigated	1.8660	12.9691	16.7515	0.0617	3.4764	0.0894	3.5658	0.9562	0.0851	1.0413						6,770.5585

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	332.25	0.00	0.00	564,142	564,142
Refrigerated Warehouse-No Rail	314.42	314.42	0.00	640,635	640,635
Total	646.67	314.42	0.00	1,204,777	1,204,777

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	7.00	7.00	7.00	59.00	0.00	41.00	92	5	3
Refrigerated Warehouse-No	7.00	7.00	7.00	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.486418	0.056693	0.203223	0.148945	0.038507	0.009459	0.008260	0.005996	0.000952	0.000366	0.033245	0.001002	0.006934
Unrefrigerated Warehouse-No Rail	0.304002	0.035433	0.127011	0.093089	0.038507	0.009459	0.175000	0.175000	0.000952	0.000366	0.033245	0.001002	0.006934

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Refrigerated Warehouse-No Rail	0.304002	0.035433	0.127011	0.093089	0.038507	0.009459	0.175000	0.175000	0.000952	0.000366	0.033245	0.001002	0.006934

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0403	0.3662	0.3076	2.2000e-003		0.0278	0.0278		0.0278	0.0278						442.0759
NaturalGas Unmitigated	0.0403	0.3662	0.3076	2.2000e-003		0.0278	0.0278		0.0278	0.0278						442.0759

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Refrigerated Warehouse-No Rail	1904.2	0.0205	0.1867	0.1568	1.1200e-003		0.0142	0.0142		0.0142	0.0142						225.3546
Unrefrigerated Warehouse-No Rail	1831.25	0.0198	0.1795	0.1508	1.0800e-003		0.0136	0.0136		0.0136	0.0136						216.7213
Total		**0.0403**	**0.3662**	**0.3076**	**2.2000e-003**		**0.0278**	**0.0278**		**0.0278**	**0.0278**						**442.0759**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Refrigerated Warehouse-No Rail	1.9042	0.0205	0.1867	0.1568	1.1200e-003		0.0142	0.0142		0.0142	0.0142						225.3546
Unrefrigerated Warehouse-No Rail	1.83125	0.0198	0.1795	0.1508	1.0800e-003		0.0136	0.0136		0.0136	0.0136						216.7213
Total		**0.0403**	**0.3662**	**0.3076**	**2.2000e-003**		**0.0278**	**0.0278**		**0.0278**	**0.0278**						**442.0759**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.0031	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Unmitigated	10.5292	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.4085					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.1156					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	5.0600e-003	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Total	**10.5291**	**5.0000e-004**	**0.0549**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**						**0.1255**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4876					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	7.5105					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	5.0600e-003	5.0000e-004	0.0549	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004						0.1255
Total	**8.0031**	**5.0000e-004**	**0.0549**	**0.0000**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**						**0.1255**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stravinski-Daou Warehouses Project

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	194.30	1000sqft	9.20	194,304.00	0
Refrigerated Warehouse-No Rail	183.87	1000sqft	9.20	183,871.00	0
Parking Lot	160.00	Space	1.44	64,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Warehouses-No Rail. 194.304 KSF, 181.21 KSF. Parking area assumes max 160 parking spaces

Construction Phase - Construction based on model defaults and information provided. Tilt=up construction assumes 6 month building construction period.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults

Demolition - 5093 sf of building floor area to be demo'd

Grading - Import of 815 cy for Dauo warehouse and 695 cy for Stravinski warehouse. 1510 cy total. No export.

Architectural Coating - Arch coating based on model defaults. Assumes use of low-VOC (50 g/L or less) content arch paint

Vehicle Trips - Operational trip gen 1.71/KSF derived from the traffic analysis prepared for the project. Trip distances based on total avg of 7 miles/trip per traffic VMT analysis.

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - Assumes 50%CE for unpaved roads, 61%CE for graded surfaces, 15mph onsite speed limit, T3 equipment included for informational purposes

Area Mitigation - Includes the use of low-VOC content products

Water Mitigation - Includes installation of low-flow water fixtures and water-efficient irrigation systems

Waste Mitigation - Assumes minimum waste reduction of 50%

Fleet Mix - Adjusted to reflect estimated 35% truck (MHD & HHD). Emp trips assumes LDA, LDT1, LDT2, MDV adjusted equally to account for increased truck trips. All other veh cats based on model defaults.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	120.00
tblConstructionPhase	PhaseEndDate	12/5/2022	1/27/2023
tblConstructionPhase	PhaseEndDate	12/19/2022	2/10/2023
tblConstructionPhase	PhaseEndDate	1/30/2023	3/24/2023
tblConstructionPhase	PhaseEndDate	3/25/2024	9/8/2023
tblConstructionPhase	PhaseEndDate	4/22/2024	10/6/2023
tblConstructionPhase	PhaseEndDate	5/20/2024	11/3/2023
tblConstructionPhase	PhaseStartDate	11/8/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	12/6/2022	1/30/2023
tblConstructionPhase	PhaseStartDate	12/20/2022	2/13/2023
tblConstructionPhase	PhaseStartDate	1/31/2023	3/27/2023
tblConstructionPhase	PhaseStartDate	3/26/2024	9/11/2023
tblConstructionPhase	PhaseStartDate	4/23/2024	10/9/2023
tblFleetMix	HHD	5.9960e-003	0.18
tblFleetMix	HHD	5.9960e-003	0.18
tblFleetMix	LDA	0.49	0.30
tblFleetMix	LDA	0.49	0.30

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.20	0.13
tblFleetMix	LDT2	0.20	0.13
tblFleetMix	MDV	0.15	0.09
tblFleetMix	MDV	0.15	0.09
tblFleetMix	MHD	8.2600e-003	0.18
tblFleetMix	MHD	8.2600e-003	0.18
tblGrading	MaterialImported	0.00	1,510.00
tblLandUse	LandUseSquareFeet	194,300.00	194,304.00
tblLandUse	LotAcreage	4.22	9.20
tblLandUse	LotAcreage	4.46	9.20
tblVehicleTrips	CC_TL	5.00	7.00
tblVehicleTrips	CC_TL	5.00	7.00
tblVehicleTrips	CNW_TL	5.00	7.00
tblVehicleTrips	CNW_TL	5.00	7.00
tblVehicleTrips	CW_TL	13.00	7.00
tblVehicleTrips	CW_TL	13.00	7.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	ST_TR	2.12	1.71
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	1.71
tblVehicleTrips	WD_TR	2.12	1.71

2.0 Emissions Summary

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.1284	2.0731	2.2312	5.0800e-003	0.3782	0.0872	0.4654	0.1432	0.0813	0.2245						460.3730
Maximum	**1.1284**	**2.0731**	**2.2312**	**5.0800e-003**	**0.3782**	**0.0872**	**0.4654**	**0.1432**	**0.0813**	**0.2245**						**460.3730**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.0193	1.9330	2.5603	5.0800e-003	0.2323	0.0958	0.3282	0.0787	0.0957	0.1744						460.3727
Maximum	**1.0193**	**1.9330**	**2.5603**	**5.0800e-003**	**0.2323**	**0.0958**	**0.3282**	**0.0787**	**0.0957**	**0.1744**						**460.3727**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**9.66**	**6.75**	**-14.75**	**0.00**	**38.56**	**-9.91**	**29.48**	**45.05**	**-17.75**	**22.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-8-2022	2-7-2023	0.3292	0.2529
2	2-8-2023	5-7-2023	0.8890	0.7717
3	5-8-2023	8-7-2023	0.6540	0.6193
4	8-8-2023	9-30-2023	0.3096	0.3020
		Highest	0.8890	0.7717

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9215	8.0000e-005	9.0500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Energy	7.3500e-003	0.0668	0.0561	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003						305.9958
Mobile	0.2627	1.8456	2.3196	8.8000e-003	0.4839	0.0127	0.4966	0.1334	0.0121	0.1456						875.7776
Waste						0.0000	0.0000		0.0000	0.0000						178.7714
Water						0.0000	0.0000		0.0000	0.0000						163.2514
Total	**2.1915**	**1.9125**	**2.3848**	**9.2000e-003**	**0.4839**	**0.0178**	**0.5017**	**0.1334**	**0.0172**	**0.1507**						**1,523.8150**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4605	8.0000e-005	9.0500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Energy	7.3500e-003	0.0668	0.0561	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003						305.9958
Mobile	0.2627	1.8456	2.3196	8.8000e-003	0.4839	0.0127	0.4966	0.1334	0.0121	0.1456						875.7776
Waste						0.0000	0.0000		0.0000	0.0000						89.3857
Water						0.0000	0.0000		0.0000	0.0000						130.6011
Total	**1.7306**	**1.9125**	**2.3848**	**9.2000e-003**	**0.4839**	**0.0178**	**0.5017**	**0.1334**	**0.0172**	**0.1507**						**1,401.7790**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**21.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**8.01**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/30/2023	2/10/2023	5	10	
3	Grading	Grading	2/13/2023	3/24/2023	5	30	

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	3/27/2023	9/8/2023	5	120	
5	Paving	Paving	9/11/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	10/9/2023	11/3/2023	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 1.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 567,263; Non-Residential Outdoor: 189,088; Striped Parking Area: 3,840 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	23.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	189.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	72.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	37.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.5900e-003	0.0000	2.5900e-003	3.9000e-004	0.0000	3.9000e-004						0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003						34.2301
Total	**0.0227**	**0.2148**	**0.1964**	**3.9000e-004**	**2.5900e-003**	**9.9800e-003**	**0.0126**	**3.9000e-004**	**9.2800e-003**	**9.6700e-003**						**34.2301**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.9400e-003	3.7000e-004	1.0000e-005	2.0000e-004	2.0000e-005	2.1000e-004	5.0000e-005	1.0000e-005	7.0000e-005						0.7406
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.8000e-004	3.5000e-004	3.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.1323
Total	**5.1000e-004**	**2.2900e-003**	**4.3400e-003**	**2.0000e-005**	**1.6400e-003**	**3.0000e-005**	**1.6600e-003**	**4.3000e-004**	**2.0000e-005**	**4.6000e-004**						**1.8729**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0100e-003	0.0000	1.0100e-003	1.5000e-004	0.0000	1.5000e-004						0.0000
Off-Road	9.2500e-003	0.1831	0.2467	3.9000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003						34.2300
Total	**9.2500e-003**	**0.1831**	**0.2467**	**3.9000e-004**	**1.0100e-003**	**8.6300e-003**	**9.6400e-003**	**1.5000e-004**	**8.6300e-003**	**8.7800e-003**						**34.2300**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.9400e-003	3.7000e-004	1.0000e-005	2.0000e-004	2.0000e-005	2.1000e-004	5.0000e-005	1.0000e-005	7.0000e-005						0.7406
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.8000e-004	3.5000e-004	3.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.1323
Total	**5.1000e-004**	**2.2900e-003**	**4.3400e-003**	**2.0000e-005**	**1.6400e-003**	**3.0000e-005**	**1.6600e-003**	**4.3000e-004**	**2.0000e-005**	**4.6000e-004**						**1.8729**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505						0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003						16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0983**	**6.3300e-003**	**0.1046**	**0.0505**	**5.8200e-003**	**0.0563**						**16.8606**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.9000e-004	2.1000e-004	2.3800e-003	1.0000e-005	8.7000e-004	0.0000	8.7000e-004	2.3000e-004	0.0000	2.3000e-004						0.6794
Total	**2.9000e-004**	**2.1000e-004**	**2.3800e-003**	**1.0000e-005**	**8.7000e-004**	**0.0000**	**8.7000e-004**	**2.3000e-004**	**0.0000**	**2.3000e-004**						**0.6794**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0383	0.0000	0.0383	0.0197	0.0000	0.0197						0.0000
Off-Road	4.6600e-003	0.0953	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003						16.8606
Total	**4.6600e-003**	**0.0953**	**0.1148**	**1.9000e-004**	**0.0383**	**4.7300e-003**	**0.0431**	**0.0197**	**4.7300e-003**	**0.0244**						**16.8606**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.9000e-004	2.1000e-004	2.3800e-003	1.0000e-005	8.7000e-004	0.0000	8.7000e-004	2.3000e-004	0.0000	2.3000e-004						0.6794
Total	**2.9000e-004**	**2.1000e-004**	**2.3800e-003**	**1.0000e-005**	**8.7000e-004**	**0.0000**	**8.7000e-004**	**2.3000e-004**	**0.0000**	**2.3000e-004**						**0.6794**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1382	0.0000	0.1382	0.0548	0.0000	0.0548						0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197						82.4642
Total	**0.0498**	**0.5177**	**0.4208**	**9.3000e-004**	**0.1382**	**0.0214**	**0.1596**	**0.0548**	**0.0197**	**0.0745**						**82.4642**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5000e-004	0.0160	3.0500e-003	6.0000e-005	1.6100e-003	1.3000e-004	1.7400e-003	4.4000e-004	1.2000e-004	5.6000e-004						6.0855
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.6000e-004	7.0000e-004	7.9400e-003	2.0000e-005	2.8900e-003	1.0000e-005	2.9000e-003	7.7000e-004	1.0000e-005	7.8000e-004						2.2646
Total	**1.2100e-003**	**0.0167**	**0.0110**	**8.0000e-005**	**4.5000e-003**	**1.4000e-004**	**4.6400e-003**	**1.2100e-003**	**1.3000e-004**	**1.3400e-003**						**8.3501**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0539	0.0000	0.0539	0.0214	0.0000	0.0214						0.0000
Off-Road	0.0229	0.4497	0.5508	9.3000e-004		0.0195	0.0195		0.0195	0.0195						82.4641
Total	**0.0229**	**0.4497**	**0.5508**	**9.3000e-004**	**0.0539**	**0.0195**	**0.0734**	**0.0214**	**0.0195**	**0.0409**						**82.4641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5000e-004	0.0160	3.0500e-003	6.0000e-005	1.6100e-003	1.3000e-004	1.7400e-003	4.4000e-004	1.2000e-004	5.6000e-004						6.0855
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.6000e-004	7.0000e-004	7.9400e-003	2.0000e-005	2.8900e-003	1.0000e-005	2.9000e-003	7.7000e-004	1.0000e-005	7.8000e-004						2.2646
Total	**1.2100e-003**	**0.0167**	**0.0110**	**8.0000e-005**	**4.5000e-003**	**1.4000e-004**	**4.6400e-003**	**1.2100e-003**	**1.3000e-004**	**1.3400e-003**						**8.3501**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0944	0.8631	0.9746	1.6200e-003		0.0420	0.0420		0.0395	0.0395						139.9100
Total	**0.0944**	**0.8631**	**0.9746**	**1.6200e-003**		**0.0420**	**0.0420**		**0.0395**	**0.0395**						**139.9100**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	5.0600e-003	0.1785	0.0573	6.4000e-004	0.0196	1.0100e-003	0.0207	5.6800e-003	9.7000e-004	6.6400e-003						65.0900
Worker	0.0356	0.0259	0.2954	9.0000e-004	0.1074	5.3000e-004	0.1080	0.0286	4.9000e-004	0.0290						84.2446
Total	**0.0406**	**0.2044**	**0.3527**	**1.5400e-003**	**0.1271**	**1.5400e-003**	**0.1286**	**0.0342**	**1.4600e-003**	**0.0357**						**149.3346**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0404	0.8536	1.0724	1.6200e-003		0.0542	0.0542		0.0542	0.0542						139.9098
Total	**0.0404**	**0.8536**	**1.0724**	**1.6200e-003**		**0.0542**	**0.0542**		**0.0542**	**0.0542**						**139.9098**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	5.0600e-003	0.1785	0.0573	6.4000e-004	0.0196	1.0100e-003	0.0207	5.6800e-003	9.7000e-004	6.6400e-003						65.0900
Worker	0.0356	0.0259	0.2954	9.0000e-004	0.1074	5.3000e-004	0.1080	0.0286	4.9000e-004	0.0290						84.2446
Total	**0.0406**	**0.2044**	**0.3527**	**1.5400e-003**	**0.1271**	**1.5400e-003**	**0.1286**	**0.0342**	**1.4600e-003**	**0.0357**						**149.3346**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003						20.1888
Paving	1.8900e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.0122**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**						**20.1888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.8000e-004	3.5000e-004	3.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.1323
Total	**4.8000e-004**	**3.5000e-004**	**3.9700e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**						**1.1323**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.6100e-003	0.1130	0.1730	2.3000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003						20.1888
Paving	1.8900e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**7.5000e-003**	**0.1130**	**0.1730**	**2.3000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**						**20.1888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.8000e-004	3.5000e-004	3.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.1323
Total	**4.8000e-004**	**3.5000e-004**	**3.9700e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**						**1.1323**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8898					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004						2.5571
Total	**0.8917**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**						**2.5571**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.1800e-003	8.6000e-004	9.7900e-003	3.0000e-005	3.5600e-003	2.0000e-005	3.5800e-003	9.5000e-004	2.0000e-005	9.6000e-004						2.7931
Total	**1.1800e-003**	**8.6000e-004**	**9.7900e-003**	**3.0000e-005**	**3.5600e-003**	**2.0000e-005**	**3.5800e-003**	**9.5000e-004**	**2.0000e-005**	**9.6000e-004**						**2.7931**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8898					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	5.9000e-004	0.0136	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004						2.5571
Total	**0.8904**	**0.0136**	**0.0183**	**3.0000e-005**		**9.5000e-004**	**9.5000e-004**		**9.5000e-004**	**9.5000e-004**						**2.5571**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.1800e-003	8.6000e-004	9.7900e-003	3.0000e-005	3.5600e-003	2.0000e-005	3.5800e-003	9.5000e-004	2.0000e-005	9.6000e-004						2.7931
Total	**1.1800e-003**	**8.6000e-004**	**9.7900e-003**	**3.0000e-005**	**3.5600e-003**	**2.0000e-005**	**3.5800e-003**	**9.5000e-004**	**2.0000e-005**	**9.6000e-004**						**2.7931**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2627	1.8456	2.3196	8.8000e-003	0.4839	0.0127	0.4966	0.1334	0.0121	0.1456						875.7776
Unmitigated	0.2627	1.8456	2.3196	8.8000e-003	0.4839	0.0127	0.4966	0.1334	0.0121	0.1456						875.7776

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	332.25	0.00	0.00	564,142	564,142
Refrigerated Warehouse-No Rail	314.42	314.42	0.00	640,635	640,635
Total	646.67	314.42	0.00	1,204,777	1,204,777

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	7.00	7.00	7.00	59.00	0.00	41.00	92	5	3
Refrigerated Warehouse-No Rail	7.00	7.00	7.00	59.00	0.00	41.00	92	5	3

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.486418	0.056693	0.203223	0.148945	0.038507	0.009459	0.008260	0.005996	0.000952	0.000366	0.033245	0.001002	0.006934
Unrefrigerated Warehouse-No Rail	0.304002	0.035433	0.127011	0.093089	0.038507	0.009459	0.175000	0.175000	0.000952	0.000366	0.033245	0.001002	0.006934
Refrigerated Warehouse-No Rail	0.304002	0.035433	0.127011	0.093089	0.038507	0.009459	0.175000	0.175000	0.000952	0.000366	0.033245	0.001002	0.006934

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						232.8051
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						232.8051
NaturalGas Mitigated	7.3500e-003	0.0668	0.0561	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003						73.1906
NaturalGas Unmitigated	7.3500e-003	0.0668	0.0561	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003						73.1906

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Refrigerated Warehouse-No Rail	695032	3.7500e-003	0.0341	0.0286	2.0000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003						37.3100
Unrefrigerated Warehouse-No Rail	668406	3.6000e-003	0.0328	0.0275	2.0000e-004		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003						35.8806
Total		**7.3500e-003**	**0.0668**	**0.0561**	**4.0000e-004**		**5.0800e-003**	**5.0800e-003**		**5.0800e-003**	**5.0800e-003**						**73.1906**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Refrigerated Warehouse-No Rail	695032	3.7500e-003	0.0341	0.0286	2.0000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003						37.3100
Unrefrigerated Warehouse-No Rail	668406	3.6000e-003	0.0328	0.0275	2.0000e-004		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003						35.8806
Total		**7.3500e-003**	**0.0668**	**0.0561**	**4.0000e-004**		**5.0800e-003**	**5.0800e-003**		**5.0800e-003**	**5.0800e-003**						**73.1906**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	22400				2.0930
Refrigerated Warehouse-No Rail	1.78906e+006				167.1678
Unrefrigerated Warehouse-No Rail	680064				63.5443
Total					**232.8051**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	22400				2.0930
Refrigerated Warehouse-No Rail	1.78906e+006				167.1678
Unrefrigerated Warehouse-No Rail	680064				63.5443
Total					**232.8051**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4605	8.0000e-005	9.0500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Unmitigated	1.9215	8.0000e-005	9.0500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4396					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.4811					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	8.4000e-004	8.0000e-005	9.0500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Total	**1.9215**	**8.0000e-005**	**9.0500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0188**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0890					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.3707					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	8.4000e-004	8.0000e-005	9.0500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Total	**1.4605**	**8.0000e-005**	**9.0500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0188**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				130.6011
Unmitigated				163.2514

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0				0.0000
Refrigerated Warehouse-No Rail	42.5199 / 0				79.3744
Unrefrigerated Warehouse-No Rail	44.9319 / 0				83.8769
Total					**163.2514**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0				0.0000
Refrigerated Warehouse-No Rail	34.0159 / 0				63.4995
Unrefrigerated Warehouse-No Rail	35.9455 / 0				67.1016
Total					**130.6011**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				89.3857
Unmitigated				178.7714

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0				0.0000
Refrigerated Warehouse-No Rail	172.84				86.9215
Unrefrigerated Warehouse-No Rail	182.64				91.8499
Total					**178.7714**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0				0.0000
Refrigerated Warehouse-No Rail	86.42				43.4608
Unrefrigerated Warehouse-No Rail	91.32				45.9250
Total					**89.3857**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stravinski-Daou Warehouses Project

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	194.30	1000sqft	9.20	194,304.00	0
Refrigerated Warehouse-No Rail	183.87	1000sqft	9.20	183,871.00	0
Parking Lot	160.00	Space	1.44	64,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Warehouses-No Rail. 194.304 KSF, 181.21 KSF. Parking area assumes max 160 parking spaces

Construction Phase - Construction based on model defaults and information provided. Tilt=up construction assumes 6 month building construction period.

Off-road Equipment - Offroad equipment based on model defaults.

Trips and VMT - Construction trips based on model defaults

Demolition - 5093 sf of building floor area to be demo'd

Grading - Import of 815 cy for Dauo warehouse and 695 cy for Stravinski warehouse. 1510 cy total. No export.

Architectural Coating - Arch coating based on model defaults. Assumes use of low-VOC (50 g/L or less) content arch paint

Vehicle Trips - Operational trip gen 1.71/KSF derived from the traffic analysis prepared for the project. Trip distances based on total avg of 7 miles/trip per traffic VMT analysis.

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - Assumes 50%CE for unpaved roads, 61%CE for graded surfaces, 15mph onsite speed limit, T3 equipment included for informational purposes

Area Mitigation - Includes the use of low-VOC content products

Water Mitigation - Includes installation of low-flow water fixtures and water-efficient irrigation systems

Waste Mitigation - Assumes minimum waste reduction of 50%

Fleet Mix - Adjusted to reflect estimated 35% truck (MHD & HHD). Emp trips assumes LDA, LDT1, LDT2, MDV adjusted equally to account for increased truck trips. All other veh cats based on model defaults.

Area Coating -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	120.00
tblConstructionPhase	PhaseEndDate	12/5/2022	1/27/2023
tblConstructionPhase	PhaseEndDate	12/19/2022	2/10/2023
tblConstructionPhase	PhaseEndDate	1/30/2023	3/24/2023
tblConstructionPhase	PhaseEndDate	3/25/2024	9/8/2023
tblConstructionPhase	PhaseEndDate	4/22/2024	10/6/2023
tblConstructionPhase	PhaseEndDate	5/20/2024	11/3/2023
tblConstructionPhase	PhaseStartDate	11/8/2022	1/1/2023
tblConstructionPhase	PhaseStartDate	12/6/2022	1/30/2023
tblConstructionPhase	PhaseStartDate	12/20/2022	2/13/2023
tblConstructionPhase	PhaseStartDate	1/31/2023	3/27/2023
tblConstructionPhase	PhaseStartDate	3/26/2024	9/11/2023
tblConstructionPhase	PhaseStartDate	4/23/2024	10/9/2023
tblFleetMix	HHD	5.9170e-003	0.18
tblFleetMix	HHD	5.9170e-003	0.18
tblFleetMix	LDA	0.52	0.30
tblFleetMix	LDA	0.52	0.30
tblFleetMix	LDT1	0.06	0.04

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.20	0.13
tblFleetMix	LDT2	0.20	0.13
tblFleetMix	LHD1	0.03	0.04
tblFleetMix	LHD1	0.03	0.04
tblFleetMix	LHD2	7.7950e-003	9.4590e-003
tblFleetMix	LHD2	7.7950e-003	9.4590e-003
tblFleetMix	MCY	0.03	0.03
tblFleetMix	MCY	0.03	0.03
tblFleetMix	MDV	0.14	0.09
tblFleetMix	MDV	0.14	0.09
tblFleetMix	MH	4.8140e-003	6.9340e-003
tblFleetMix	MH	4.8140e-003	6.9340e-003
tblFleetMix	MHD	8.3410e-003	0.18
tblFleetMix	MHD	8.3410e-003	0.18
tblFleetMix	OBUS	8.8500e-004	9.5200e-004
tblFleetMix	OBUS	8.8500e-004	9.5200e-004
tblFleetMix	SBUS	7.9200e-004	1.0020e-003
tblFleetMix	SBUS	7.9200e-004	1.0020e-003
tblFleetMix	UBUS	3.4600e-004	3.6600e-004
tblFleetMix	UBUS	3.4600e-004	3.6600e-004
tblGrading	MaterialImported	0.00	1,510.00
tblLandUse	LandUseSquareFeet	183,870.00	183,871.00
tblLandUse	LandUseSquareFeet	194,300.00	194,304.00
tblLandUse	LotAcreage	4.22	9.20
tblLandUse	LotAcreage	4.46	9.20
tblVehicleTrips	CC_TL	5.00	7.00
tblVehicleTrips	CC_TL	5.00	7.00
tblVehicleTrips	CNW_TL	5.00	7.00

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	CNW_TL	5.00	7.00
tblVehicleTrips	CW_TL	13.00	7.00
tblVehicleTrips	CW_TL	13.00	7.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	ST_TR	2.12	1.71
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	1.71
tblVehicleTrips	WD_TR	2.12	1.71

2.0 Emissions Summary

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.1284	2.0731	2.2312	5.0800e-003	0.3782	0.0872	0.4654	0.1432	0.0813	0.2245						460.3730
Maximum	**1.1284**	**2.0731**	**2.2312**	**5.0800e-003**	**0.3782**	**0.0872**	**0.4654**	**0.1432**	**0.0813**	**0.2245**						**460.3730**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.0193	1.9330	2.5603	5.0800e-003	0.2323	0.0958	0.3282	0.0787	0.0957	0.1744						460.3727
Maximum	**1.0193**	**1.9330**	**2.5603**	**5.0800e-003**	**0.2323**	**0.0958**	**0.3282**	**0.0787**	**0.0957**	**0.1744**						**460.3727**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**9.66**	**6.75**	**-14.75**	**0.00**	**38.56**	**-9.91**	**29.48**	**45.05**	**-17.75**	**22.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**11-8-2022**	**2-7-2023**	0.3292	0.2529
2	**2-8-2023**	**5-7-2023**	0.8890	0.7717
3	**5-8-2023**	**8-7-2023**	0.6540	0.6193
4	**8-8-2023**	**9-30-2023**	0.3096	0.3020
		Highest	0.8890	0.7717

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9215	8.0000e-005	9.0200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Energy	7.3500e-003	0.0668	0.0561	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003						305.9958
Mobile	0.2228	1.5787	1.9877	7.7500e-003	0.4840	0.0107	0.4946	0.1335	0.0102	0.1436						781.6150
Waste						0.0000	0.0000		0.0000	0.0000						178.7714
Water						0.0000	0.0000		0.0000	0.0000						163.2514
Total	**2.1516**	**1.6457**	**2.0529**	**8.1500e-003**	**0.4840**	**0.0158**	**0.4998**	**0.1335**	**0.0153**	**0.1488**						**1,429.6524**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.8110	8.0000e-005	9.0200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Energy	7.3500e-003	0.0668	0.0561	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003						305.9958
Mobile	0.2228	1.5787	1.9877	7.7500e-003	0.4840	0.0107	0.4946	0.1335	0.0102	0.1436						781.6150
Waste						0.0000	0.0000		0.0000	0.0000						89.3857
Water						0.0000	0.0000		0.0000	0.0000						130.6011
Total	**2.0412**	**1.6457**	**2.0529**	**8.1500e-003**	**0.4840**	**0.0158**	**0.4998**	**0.1335**	**0.0153**	**0.1488**						**1,307.6164**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**8.54**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/30/2023	2/10/2023	5	10	
3	Grading	Grading	2/13/2023	3/24/2023	5	30	

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	3/27/2023	9/8/2023	5	120	
5	Paving	Paving	9/11/2023	10/6/2023	5	20	
6	Architectural Coating	Architectural Coating	10/9/2023	11/3/2023	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 1.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 567,263; Non-Residential Outdoor: 189,088; Striped Parking Area: 3,840 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	23.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	189.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	72.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	37.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.5900e-003	0.0000	2.5900e-003	3.9000e-004	0.0000	3.9000e-004						0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003						34.2301
Total	**0.0227**	**0.2148**	**0.1964**	**3.9000e-004**	**2.5900e-003**	**9.9800e-003**	**0.0126**	**3.9000e-004**	**9.2800e-003**	**9.6700e-003**						**34.2301**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.9400e-003	3.7000e-004	1.0000e-005	2.0000e-004	2.0000e-005	2.1000e-004	5.0000e-005	1.0000e-005	7.0000e-005						0.7406
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.8000e-004	3.5000e-004	3.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.1323
Total	**5.1000e-004**	**2.2900e-003**	**4.3400e-003**	**2.0000e-005**	**1.6400e-003**	**3.0000e-005**	**1.6600e-003**	**4.3000e-004**	**2.0000e-005**	**4.6000e-004**						**1.8729**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0100e-003	0.0000	1.0100e-003	1.5000e-004	0.0000	1.5000e-004						0.0000
Off-Road	9.2500e-003	0.1831	0.2467	3.9000e-004		8.6300e-003	8.6300e-003		8.6300e-003	8.6300e-003						34.2300
Total	**9.2500e-003**	**0.1831**	**0.2467**	**3.9000e-004**	**1.0100e-003**	**8.6300e-003**	**9.6400e-003**	**1.5000e-004**	**8.6300e-003**	**8.7800e-003**						**34.2300**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.9400e-003	3.7000e-004	1.0000e-005	2.0000e-004	2.0000e-005	2.1000e-004	5.0000e-005	1.0000e-005	7.0000e-005						0.7406
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.8000e-004	3.5000e-004	3.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.1323
Total	**5.1000e-004**	**2.2900e-003**	**4.3400e-003**	**2.0000e-005**	**1.6400e-003**	**3.0000e-005**	**1.6600e-003**	**4.3000e-004**	**2.0000e-005**	**4.6000e-004**						**1.8729**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505						0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003						16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0983**	**6.3300e-003**	**0.1046**	**0.0505**	**5.8200e-003**	**0.0563**						**16.8606**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.9000e-004	2.1000e-004	2.3800e-003	1.0000e-005	8.7000e-004	0.0000	8.7000e-004	2.3000e-004	0.0000	2.3000e-004						0.6794
Total	**2.9000e-004**	**2.1000e-004**	**2.3800e-003**	**1.0000e-005**	**8.7000e-004**	**0.0000**	**8.7000e-004**	**2.3000e-004**	**0.0000**	**2.3000e-004**						**0.6794**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0383	0.0000	0.0383	0.0197	0.0000	0.0197						0.0000
Off-Road	4.6600e-003	0.0953	0.1148	1.9000e-004		4.7300e-003	4.7300e-003		4.7300e-003	4.7300e-003						16.8606
Total	**4.6600e-003**	**0.0953**	**0.1148**	**1.9000e-004**	**0.0383**	**4.7300e-003**	**0.0431**	**0.0197**	**4.7300e-003**	**0.0244**						**16.8606**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.9000e-004	2.1000e-004	2.3800e-003	1.0000e-005	8.7000e-004	0.0000	8.7000e-004	2.3000e-004	0.0000	2.3000e-004						0.6794
Total	**2.9000e-004**	**2.1000e-004**	**2.3800e-003**	**1.0000e-005**	**8.7000e-004**	**0.0000**	**8.7000e-004**	**2.3000e-004**	**0.0000**	**2.3000e-004**						**0.6794**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1382	0.0000	0.1382	0.0548	0.0000	0.0548						0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197						82.4642
Total	**0.0498**	**0.5177**	**0.4208**	**9.3000e-004**	**0.1382**	**0.0214**	**0.1596**	**0.0548**	**0.0197**	**0.0745**						**82.4642**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5000e-004	0.0160	3.0500e-003	6.0000e-005	1.6100e-003	1.3000e-004	1.7400e-003	4.4000e-004	1.2000e-004	5.6000e-004						6.0855
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.6000e-004	7.0000e-004	7.9400e-003	2.0000e-005	2.8900e-003	1.0000e-005	2.9000e-003	7.7000e-004	1.0000e-005	7.8000e-004						2.2646
Total	**1.2100e-003**	**0.0167**	**0.0110**	**8.0000e-005**	**4.5000e-003**	**1.4000e-004**	**4.6400e-003**	**1.2100e-003**	**1.3000e-004**	**1.3400e-003**						**8.3501**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0539	0.0000	0.0539	0.0214	0.0000	0.0214						0.0000
Off-Road	0.0229	0.4497	0.5508	9.3000e-004		0.0195	0.0195		0.0195	0.0195						82.4641
Total	**0.0229**	**0.4497**	**0.5508**	**9.3000e-004**	**0.0539**	**0.0195**	**0.0734**	**0.0214**	**0.0195**	**0.0409**						**82.4641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.5000e-004	0.0160	3.0500e-003	6.0000e-005	1.6100e-003	1.3000e-004	1.7400e-003	4.4000e-004	1.2000e-004	5.6000e-004						6.0855
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.6000e-004	7.0000e-004	7.9400e-003	2.0000e-005	2.8900e-003	1.0000e-005	2.9000e-003	7.7000e-004	1.0000e-005	7.8000e-004						2.2646
Total	**1.2100e-003**	**0.0167**	**0.0110**	**8.0000e-005**	**4.5000e-003**	**1.4000e-004**	**4.6400e-003**	**1.2100e-003**	**1.3000e-004**	**1.3400e-003**						**8.3501**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0944	0.8631	0.9746	1.6200e-003		0.0420	0.0420		0.0395	0.0395						139.9100
Total	**0.0944**	**0.8631**	**0.9746**	**1.6200e-003**		**0.0420**	**0.0420**		**0.0395**	**0.0395**						**139.9100**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	5.0600e-003	0.1785	0.0573	6.4000e-004	0.0196	1.0100e-003	0.0207	5.6800e-003	9.7000e-004	6.6400e-003						65.0900
Worker	0.0356	0.0259	0.2954	9.0000e-004	0.1074	5.3000e-004	0.1080	0.0286	4.9000e-004	0.0290						84.2446
Total	**0.0406**	**0.2044**	**0.3527**	**1.5400e-003**	**0.1271**	**1.5400e-003**	**0.1286**	**0.0342**	**1.4600e-003**	**0.0357**						**149.3346**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0404	0.8536	1.0724	1.6200e-003		0.0542	0.0542		0.0542	0.0542						139.9098
Total	**0.0404**	**0.8536**	**1.0724**	**1.6200e-003**		**0.0542**	**0.0542**		**0.0542**	**0.0542**						**139.9098**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	5.0600e-003	0.1785	0.0573	6.4000e-004	0.0196	1.0100e-003	0.0207	5.6800e-003	9.7000e-004	6.6400e-003						65.0900
Worker	0.0356	0.0259	0.2954	9.0000e-004	0.1074	5.3000e-004	0.1080	0.0286	4.9000e-004	0.0290						84.2446
Total	**0.0406**	**0.2044**	**0.3527**	**1.5400e-003**	**0.1271**	**1.5400e-003**	**0.1286**	**0.0342**	**1.4600e-003**	**0.0357**						**149.3346**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003						20.1888
Paving	1.8900e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.0122**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**						**20.1888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.8000e-004	3.5000e-004	3.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.1323
Total	**4.8000e-004**	**3.5000e-004**	**3.9700e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**						**1.1323**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.6100e-003	0.1130	0.1730	2.3000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003						20.1888
Paving	1.8900e-003					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**7.5000e-003**	**0.1130**	**0.1730**	**2.3000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**						**20.1888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	4.8000e-004	3.5000e-004	3.9700e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004						1.1323
Total	**4.8000e-004**	**3.5000e-004**	**3.9700e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**						**1.1323**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8898					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004						2.5571
Total	**0.8917**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**						**2.5571**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.1800e-003	8.6000e-004	9.7900e-003	3.0000e-005	3.5600e-003	2.0000e-005	3.5800e-003	9.5000e-004	2.0000e-005	9.6000e-004						2.7931
Total	**1.1800e-003**	**8.6000e-004**	**9.7900e-003**	**3.0000e-005**	**3.5600e-003**	**2.0000e-005**	**3.5800e-003**	**9.5000e-004**	**2.0000e-005**	**9.6000e-004**						**2.7931**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8898					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	5.9000e-004	0.0136	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004						2.5571
Total	**0.8904**	**0.0136**	**0.0183**	**3.0000e-005**		**9.5000e-004**	**9.5000e-004**		**9.5000e-004**	**9.5000e-004**						**2.5571**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.1800e-003	8.6000e-004	9.7900e-003	3.0000e-005	3.5600e-003	2.0000e-005	3.5800e-003	9.5000e-004	2.0000e-005	9.6000e-004						2.7931
Total	**1.1800e-003**	**8.6000e-004**	**9.7900e-003**	**3.0000e-005**	**3.5600e-003**	**2.0000e-005**	**3.5800e-003**	**9.5000e-004**	**2.0000e-005**	**9.6000e-004**						**2.7931**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2228	1.5787	1.9877	7.7500e-003	0.4840	0.0107	0.4946	0.1335	0.0102	0.1436						781.6150
Unmitigated	0.2228	1.5787	1.9877	7.7500e-003	0.4840	0.0107	0.4946	0.1335	0.0102	0.1436						781.6150

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	332.25	0.00	0.00	564,142	564,142
Refrigerated Warehouse-No Rail	314.42	314.42	0.00	640,631	640,631
Total	646.67	314.42	0.00	1,204,773	1,204,773

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	7.00	7.00	7.00	59.00	0.00	41.00	92	5	3
Refrigerated Warehouse-No Rail	7.00	7.00	7.00	59.00	0.00	41.00	92	5	3

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.516135	0.058853	0.199929	0.136792	0.029532	0.007795	0.008341	0.005917	0.000885	0.000346	0.029869	0.000792	0.004814
Unrefrigerated Warehouse-No Rail	0.304002	0.035433	0.127011	0.093089	0.038507	0.009459	0.175000	0.175000	0.000952	0.000366	0.033245	0.001002	0.006934
Refrigerated Warehouse-No Rail	0.304002	0.035433	0.127011	0.093089	0.038507	0.009459	0.175000	0.175000	0.000952	0.000366	0.033245	0.001002	0.006934

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						232.8051
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						232.8051
NaturalGas Mitigated	7.3500e-003	0.0668	0.0561	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003						73.1906
NaturalGas Unmitigated	7.3500e-003	0.0668	0.0561	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003						73.1906

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Refrigerated Warehouse-No Rail	695032	3.7500e-003	0.0341	0.0286	2.0000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003						37.3100
Unrefrigerated Warehouse-No Rail	668406	3.6000e-003	0.0328	0.0275	2.0000e-004		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003						35.8806
Total		**7.3500e-003**	**0.0668**	**0.0561**	**4.0000e-004**		**5.0800e-003**	**5.0800e-003**		**5.0800e-003**	**5.0800e-003**						**73.1906**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Refrigerated Warehouse-No Rail	695032	3.7500e-003	0.0341	0.0286	2.0000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003						37.3100
Unrefrigerated Warehouse-No Rail	668406	3.6000e-003	0.0328	0.0275	2.0000e-004		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003						35.8806
Total		**7.3500e-003**	**0.0668**	**0.0561**	**4.0000e-004**		**5.0800e-003**	**5.0800e-003**		**5.0800e-003**	**5.0800e-003**						**73.1906**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	22400				2.0930
Refrigerated Warehouse-No Rail	1.78906e+006				167.1678
Unrefrigerated Warehouse-No Rail	680064				63.5443
Total					**232.8051**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	22400				2.0930
Refrigerated Warehouse-No Rail	1.78906e+006				167.1678
Unrefrigerated Warehouse-No Rail	680064				63.5443
Total					**232.8051**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.8110	8.0000e-005	9.0200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Unmitigated	1.9215	8.0000e-005	9.0200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4396					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.4811					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	8.3000e-004	8.0000e-005	9.0200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Total	**1.9215**	**8.0000e-005**	**9.0200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0188**

Attachment 5

Stravinski-Daou Warehouses Project - San Luis Obispo County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4396					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.3707					0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	8.3000e-004	8.0000e-005	9.0200e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.0188
Total	**1.8111**	**8.0000e-005**	**9.0200e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**						**0.0188**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				130.6011
Unmitigated				163.2514

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0				0.0000
Refrigerated Warehouse-No Rail	42.5199 / 0				79.3744
Unrefrigerated Warehouse-No Rail	44.9319 / 0				83.8769
Total					**163.2514**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0				0.0000
Refrigerated Warehouse-No Rail	34.0159 / 0				63.4995
Unrefrigerated Warehouse-No Rail	35.9455 / 0				67.1016
Total					**130.6011**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				89.3857
Unmitigated				178.7714

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0				0.0000
Refrigerated Warehouse-No Rail	172.84				86.9215
Unrefrigerated Warehouse-No Rail	182.64				91.8499
Total					**178.7714**

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0				0.0000
Refrigerated Warehouse-No Rail	86.42				43.4608
Unrefrigerated Warehouse-No Rail	91.32				45.9250
Total					**89.3857**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

Attachment 5

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.0 Vegetation

Attachment 5

TRIP GENERATION/VMT SUMMARY

WAREHOUSE PROJECT		ESTIMATED EMPLOYEES		AVERAGE-DAILY VEHICLE TRIP GENERATION RATES					
				TRUCKS		PASSENGER VEHICLES		TOTAL (ALL VEHICLES)	
WAREHOUSE	SQ FT	SF/EMPLOYEE (ITE)	NUMER OF EMPLOYEES	AVG DAILY TRIPS	TRIP RATE/KSF	AVG DAILY TRIPS	TRIP RATE/KSF	AVG DAILY TRIPS	TRIP RATE/KSF
STRAVINSKI	194304	781	249	116	0.597	216	1.112	332	1.71
DAOU	183871	781	235	110	0.598	204	1.109	314	1.71
TOTAL	378175	781	484	226	0.598	420	1.111	646	1.71

Does not include PCE. Based on information derived from the traffic analysis prepared for this project.

Employee estimates based on ITE average rates/square foot of floor area.

	MILES/TRIP	DAILY TRIPS	%TRIPS	TOTAL DAILY MILES
EMPLOYEE	3.7	420	0.65	1553.63
TRUCK	13	226	0.35	2939.3
TOTAL		646		4492.93
AVG TOTAL MILES/TRIP:	7.0			

Based on model defaults and data derived from the traffic analysis prepared for this project.

Attachment 5

FLEET MIX ADJUSTMENT

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
CalEEMod Default Fleet Mix	0.486418	0.056693	0.203223	0.148945	0.038507	0.009459	0.00826	0.005996	0.000952	0.000366	0.033245	0.001002	0.006934
Adjusted Fleet Mix	0.304002	0.035433	0.127011	0.093089	0.038507	0.009459	0.175	0.175	0.000952	0.000366	0.033245	0.001002	0.006934

Project truck fleet mix assumes total of 35% distributed equally among MHDT and HHDT vehicle categories based on the traffic anlaysis prepared for this project. Employee trips assumes predominantly light-duty vehicles (defined by ARB as LDA, LDT1, LDT2, MDV) adjusted equally to account for increased truck fleet mix. All other vehicle categories based on CalEEMod defaults.

https://ww2.arb.ca.gov/sites/default/files/2021-01/EMFAC202x_Users_Guide_01112021_final.pdf

Attachment 5

DAILY CONSTRUCTION EMISSIONS

CONSTRUCTION ACTIVITY	EMISSIONS WITHOUT MITIGATION					
	ROG	NOX	ROG+NOX	FUG PM10	EXH PM10	TOT PM10
DEMOLITION						
ONSITE	2.27	21.48	23.75	0.26	1.00	1.26
OFFSITE	0.06	0.23	0.29	0.17	0.00	0.17
TOTAL	2.33	21.71	24.04	0.43	1.00	1.43
SITE PREP						
ONSITE	2.66	27.52	30.18	19.66	1.27	20.92
OFFSITE	0.06	0.04	0.10	0.18	0.00	0.18
TOTAL	2.72	27.56	30.28	19.84	1.27	21.10
GRADING						
ONSITE	3.32	34.52	37.84	9.21	1.42	10.64
OFFSITE	0.09	1.10	1.19	0.31	0.01	0.32
TOTAL	3.41	35.62	39.03	9.52	1.43	10.96
BLDG CONST						
ONSITE	1.57	14.39	15.96	0.00	0.70	0.70
OFFSITE	0.73	3.42	4.15	2.17	0.03	2.19
TOTAL	2.30	17.81	20.11	2.17	0.73	2.89
PAVING						
ONSITE	1.22	10.19	11.41	0.00	0.51	0.51
OFFSITE	0.05	0.04	0.09	0.15	0.00	0.15
TOTAL	1.27	10.23	11.50	0.15	0.51	0.66
ARCH COATING						
ONSITE	89.17	1.30	90.47	0.00	0.07	0.07
OFFSITE	0.13	0.09	0.22	0.37	0.00	0.37
TOTAL	89.30	1.39	90.69	0.37	0.07	0.44
BLDG CONST/PAVING/ARCH COATING:	92.87	29.43	122.30	2.69	1.31	3.99
MAX DAILY:	92.87	35.62	122.30	19.84	1.43	21.10

Based on the highest calculated daily emissions for either winter or summer conditions. Totals may not sum due to rounding.
Max daily emissions assumes that building construction, paving, and arch coating application could occur simultaneously.

Attachment 5

DAILY CONSTRUCTION EMISSIONS

CONSTRUCTION ACTIVITY	EMISSIONS WITH MITIGATION					
	ROG	NOX	ROG+NOX	FUG PM10	EXH PM10	TOT PM10
DEMOLITION						
ONSITE	0.93	18.31	19.24	0.10	0.86	0.96
OFFSITE	0.06	0.23	0.29	0.17	0.00	0.17
TOTAL	0.99	18.54	19.53	0.27	0.86	1.13
SITE PREP						
ONSITE	0.93	19.07	20.00	7.67	0.95	8.61
OFFSITE	0.06	0.04	0.10	0.18	0.00	0.18
TOTAL	0.99	19.11	20.10	7.85	0.95	8.79
GRADING						
ONSITE	1.52	29.98	31.50	3.59	1.30	4.89
OFFSITE	0.09	1.10	1.19	0.31	0.01	0.32
TOTAL	1.61	31.08	32.69	3.90	1.31	5.21
BLDG CONST						
ONSITE	0.67	14.23	14.90	0.00	0.90	0.90
OFFSITE	0.73	3.42	4.15	2.17	0.03	2.19
TOTAL	1.40	17.65	19.05	2.17	0.93	3.09
PAVING						
ONSITE	0.75	11.30	12.05	0.00	0.61	0.61
OFFSITE	0.05	0.04	0.09	0.15	0.00	0.15
TOTAL	0.80	11.34	12.14	0.15	0.61	0.76
ARCH COATING						
ONSITE	89.04	1.36	90.40	0.00	0.10	0.10
OFFSITE	0.13	0.09	0.22	0.37	0.00	0.37
TOTAL	89.17	1.45	90.62	0.37	0.10	0.47
BLDG CONST/PAVING/ARCH COATING:	91.37	30.44	121.81	2.69	1.64	4.32
MAX DAILY:	91.37	31.08	121.81	7.85	0.95	8.79

Based on the highest calculated daily emissions for either winter or summer conditions. Totals may not sum due to rounding.
Max daily emissions assumes that building construction, paving, and arch coating application could occur simultaneously.

WINE FERMENTATION AND OAK BARREL AGING/STORAGE EMISSION CALCUATIONS

Winery Name: Proposed Daou Warehouse
Contact Name & Email:
Permit Number (If known):

Quarterly Wine Fermentation Inputs		
Information[1]	Value	Reference
1st Quarter Red Wine Fermentation (gal)	583,950	Permit Application
2nd Quarter Red Wine Fermentation (gal)	583,950	Permit Application
3rd Quarter Red Wine Fermentation (gal)	583,950	Permit Application
4th Quarter Red Wine Fermentation (gal)	583,950	Permit Application
1st Quarter White Wine Fermentation (gal)	0	Permit Application
2nd Quarter White Wine Fermentation (gal)	0	Permit Application
3rd Quarter White Wine Fermentation (gal)	0	Permit Application
4th Quarter White Wine Fermentation (gal)	0	Permit Application

1. **Please input combined values for both tank and oak barrel ferementation**

Quarterly Wine Storage/Aging Inputs (Units In # Of Physical Barrels Stored)		
Information	Value	Reference
1st Quarter Red Wine Storage/Aging (barrels)	0	Permit Application
2nd Quarter Red Wine Storage/Aging (barrels)	0	Permit Application
3rd Quarter Red Wine Storage/Aging(barrels)	0	Permit Application
4th Quarter Red Wine Storage/Aging (barrels)	0	Permit Application
1st Quarter White Wine Storage/Aging (barrels)	0	Permit Application
2nd Quarter White Wine Storage/Aging (barrels)	0	Permit Application
3rd Quarter White Wine Storage/Aging (barrels)	0	Permit Application
4th Quarter White Wine Storage/Aging (barrels)	0	Permit Application

Annual Wine Inputs & Properties		
Information	Value	Reference
Red Wine Production (gal/yr)	2,335,800	Calculated Value
White Wine Production (gal/yr)	0	Calculated Value
Red Wine Barrel Storage (barrel/yr)	0	Permit Application
White Wine Barrel Storage (barrel/yr)	0	Permit Application
Percent Wine Loss by Volume (gal/gal-wine)	3.00%	MBARD Default/ Permit Application

Emission Factors		
Information	Value	Reference
Red Wine Fermentation (lb/1000 gal)	6.2	CARB March 2005
Red Wine Aging/Storage (lb/1000 gal-yr)	27.83	Calculated Value
White Wine Fermentation (lb/1000 gal)	2.5	CARB March 2005
White Wine Aging/Storage (lb/1000 gal-yr)	25.83	Calculated Value

Wine Fermentation & Oak Barrel Aging/Storage VOC Potential To Emit[1]		
Information	lb/day	tons/year
Red Wine Fermentation	39.35	7.24
White Wine Fermentation	0.00	0.00
Red Wine Aging/Storage	0.00	0.00
White Wine Aging/Storage	0.00	0.00
Total	39.35	7.24

1. **PTE from fermentation and aging/storage reflects the emissions from the total highest emitting quarter.**

Attachment 5

WINE FERMENTATION AND OAK BARREL AGING/STORAGE EMISSION CALCUATIONS

Winery Name: Proposed Daou Warehouse
Contact Name & Email: 0
Permit Number (If known): 0

Wine Properties		
Information	Value	Reference
Barrel Conversion Factor (gal/yr)	59	Standard/ Permit Application
Specific Gravity of Ethanol	0.79	MSDS
Density of Water (lb/gal)	8.34	Standard
Density of Ethanol (lb/gal)	6.59	Calculated Value
Red Wine Ethanol Volume Percent (gal/gal-wine)	14.00%	MBARD Default/Permit Application
White Wine Ethanol Volume Percent (gal/gal-wine)	13.00%	MBARD Default/Permit Application
Red Wine Ethanol Weight Percent (lb/lb-wine)	11.40%	Calculated Value
White Wine Ethanol Weight Perent (lb/lb-wine)	10.56%	Calculated Value
Red Wine Density (lb/gal)	8.14	Calculated Value
White Wine Density (lb/gal)	8.16	Calculated Value

Quarterly Fermentation Emissions				
Process	**1st Quarter**	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
Fermentation Red	3620.49	3620.49	3620.49	3620.49
Daily VOC (lb/day)	40.23	39.79	39.35	39.35
Fermentation White	0	0	0	0
Daily VOC (lb/day)	0	0	0	0

Quarter Barrel Emissions				
Process	**1st Quarter**	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
Red Storage	0	0	0	0
Daily VOC (lb/day)	0	0	0	0
White Storage	0	0	0	0
Daily VOC (lb/day)	0	0	0	0

Total Quarterly Wine Fermentation & Storage Emissions (lb/day)				
Total	40.23	39.79	39.35	39.35
Process	**1st Quarter**	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
Fermentation Red	40.23	39.79	39.35	39.35
Fermentation White	0	0	0	0
Red Storage	0	0	0	0
White Storage	0	0	0	0

Total Quarterly Maximum Emissions	40.23
Which Quarter Has The Maximum Emissions?	1st Quarter

ETHANOL EMISSIONS FROM WASTEWATER PONDS

Winery Name: Proposed Daou Warehouse
Contact Name & Email: 0
Permit Number (If known): GNR-017XXX

Wastewater Inputs		
Information	Value	Reference
Wastewater Throughput (gal/yr)	3,596,000	Permit Application
Crushing Season (days/yr)	80	MBARD Default/ Permit Application
Non-Crushing Season (days/yr)	285	MBARD Default/ Permit Application
Ethanol Concentration - Crush (mg/L)	2,086	MBARD Default/ Permit Application
Ethanol Concentration - Non-Crush (mg/L)	608	MBARD Default/ Permit Application
Evaporation Loss Percentage (gal-ww evap/gal-ww processed)	3%	MBARD Default/ Permit Application

Emission Factors		
Information	Value	Reference
Annual Ethanol (lb-ethanol/ 1000 gal-yr)	0.23	Calculated Value
Daily Ethanol (lb-ethanol/gal)	2.328E-04	Calculated Value

Ethanol Emissions From Wastewater Ponds		
Information	lb/day	tons/year
Wastewater	2.29	0.42

ETHANOL EMISSIONS FROM WASTEWATER PONDS

Winery Name: Proposed Daou Warehouse
Contact Name & Email: 0
Permit Number (If known): GNR-017XXX

Wastewater Properties		
Information	Value	Reference
Ethanol-C/TOC	56%	Standard
Annual Average Ethanol Concentration (mg/L)	932.00	Calculated Value
Gram Conversion Factor (g/lb)	454	Standard
Milligram Conversion Factor (mg/g)	1000	Standard
Liter Conversion Factor (L/gal)	3.78	Standard

Attachment 5

WINE FERMENTATION CO2 EMISSIONS

PROJECT:	DAOU WAREHOUSE - WINERY PRODUCTION	
lb CO2/1K g:	$6303xVF_{EtOH}$	
	VF: Volume fraction of Ethanol in the produced wine (g ethanol/g wine)	
	Red:	0.14
	White:	0.13
lbs CO2/1K g Red Wine:	882	
lbs CO2/1K g White Wine:	819	

Source: SBCAPCD Winery Spreadsheet for VOC calculations (www.sbcapcd.org/eng/winery/winery.htm)

Annual Production Red Wine:	2,336	k gal
Annual Production White Wine:	0	k gal

Red Wine Annual CO2 Emissions:	934
White Wine Annual Emissions (MTCO2e):	0
Total Annual Emissions (MTCO2e):	934

Attachment 5

	YEAR																				
	BAU 2005	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**
POPULATION							32,300	32,840	33,380	33,920	34,460	35,000	35,540	36,080	36,620	37,160	37,700	38,040	38,380	38,720	39,060
EMPLOYMENT		15,071	15,115	15,159	15,203	15,247	15,291	15,300	15,380	15,459	15,539	15,619	15,698	15,778	15,858	15,937	16,017	15,977	15,736	15,875	15,624
SERVICE POPULATION							47,591	48,140	48,760	49,379	49,999	50,619	51,238	51,858	52,478	53,097	53,717	54,017	54,116	54,595	54,684
							0.47	0.47	0.46	0.46	0.45	0.45	0.44	0.44	0.43	0.43	0.42	0.42	0.41	0.41	0.40
GHG EMISSIONS INVENTORY																					
LAND USE SECTOR (TOTAL):	168,233						143,030	138,821	134,612	130,403	126,194	121,985	117,776	113,567	109,358	105,149	100,940	97575	94210	90846	87481
PERCENT REDUCTION							-15%										-40%				
GHG EFFICIENCY THRESHOLD							**3.0**	**2.9**	**2.8**	**2.7**	**2.6**	**2.4**	**2.3**	**2.2**	**2.1**	**2.0**	**1.9**	**1.8**	**1.7**	**1.7**	**1.6**

Based on business-as-usual (year 2005) and year 2020 emissions inventory and the State's target GHG reductions of 40 percent below BAU baseline GHG emissions inventory by 2030 and 80% by 2050. Emissions inventory reflects locally appropriate emission sectors; excludes emission sectors that do not apply to standard development (e.g., agriculture).

Service population represents total employment and population for the City. Interim years are based on a linear extrapolation.

	YEAR															
	2035	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**	**2045**	**2046**	**2047**	**2048**	**2049**	**2050**
POPULATION	39,400	39,740	40,080	40,420	40,760	41,100	41,440	41,780	42,120	42,460	42,800	43,140	43,480	43,820	44,160	44,500
EMPLOYMENT	15,760	15,499	15,631	15,360	15,489	15,207	15,333	15,041	15,163	14,861	14,980	14,668	14,783	14,461	14,573	14,240
SERVICE POPULATION	55,160	55,239	55,711	55,780	56,249	56,307	56,773	56,821	57,283	57,321	57,780	57,808	58,263	58,281	58,733	58,740
	0.40	0.39	0.39	0.38	0.38	0.37	0.37	0.36	0.36	0.35	0.35	0.34	0.34	0.33	0.33	0.32
GHG EMISSIONS INVENTORY																
LAND USE SECTOR (TOTAL):	84117	80752	77387	74023	70658	67293	63929	60564	57199	53835	50470	47105	43741	40376	37011	33647
PERCENT REDUCTION													Target Reduction Below 1990 level:			-80%
GHG EFFICIENCY THRESHOLD	**1.5**	**1.5**	**1.4**	**1.3**	**1.3**	**1.2**	**1.1**	**1.1**	**1.0**	**0.9**	**0.9**	**0.8**	**0.8**	**0.7**	**0.6**	**0.6**

Attachment 5

CARBON OFFSET CALCULATION

TOTAL BOTH WAREHOUSES	OPERATIONAL YEAR																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
SOURCE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
AMORTIZED CONSTRUCTION	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
ENERGY	505	437	352	264	178	93	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MOBILE	876	860	845	829	813	798	782	764	746	728	709	691	673	655	637	619	600	582	564	546	528	510	491	473	455
WASTE	89	89	89	89	89	89	89	87	85	82	80	78	76	74	71	69	67	65	63	60	58	56	54	52	49
WATER	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131
TOTAL	1619	1536	1434	1331	1230	1129	1027	1000	979	959	939	918	898	877	857	837	816	796	776	755	735	715	694	674	653
CO2e/SP	3.3	3.2	3.0	2.7	2.5	2.3	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.4
THRESHOLD	2.6	2.4	2.3	2.2	2.1	2	1.9	1.8	1.7	1.7	1.6	1.5	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.7
CARBON OFFSET REQUIRED	360	374	321	266	213	161	108	141	156	136	164	192	172	200	228	208	236	264	243	271	299	279	307	287	315
LIFETIME CARBON OFFSETS (MTCO2e):	5899																								

STRAVINSKI WINERY WAREHOUSE (REFRIGERATED)

AMORTIZED CONSTRUCTION	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
ENERGY	364.3	315.9	254.2	190.5	128.8	67.1	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOBILE	450.3	442.2	434.2	426.1	418.1	410.0	401.9	392.6	383.3	373.9	364.6	355.3	345.9	336.6	327.2	317.9	308.6	299.2	289.9	280.6	271.2	261.9	252.5	243.2	233.9
WASTE	45.7	45.7	45.7	45.7	45.7	45.7	45.7	44.6	43.5	42.4	41.2	40.1	39.0	37.8	36.7	35.6	34.4	33.3	32.2	31.0	29.9	28.8	27.7	26.5	25.4
WATER	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3
TOTAL	936.6	880.1	810.4	738.7	668.9	599.2	529.5	513.6	503.1	492.6	482.2	471.7	461.2	450.7	440.3	429.8	419.3	408.9	398.4	387.9	377.5	367.0	356.5	346.1	335.6
CO2e/SP	4.0	3.7	3.4	3.1	2.8	2.5	2.3	2.2	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.7	1.7	1.7	1.6	1.6	1.5	1.5	1.4
THRESHOLD	2.6	2.4	2.3	2.2	2.1	2	1.9	1.8	1.7	1.7	1.6	1.5	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7
CARBON OFFSET REQUIRED	**326**	**316**	**270**	**222**	**175**	**129**	**83**	**97**	**104**	**93**	**106**	**119**	**109**	**122**	**135**	**124**	**137**	**150**	**140**	**153**	**166**	**156**	**169**	**158**	**171**
LIFETIME CARBON OFFSETS (MTCO2e):	3,929																								
ESTIMATED $/MT:	$20																								
ESTIMATED TOTAL OFFSET COST:	$78,582																								

DAOU WAREHOUSE (UNREFRIGERATED)

AMORTIZED CONSTRUCTION	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
ENERGY	140.0	121.3	97.6	73.1	49.5	25.8	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOBILE	425.7	418.1	410.5	402.9	395.3	387.7	380.1	371.2	362.4	353.6	344.7	335.9	327.1	318.2	309.4	300.6	291.8	282.9	274.1	265.3	256.4	247.6	238.8	230.0	221.1
WASTE	43.3	43.3	43.3	43.3	43.3	43.3	43.3	42.2	41.1	40.0	39.0	37.9	36.8	35.8	34.7	33.6	32.6	31.5	30.4	29.4	28.3	27.2	26.1	25.1	24.0
WATER	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7
TOTAL	681.6	655.3	624.0	592.0	560.7	529.4	498.1	486.1	476.2	466.3	456.4	446.5	436.6	426.7	416.8	406.9	397.0	387.1	377.2	367.3	357.4	347.5	337.6	327.7	317.8
CO2e/SP	2.7	2.6	2.5	2.4	2.3	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.3	1.3
THRESHOLD	2.6	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.7	1.6	1.5	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.7
CARBON OFFSET REQUIRED	**34**	**58**	**51**	**44**	**38**	**31**	**25**	**45**	**53**	**43**	**58**	**73**	**63**	**78**	**93**	**83**	**98**	**113**	**103**	**118**	**133**	**123**	**138**	**129**	**144**
LIFETIME CARBON OFFSETS (MTCO2e):	1,970																								
ESTIMATED $/MT:	$20																								
ESTIMATED TOTAL OFFSET COST:	$39,407																								

Attachment 5

ELECTRICITY USE GHG EMISSIONS

Yr	EF (lbs/MWh)	kWh/yr	MWh/yr	LBS CO2	MTCO2e
2024	446.53	2491524	2491.524	1112540.21	504.63934
2025	386.83	2491524	2491.524	963796.229	437.170259
2026	311.3	2491524	2491.524	775611.421	351.811136
2027	233.28	2491524	2491.524	581222.719	263.637975
2028	157.75	2491524	2491.524	393037.911	178.278852
2029	82.18	2491524	2491.524	204753.442	92.8745234
2030	6.63	2491524	2491.524	16518.8041	7.4927974

3CE Emission Factors

Project Year	3CE Electricity Emission Factors (lbs of CO2/MWh)
2018	9.74
2019	9.99
2020	135.09
2021	507.05
2022	539.8
2023	526.33
2024	446.53
2025	386.83
2026	311.30
2027	233.28
2028	157.75
2029	82.18
2030	6.63

Attachment 6

STRAVINSKI-DAOU PROJECT
5175 AIRPORT ROAD
PASO ROBLES, CA 93446
(APN: 025-434-002)

REVISED BIOLOGICAL RESOURCES ASSESSMENT

December 17, 2022

Prepared for:

DAOU VINEYARDS AND WINERY
&
STRAVINSKI DEVELOPMENT GROUP, LLC

sage institute

CPUC WBE# 14080030
PO Box 1646
Templeton, CA 93465
805.434.2804
fax 805.242.0346
www.sageii.com

TABLE OF CONTENTS

1.0 INTRODUCTION AND PURPOSE 1
2.0 METHODS 1
3.0 EXISTING CONDITIONS 2
4.0 RESULTS 2
4.1 HABITAT TYPES AND PLANT COMMUNITIES 2
4.1.1 CROPLAND/FALLOW AGRICULTURAL LAND 3
4.1.2 DEVELOPED 3
4.2 WILDLIFE 3
4.3 WATERS OF THE U.S., WETLANDS, AND WATERS OF THE STATE 3
4.4 SPECIAL-STATUS SPECIES AND NATURAL COMMUNITIES OF SPECIAL CONCERN 3
4.4.1 SPECIAL-STATUS BOTANICAL RESOURCES 4
4.4.2 SPECIAL-STATUS WILDLIFE 4
4.4.3 SAN JOAQUIN KIT FOX HABITAT EVALUATION 5
5.0 IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES 6
5.1 IMPACT ASSESSMENT 6
5.2 RECOMMENDED MITIGATION MEASURES 8
6.0 CONCLUSIONS 11
7.0 REFERENCES 12

APPENDIX A – FIGURES
FIGURE 1: VICINITY LOCATION MAP
FIGURE 2: HABITAT MAP
FIGURE 3: CNDDB PLANT SPECIES OCCURRENCES MAP (10-MILE SEARCH RADIUS)
FIGURE 4: CNDDB WILDLIFE SPECIES OCCURRENCES MAP (10-MILE SEARCH RADIUS)
FIGURE 5: CNDDB SAN JOAQUIN KIT FOX OCCURRENCES MAP (10-MILE SEARCH RADIUS)
FIGURE 6: REPRESENTATIVE PHOTOGRAPHS

APPENDIX B – TABLES
TABLE B-1: CNDDB SPECIAL-STATUS SPECIES OCCURRENCE LIST (10-MILE SEARCH RADIUS)

APPENDIX C – SJKF HABITAT EVALUATION FORM

STRAVINSKI-DAOU PROJECT
REVISED BIOLOGICAL RESOURCES ASSESSMENT

1.0 INTRODUCTION AND PURPOSE

At the request of Daou Vineyards and the Stravinski Development Group, LLC, Sage Institute Inc. (SII) conducted a field survey in December 2022 to verify site conditions and prepared this Revised Biological Assessment (Revised BRA) for the currently proposed Stravinski-Daou Project (project). SII previously prepared a January 8, 2020, Daou Campus Project Biological Assessment (SII 2020) that provided a detailed biological resources analysis for the project site that is hereby incorporated by reference into this Revised BA. The purpose of this Revised BRA is to document current conditions of the proposed project site and to update the evaluation for any direct or indirect significant impacts on biological or wetland resources, or adverse effects on any rare, threatened, or endangered plant or wildlife species (special-status species).

The updated project description consists of subdividing an approximately 19.75-acre property into two (2) parcels, roughly equal in size at 9.87-acres each. Phase 1 proposes to construct an approximately 196,000 square foot warehouse building. The building will be used as refrigerated wine storage, distribution and fulfillment center. There will not be any public tasting rooms, event centers, retail operations nor any other use that would be open to the public on the project site. Phase 2 proposes to construct an approximately 157,000 square foot wine production facility. The interior uses include barrel storage, bottling/packages areas, warehousing, and fermentation areas. The exterior uses include a crush pad, mechanical yards, and wastewater treatment.

The approximately 20-acre project site is located at 5175 Airport Road across from the Paso Robles Airport in the City of Paso Robles (APN: 025-434-002). Access to the project site will be from Airport Road. The site has a residence and several barns, and has been actively cultivated going back to at least 1977 as shown on the soils survey map and available aerial photography back to 1994. Several clusters of valley oaks (*Quercus lobata*) and non-native trees are around the existing structures and Airport Road. The project site is surrounded by agricultural, commercial, and industrial uses. Figure 1 in Appendix A provides a regional and vicinity location map. The proposed project (Phase 1 and Phase 2) would develop the entire approximate 20-acre site in facilities as described above.

2.0 METHODS

Prior to field surveys SII biologists conducted a review of available background information including aerial photography of the project area (Google Earth), the Soil Survey (Natural Resources Conservation Service), and the 10-mile radius query results of the California Natural Diversity Data Base (CNDDB 2022). The CNDDB provided a list and mapped locations of special-status plant and wildlife species, and natural communities of special concern, that have been recorded in the region of the project site. The CNDDB records help to focus the field survey efforts and evaluation of potential project effects on specific species or habitats. It is noted that the CNDDB does not necessarily include all potential special-status species potentially occurring onsite or in the region, but rather only those that have been recorded by the CNDDB.

SII Principal Ecologist David Wolff conducted a field reconnaissance survey of the site on November 14, 2019, and SII Principal Biologist Jason Kirschenstein conducted a subsequent reconnaissance survey of the site on December 12, 2022. The surveys were conducted by walking the entirety of the proposed project site recording plant and wildlife species observed and general site characteristics. The site survey was conducive to the purpose of documenting plant and wildlife to establish existing conditions. The purpose of the field surveys was to document existing conditions in terms of habitat for plant and wildlife species, suitability for special-status species, the potential to support wetland and/or riparian habitats, and/or waters of the U.S./State. The study area habitat types were described by the aggregation of plants and wildlife based on the composition and structure of the dominant vegetation observed at the time the field reconnaissance was conducted. The survey data collected on plant and wildlife species and conclusions presented in this biological and wetland assessment are based on the methods and field reconnaissance conducted over the project site as described above.

3.0 EXISTING CONDITIONS

The proposed project site is surrounded on all sides by a variety of commercial, industrial, and agricultural uses. The Paso Robles Airport and related businesses are to the east of the site across Airport Road. Review of available aerial photography shows that the project site has been in active cultivation with alfalfa and dryland farming, and appurtenant structures, going back to at least 1977. Observations during the field surveys showed the grassland to be mostly fallow, although evidence of prior disking was evident on the southern half of the site. Fallow grassland areas are dominated by ruderal non-native herbaceous annual plant species. There is one large valley oak and a cluster of valley oaks around the existing developed area structures, and one valley oak along Airport Road. No drainage features, riparian habitat, or wetlands were observed during SII field surveys or are evidenced by review of available aerial photography.

The USDA Natural Resources Conservation Service (NRCS; Soil Conservation Service, 1977) has identified two soil series mapping units within the project site. Onsite soils are mapped as Arbuckle-San Ysidro Complex (106), 2 to 9 percent slopes, and San Ysidro Loam (197), 0 to 2 percent slopes. The Arbuckle soil is a very deep, well drained soil with moderately low permeability formed in alluvium from mixed rocks. Typically, the surface layer is pale brown fine sandy loam to 10 inches thick. The San Ysidro soil is a very deep, moderately well drained soil with very slow permeability formed in alluvium from mixed rocks. Typically, the surface layer is pale brown loam about 20 inches thick. Field observations of the surface soils affirmed loamy and sandy loam soils throughout the project site.

4.0 RESULTS

4.1 HABITAT TYPES AND PLANT COMMUNITIES

Natural/native plant communities are generally described by the assemblages of plant species that occur together in the same area forming habitat types and alliance used in this report follow *A manual of California vegetation, 2nd edition* (Sawyer et al. 2009). However, the “manual” does not include any agricultural alliances. The Wildlife Habitat Relationship System (WHR) provides a “Cropland” habitat type described in, A Guide to Wildlife Habitats of California (Laudenslayer et. al 1988) that is most appropriate classification for this project site. Plant names used in this report follow *The Jepson Manual, Vascular Plants of California, Second Edition Thoroughly Revised and Expanded* (Baldwin et al. 2012). The proposed project site supports developed, and agricultural land and fallow agricultural/ruderal (disturbed) land dominated with non-native plant species. Figure 2 in Appendix A provides a habitat map

showing the location and extent of habitat types on the proposed project site. Figure 6 includes a set of representative photographs of the site taken in December 2022.

4.1.1 CROPLAND/FALLOW AGRICULTURAL LAND

The fallow agricultural land on the site supports a mix of ruderal non-native plants dominated by oats (*Avena* sp.) and short-pod mustard (*Hirschfeldia incana*). The fallow land still had evidence of furrows from tilling and was observed to be relatively low in plant species diversity with ripgut brome *(Bromus diandrus),* prickly lettuce (*Lactuca serriola)*, heliotrope (*Heliotropium curassavicum*), tumbleweed (*Salsola tragus*), vinegar weed (*Trichostema lanceolatum*), turkey-mullein (*Croton setiger*), prostrate knotweed (*Polygonum aviculare*), and wheat (*Triticum aestivum*). Native spikeweed (*Centromadia fitchii*) was scattered amongst the non-native ruderal plants. The above constitutes the entire plant species observed during the SII field survey.

4.1.2 DEVELOPED

The northeast corner of the project site is developed land with a residence, several barn/farm structures, along with compacted roads and parking/storage areas lacking vegetation. One large valley oak is located on the west side of the residence, with a cluster of valley oaks in the middle of the developed area. A large cedar tree is on the east side of the residence. Landscaping shrubs are scattered around the buildings.

4.2 WILDLIFE

The cropland, fallow cropland and developed areas, with the surrounding urbanized land uses around the project site provides minimal quality habitat for wildlife species because of the regular tilling and disturbance. Depending on the type and cycle of plant cultivation, and season of the year, common bird species such as sparrows, blackbirds, and European starlings likely frequent the area. Gopher burrows were observed in the fallow areas. No California ground squirrels were observed but may also occupy the site depending on the frequency of cultivation activities. Given that the site is surrounded by the airport and a variety of developed urban uses, other wildlife use is likely limited to locally common skunks, raccoons, opossum, and coyote. Generally low wildlife values can be attributed to this site. As such, the project site does not represent a substantial movement corridor for wildlife.

4.3 WATERS OF THE U.S., WETLANDS, AND WATERS OF THE STATE

The thorough field surveys affording 100 percent visual inspection of the entire project site resulted in no observations of wetlands, drainages, or riparian habitat on or adjacent to the project site. As such, there are no jurisdictional waters of the U.S./State on the project site.

4.4 SPECIAL-STATUS SPECIES AND NATURAL COMMUNITIES OF SPECIAL CONCERN

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) under the federal Endangered Species Act (FESA); those considered “species of concern” by the USFWS; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA); animals designated as “Species of Special Concern” by the CDFW; and plants occurring on lists 1B, 2, and 4 of the CNPS

Inventory of Rare and Endangered Vascular Plants of California. Natural Communities of Special Concern are habitat types considered rare and worthy of tracking in the CNDDB by the CNPS and CDFW because of their limited distribution or historic loss over time.

The updated December 2022 search and review of the CNDDB revealed the same 35 special-status species that were identified in the 2020 BA. These 35 species are composed of 16 special-status plants, 19 special-status wildlife species, and one natural community of special concern (valley oak woodland) with recorded occurrences in the 10-mile search radius of the proposed project site. The valley oak trees in the developed areas do not constitute a Valley Oak Woodland habitat. The following briefly describes or summarizes the special-status species issues and potential for occurrence on the project site. Table B-1 in Appendix B provides a list of special-status species recorded in the 10-mile CNDDB query and includes scientific and common names, listing status, and habitat requirements. Common names are used in text for ease of reading (see Table B-1). Figures 3 and 4 in Appendix A includes an updated map of CNDDB special-status plant and wildlife species recorded occurrences respectively within approximately 10 miles of the project site.

4.4.1 Special-Status Botanical Resources

The 2022 CNDDB review revealed the recorded occurrences of 16 special-status plant species within a ten-mile radius of the project site. None of these species are formally listed as rare, threatened or endangered. However, one is a CNPS rank 4, and the rest are CNPS rank 1.B species suggesting regional or statewide rarity. The special-status plant species occurrences recorded in the CNDDB are commonly associated with a specific soil type, native undisturbed habitat, moisture regime (e.g. wetland), and/or elevation range that dictates the range or microhabitat of the species. No rare, threatened, or endangered plant species or remnants thereof were observed within the project area during SII field surveys. However, surveys were not conducted during the spring flowering period.

Only one native plant was observed amongst the non-native ruderal species in the fallow cropland areas. The documented long-term cultivation of the site precludes the establishment of any native habitat to support the special-status plant species recorded in the region. Table B-1 in Appendix B provides the required habitat, or micro-habitat element for the special-status plants, supporting the findings that there would be no special-status plants expected to occur in the cropland or developed areas of the project site.

4.4.2 SPECIAL-STATUS WILDLIFE

The 2022 CNDDB search revealed the recorded occurrences of 19 special-status wildlife species within the ten-mile search radius of the project site. Special-status wildlife species known from the region evaluated for this study are discussed below by groups based upon habitat preferences, specific habitat use requirements (i.e. terrestrial or aquatic), mobility, and migratory patterns.

Aquatic Species – The CNDDB has recorded occurrences for the western pond turtle and western spadefoot toad and the vernal pool fairy shrimp within the ten-mile search range. The western pond turtle is a highly aquatic species found in lowlands and foothills in or near permanent sources of deep water with dense, shrubby, emergent or riparian vegetation, none of which occur on the project site. No aquatic habitats of any kind were observed during SII field surveys of the project site. As such, the project site does not support suitable aquatic habitat for this species. The vernal pool fairy shrimp and western spadefoot are closely associated with vernal pools or temporary pond/puddle habitats that are

not subject to flowing water. No evidence of vernal pool or seasonal pond/puddle habitats were observed during SII field surveys or indicated on the review of multiple years of aerial photography. As such, the project site does not support suitable seasonal aquatic habitat for these two species.

Insects – The Lompoc grasshopper (*Trimerotropis occulens)* is mostly associated with sandy soils in grassland, coastal scrub or chaparral habitats. No such habitat occurs on site and the study area is well outside the known range of this species. The Atascadero June beetle (*Polyphylla nubila*) is known only from inland sand dunes that are not present on the project site (only gravelly loam soils) and would not occur. The crotch bumble bee (*Bombus crotchii*) ranges throughout California to Baja typically found in wildflower rich grasslands and shrublands. The local CNDDB record is an unspecified location from a 1959 collection. The project site is not wildflower rich and does not represent suitable habitat for the species.

Reptiles – The legless lizard, coast horned lizard, and San Joaquin coachwhip require undisturbed native habitats with suitable prey (insects/ants, small mammals respectively) that do not occur on the cultivated/developed project site. As such, they are not expected to occur.

Birds – The CNDDB includes occurrences for wide-ranging resident and migratory bird species known from the region of the project site. The tricolored blackbird is locally nomadic but requires bulrush and cattail marsh or ponds for breeding that are not present on the project site. The least Bell's vireo is a breeding season migrant known from the Salinas River that requires dense riparian habitat that does not occur on the project site. As such, the project site does not support suitable habitat for these two species.

The local migrant/nomadic burrowing owl is closely associated with ground squirrel burrows for nest and winter refuge sites in grassland habitat with insect and small mammal prey base. None of which occurs on the cultivated/developed project site. The wide ranging locally nomadic and migrant raptors listed in the CNDDB might use the site for very occasional foraging habitat depending on the cycle of cultivation and randomness of flying over the site. This includes the golden eagle, ferruginous hawk (winter migrant), Swainson's hawk (breeding migrant), and prairie falcon. The cultivated site does not represent any substantial foraging habitat opportunity for these wide-ranging species.

Mammals – The American badger, Salinas pocket mouse, and Nelson's antelope squirrel are typically found in grasslands with friable soils for digging burrows. The Monterey dusky-footed woodrat requires woody habitat types such as is a woodland, riparian forest, or shrublands. The cultivated and developed site does not support suitable habitat for any of these mammal species.

The Townsend's big-eared bat and pallid bat may occupy a variety of woodland, forest, and shrubland habitats. While highly sensitive to disturbance, bats may occupy attics or other abandoned parts of buildings. No suitable native habitat occurs on the site, however, the buildings could support a bat roost. No obvious evidence of bat use within existing structures, or bats flying, were observed during the 2020 or 2022 SII field surveys that include observations through dusk (in 2020).

4.4.3 San Joaquin Kit Fox Habitat Evaluation

The project site was specifically evaluated for suitability to provide habitat for the San Joaquin kit fox (SJKF) which is a wide-ranging species known from northeastern and southeastern San Luis Obispo County. The SJKF occupies open country grassland, open scrubland, and oak savannah where there are

friable soils for burrowing and an abundant rodent prey base. This small species of fox is known to use available ground squirrel or other existing burrows for den sites as they typically do not excavate their own dens. The developed cultivated project site itself does not support quality habitat as it is regularly tilled limiting burrowing animals and the establishment of a prey base.

The project site does fall within the agency established movement corridor linking the Camp Roberts subpopulation with the core population in the Carrizo Plains. As shown on Figure 5 in Appendix A, the study area falls within the SJKF corridor between the Carrizo Plain and Camp Roberts within 10 miles of numerous recorded occurrences. Most of the occurrences are on Camp Roberts where they have not been seen in many years (dates are shown next to the occurrences on Figure 5). The Chandler Ranch observations south of Highway 46 go back to the 1990's with no recent records of observations. There are 2014 observations of scat from a scent station study updating previous observations almost 10 miles to the east of the project site near Shandon.

The California Department of Fish and Wildlife (CDFW) requires the completion of the SJKF habitat evaluation form to evaluate potential impacts on the SJKF resulting from discretionary projects. The updated habitat evaluation form completed for this project site is provided in Appendix C that shows a preliminary score of 73. Typically, scores above 50 require compensatory mitigation for the loss of habitat resulting from project implementation with scores in the 70's typically equating to a 3:1 ratio. The study area is adjacent to 3:1 mitigation ratio area designated by the San Luis Obispo County's map of *Standard San Joaquin Kit Fox Mitigation Ratios*. The City of Paso Robles does not have a designated ratio within the city limits. The City in consultation with the CDFW will review the project site against the SJKF habitat evaluation form scoring and make a final determination of the appropriate ratio for project impact compensation for the loss of movement habitat within the corridor. No direct take (i.e. mortality, destruction of active dens, etc.) is allowed under the habitat mitigation fee program.

5.0 IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES

5.1 IMPACT ASSESSMENT

The proposed Daou Campus project would convert the approximately 17.5 of annually cultivated cropland and 2.5 acres of existing development to a fully developed site. The project site does not support any native plant community and provides minimal habitat for locally common wildlife accustomed to agricultural lands.

Per the Tree Evaluation Letter Report prepared for the project (Althouse and Meade, May 2022), three (3) native valley oaks (Tree #s 1 – 3) will require removal to support the currently proposed project. These trees range in diameter at breast height (dbh) from 4 to 67 inches and received health ratings ranging from "fair" to "poor". Per the Tree Evaluation Letter, trees #s 1 and 2 are growing along Airport Road under overhead power lines. Airport Road is to be widened to accommodate a center turn lane, which will impact the critical root zone of Tree # 1 by >30 percent. In addition, the overhead power lines are to be moved underground. New utilities, sewer, and water will also be installed and significantly impact the critical root zones of Tree #'s 1 and 2. Therefore, these oaks are proposed for removal due to the construction impacts of road widening and new utility installations. Tree No. 3 is in poor condition and is in the proposed parking lot area. Therefore, this oak is proposed for removal. The remaining three oak trees (Tree #s 4-6) are proposed to be retained, and will be incorporated into the proposed parking lot design.

The Mitigation Recommendations provided in the Tree Evaluation Letter were reviewed as part of this analysis for consistency with the City's Oak Tree Preservation Ordinance. Based on this review, the Tree Evaluation Letter provides appropriate oak tree removal Mitigation Recommendations that would fully mitigate impacts related to the removal of the three (3) valley oaks. In summary, oak trees removed by the project would be replaced in accordance with the City's Oak Tree Preservation Ordinance. Planting small trees in quantity to account for the mitigated dbh equivalency would satisfy this requirement. Mitigation for the removal of three oak trees (Tree No.1, 2, and 3) is equivalent to 25.5-inches in caliper for oak replacement trees (or nine, 3-inch caliper valley oaks). The Tree Evaluation Letter also includes other appropriate Mitigation Measures for establishing tree protection zones for the oak trees to be retained, tree protection fencing, signage, construction monitoring, and post-construction reporting. The retention of three (3) valley oak trees combined with planting nine (9) replacement trees per the Mitigation Measures in the Tree Evaluation Letter would continue to provide nesting, foraging, and roosting habitat for resident and migratory birds.

Construction of the proposed project would convert active cropland and developed areas to developed uses. No special-status plant or wildlife species were observed and are not expected to occur on the project site as there is no suitable habitat for any special-status wildlife. Given there is no special-status plant or wildlife species habitat present on the site, impacts on general biological resources are considered to be less than significant.

Vegetation and tree removal (clearing and grubbing) during the nesting season for birds could result in the destruction of active bird's nests. Destruction of active nests is prohibited by the Fish and Game Code of California Sections 3503 and 3503.1 (raptors specifically). As such, this could be considered a potentially significant impact requiring mitigation to avoid take or destruction of active nests thereby reducing this potentially significant impact to a less than significant level.

While somewhat unlikely, bats could occupy the structures prior to removal. As such, this could be considered a potentially significant impact requiring mitigation to avoid destruction of an active bat roost thereby reducing this potentially significant impact to a less than significant level.

The project is within the SJKF movement corridor between the Carrizo Plain core population and the Camp Roberts subpopulation. While there are abundant open lands through the area, the project could incrementally block or degrade SJKF movement through this corridor. The proposed project would develop approximately 20 acres, 2.5 acres of which is already developed (See Figure 2), leaving a net impact to SJKF movement corridor of 17.5 acres. This loss of 17.5 acres of cropland habitat movement opportunity for the SJKF is considered a potentially significant impact requiring mitigation to contribute to the long-term conservation of the movement corridor through the region.

5.2 RECOMMENDED MITIGATION MEASURES

The following mitigation measures are recommended to reduce potentially significant impacts on nesting birds, bats, SJKF, and oak trees to a less than significant level.

MM BIO-1: To reduce any potentially significant impact on nesting birds from vegetation and tree removals, the following mitigation measure is recommended:

Vegetation removal and initial site disturbance shall be conducted between September 1st and January 31st outside of the nesting season for birds. If vegetation and/or tree removal is planned for the bird nesting season (February 1st to August 31st), then preconstruction nesting bird surveys shall be conducted by a qualified biologist to determine if any active nests would be impacted by project construction. If no active nests are found, then no further mitigation shall be required.

If any active nests are found that would be impacted by construction, then the nest sites shall be avoided with the establishment of a non-disturbance buffer zone around active nests as determined by a qualified biologist. Nest sites shall be avoided and protected with the non-disturbance buffer zone until the adults and young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist. As such, avoiding disturbance or take of an active nest would reduce potential impacts on nesting birds to a less-than-significant level.

MM BIO-2: To reduce any potentially significant impact on bat roosts, the following mitigation measure is recommended:

Prior to demolition of the existing buildings, an evaluation for bat usage shall be conducted by a qualified biologist. If no evidence of bat use is detected, then no further mitigation shall be required. If an active bat roost is found that would be impacted by construction, then the roost site shall be avoided and protected until the roost is no longer occupied. Natal roosts shall be avoided until the adults and young disperse from the site. Exclusionary measures may be implemented for non-natal roosts to avoid direct mortality of individuals. As such, avoiding disturbance to an active natal roost, and avoiding direct mortality from demolition would reduce potential impacts on roosting bats to a less-than-significant level.

MM BIO-3: To reduce any potentially significant impact on the regional SJKF movement corridor, and avoid take of any SJKF from project construction, the following mitigation measures are recommended:

Prior to issuance of grading and/or construction permits, the applicant shall submit evidence to the City of Paso Robles Community Development Department that states that one or a combination of the following three San Joaquin kit fox compensatory mitigation measures has been implemented. The City in consultation with the CDFW will review the project site against the SJKF habitat evaluation form scoring and make a final determination of the appropriate ratio for project impact compensation for the loss of movement habitat within the corridor. The calculations below are for reference and assume a maximum 3:1 ratio will be required by CDFW.

a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of 52.5 acres (17.5 acres of development multiplied by 3 as a result of an applied 3:1 mitigation ratio) of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, northwest of Highway 58), either on-site or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Wildlife and the City. This mitigation alternative (a.) requires that all aspects if this program must be in place before City permit issuance or initiation of any ground disturbing activities.

b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the property in perpetuity. Mitigation alternative (b) above can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement between the CDFW and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The fee, payable to "The Nature Conservancy," would total: $131,250 (17.5 x 3 x $2,500).

   This fee is calculated based on the 2020 cost-per-unit of $2,500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of property in San Luis Obispo County; actual cost may increase (or decrease) depending on the timing of payment and final mitigation ratio required. This fee must be paid after the CDFW provides written notification about your mitigation options but prior to City permit issuance and initiation of any ground disturbing activities.

c. Purchase credits in a CDFW-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the property in perpetuity. Mitigation alternative (c) above can be completed by purchasing credits from the Palo Prieto Conservation Bank (see contact information below). The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the CEQA. The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank, would total: $131,250 (17.5 x 3 x $2,500).

   This fee is calculated based on the 2020 cost-per-credit of $2,500 per acre of mitigation. The fee is established by the conservation bank owner and may change at any time. Actual cost may increase (or decrease) depending on the timing of payment and final mitigation ratio required. Purchase of credits must be completed prior to City permit issuance and initiation of any ground disturbing activities.

MM BIO-4: To avoid direct take of SJKF during construction in accordance with the San Luis Obispo County Guide to SJKF Mitigation Procedures Under CEQA, the project owner(s) shall adopt the Standard Kit Fox CEQA Mitigation Measures and shall be included on development plans. The following measures shall be implemented:

- Within 30 days of initiation of site disturbance and/or construction, a qualified biologist shall conduct a pre-activity (i.e. pre-construction) survey for known or potential kit fox dens and submit a letter (or email) to the City reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any potential kit fox activity within the project limits. This may include implementing the 3-day tracking survey per the USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior To Or During Ground Disturbance (USFWS 2011) if deemed necessary by the qualified biologist.
- A maximum 25 mph speed limit shall be required at the project site during construction activities.
- All construction activities shall cease at dusk and not start before dawn.
- A qualified biologist shall be on-site immediately prior to initiation of project activities to inspect for any large burrows (e.g., known and potential dens) and to ensure no wildlife are injured during project activities. If dens are encountered, they should be avoided as discussed below.
- Exclusion zone boundaries shall be established around all known and potential kit fox dens.
- All excavations deeper than 2 feet shall be completely covered at the end of each working day.
- All pipes, culverts, or similar structures shall be inspected for SJKF and other wildlife before burying, capping, or moving.
- All exposed openings of pipes, culverts, or similar structures shall be capped or temporarily sealed prior to the end of each working day.
- All food-related trash shall be removed from the site at the end of each work day.
- Project-related equipment shall be prohibited outside of designated work areas and access routes.
- No firearms shall be allowed in the project area.
- Disturbance to burrows shall be avoided to the greatest extent feasible.
- No rodenticides or herbicides should be applied in the project area.
- Permanent fences shall allow for SJKF passage through or underneath (i.e., an approximate 4-inch passage gap shall remain at ground level).
- Prior to issuance of grading and/or construction permit and within 30 days prior to initiation of site disturbance and/or construction, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the City, as well as any related biological report(s) prepared for the project. The applicant

shall notify the City shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.

- During the site-disturbance and/or construction phase, any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and City. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the USFWS and CDFW by telephone. In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to CDFW for care, analysis, or disposition.

MM BIO-5: To fully mitigate proposed impacts to three native valley oaks, the project owner(s) shall implement the Mitigation Recommendations provided in the May 12, 2022, Tree Evaluation Letter prepared by Althouse and Mead.

6.0 CONCLUSIONS

Based on the findings described above establishing the existing conditions of biological resources within the project site, and incorporation of the recommended mitigation measures, implementation of the proposed project would not result in any substantial adverse effects on biological, botanical, or wetland habitat resources. Therefore, with mitigation measures incorporated into the project, direct and indirect project impacts on biological resources are considered to be less than significant.

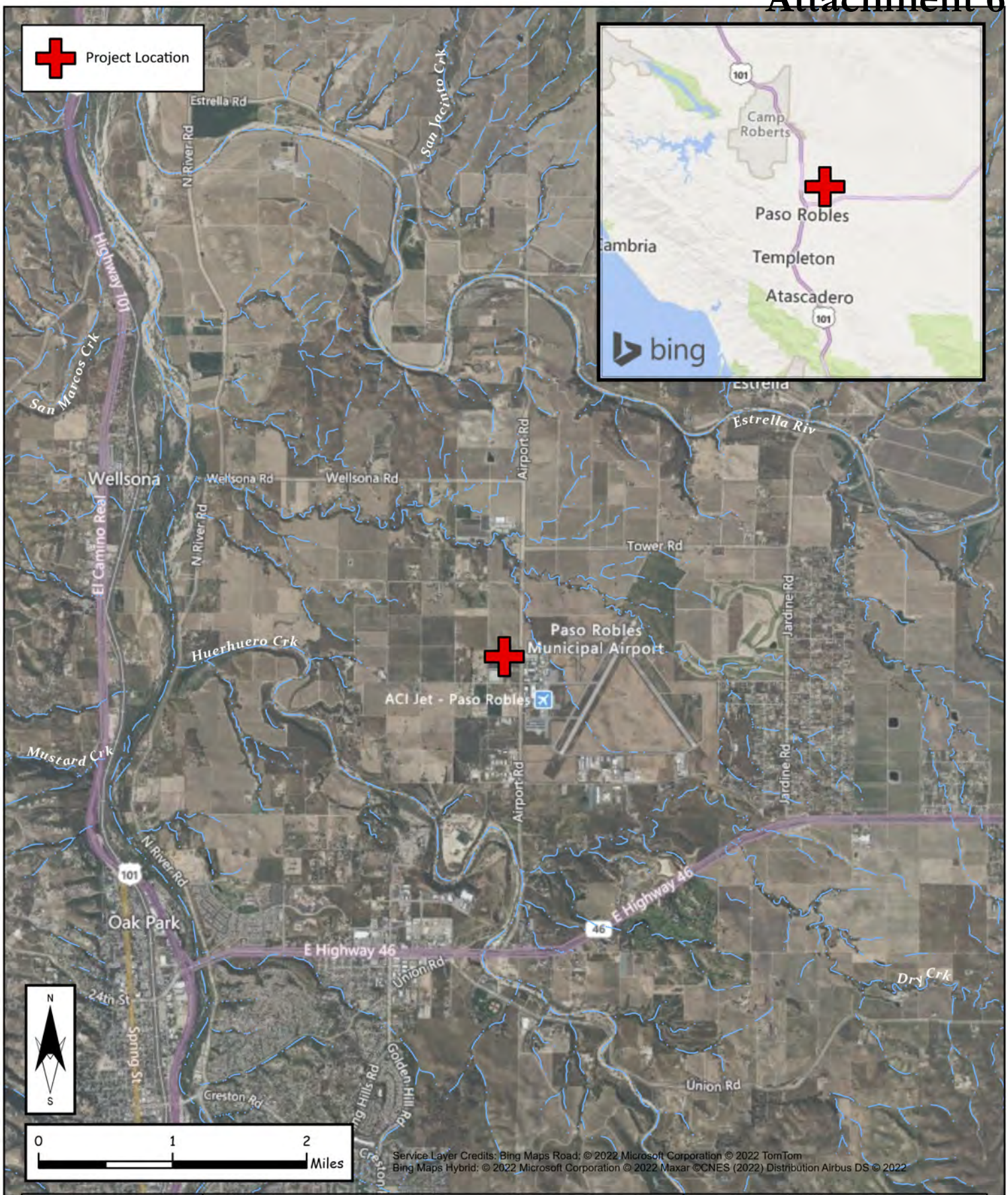
8.0 REFERENCES

1. Althouse and Mead. May 2022. Tree Evaluation Letter Report, APN 025-434-002, 5175 Airport Road, City of Paso Robles, California.
2. Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, Editors. 2012. *The Jepson Manual, Vascular Plants of California, Second Edition Thoroughly Revised and Expanded*. UC Press.
3. California Native Plant Society (CNPS). 2022. *Online Inventory of Rare and Endangered Vascular Plants of California.* Accessed December 2022.
4. California Department of Fish and Wildlife (CDFW). 2019. Natural Diversity Data Base (CNDDB) of recorded occurrences of special-status species. Accessed December 2022.
5. CALFLORA. 2022. Online database of native plants of California. Accessed December 2022.
6. Hickman, J.C., Editor. 1993. The Jepson Manual, Higher Plants of California. University of California Press.
7. Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California.* California Department of Fish and Wildlife Nongame-Heritage Program.
8. Holland, V.L., and D.J. Keil. 1990. *California Vegetation*. Biological Sciences Department, California Polytechnic State University, San Luis Obispo, California.
9. Jameson, E.W. & Hans J. Peeters. 2004. *Mammals of California, Revised Edition.* University of California Press.
10. Jennings, M.R. and M.P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. California Department of Fish and Wildlife Contract # 8023. Inland Fisheries Division, Rancho Cordova, California.
11. Mayer, W. and W. Laudenslayer, Editors. 1988. *A Guide to Wildlife Habitats of California*. California Department of Forestry and Fire Protection.
12. Peterson, R.T. 1990. *A Field Guide to Western Birds*, Houghton Mifflin Company.
13. Stebbins, R.C., and McGinnis, S.M. 2012. *Field Guide to Amphibians and Reptiles of California: Revised Edition* (California Natural History Guides) University of California Press, 2012
14. Sage Institute, Inc. January 2020. Biological resources Assessment for the *Daou Campus Project, 5175 Airport Road, Paso Robles, CA 93446, (APN: 025-434-002)*.
15. Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, Second Edition*. California Native Plant Society Press, Sacramento.
16. U.S.D.A Soil Conservation Service (Natural Resources Conservation Service). 1977. *Soil Survey of San Luis Obispo County, Paso Robles Area.*
17. USFWS. 2011. *Standardized Recommendations for Protection Of The Endangered San Joaquin Kit Fox Prior To Or During Ground Disturbance*.

APPENDIX A

FIGURES

FIGURE 1: VICINITY LOCATION MAP
FIGURE 2: HABITAT MAP
FIGURE 3: CNDDB PLANT SPECIES OCCURRENCES MAP (10-MILE SEARCH RADIUS)
FIGURE 4: CNDDB WILDLIFE SPECIES OCCURRENCES MAP (10-MILE SEARCH RADIUS)
FIGURE 5: CNDDB SJKF OCCURRENCES MAP (10-MILE SEARCH RADIUS)
FIGURE 6: REPRESENTATIVE PHOTOGRAPHS

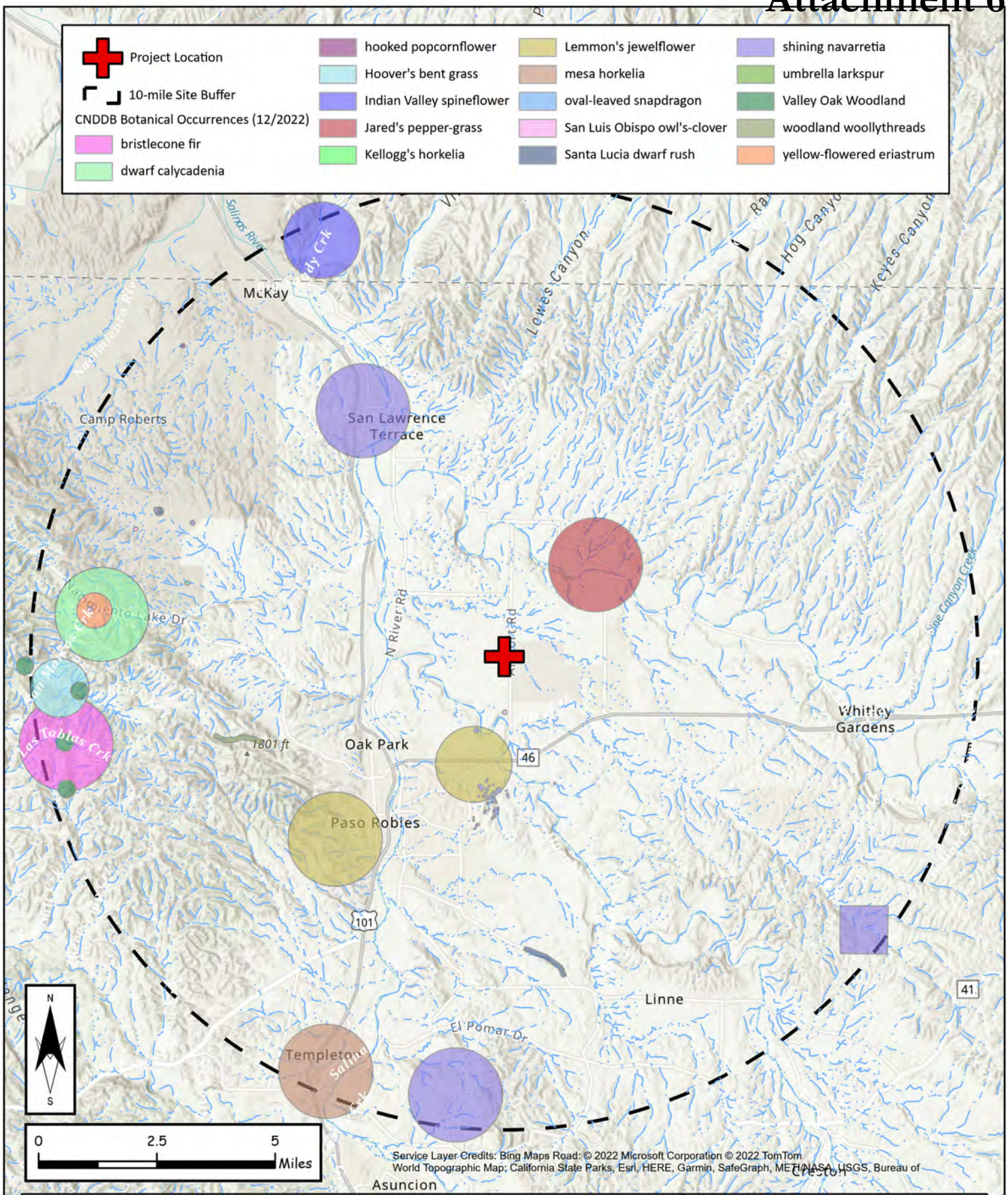


sage institute inc updated 12/16/2022	Stravinski-Daou Project	**Figure 1**
	Revised Biological Resources Assessment	**Vicinity Location Map**

sage institute
updated 12/16/2022

Stravinski-Daou Project	**Figure 2**
Revised Biological Resources Assessment	**Habitat Map**

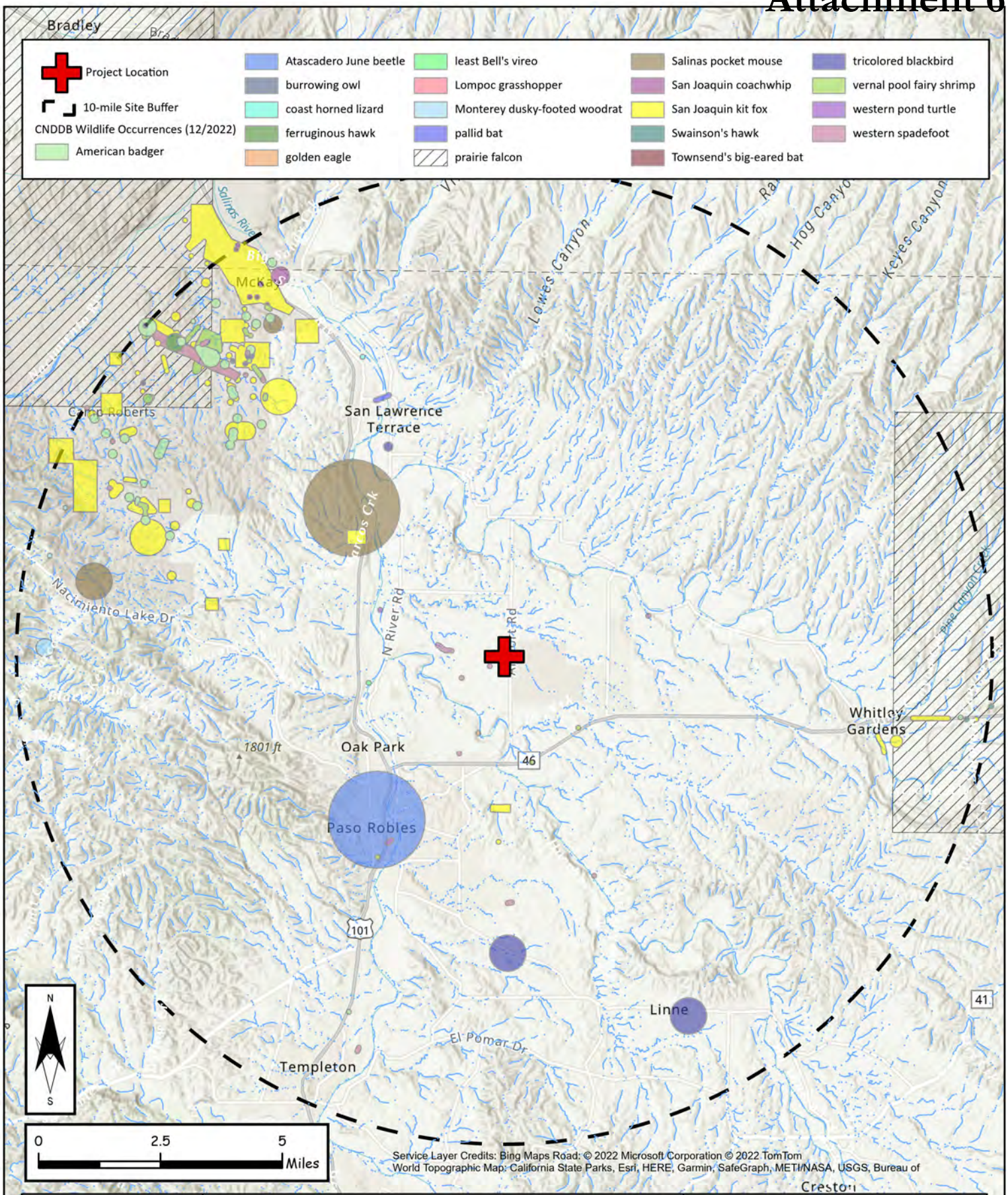
Attachment 6



sage institute LLC
updated 12/16/2022

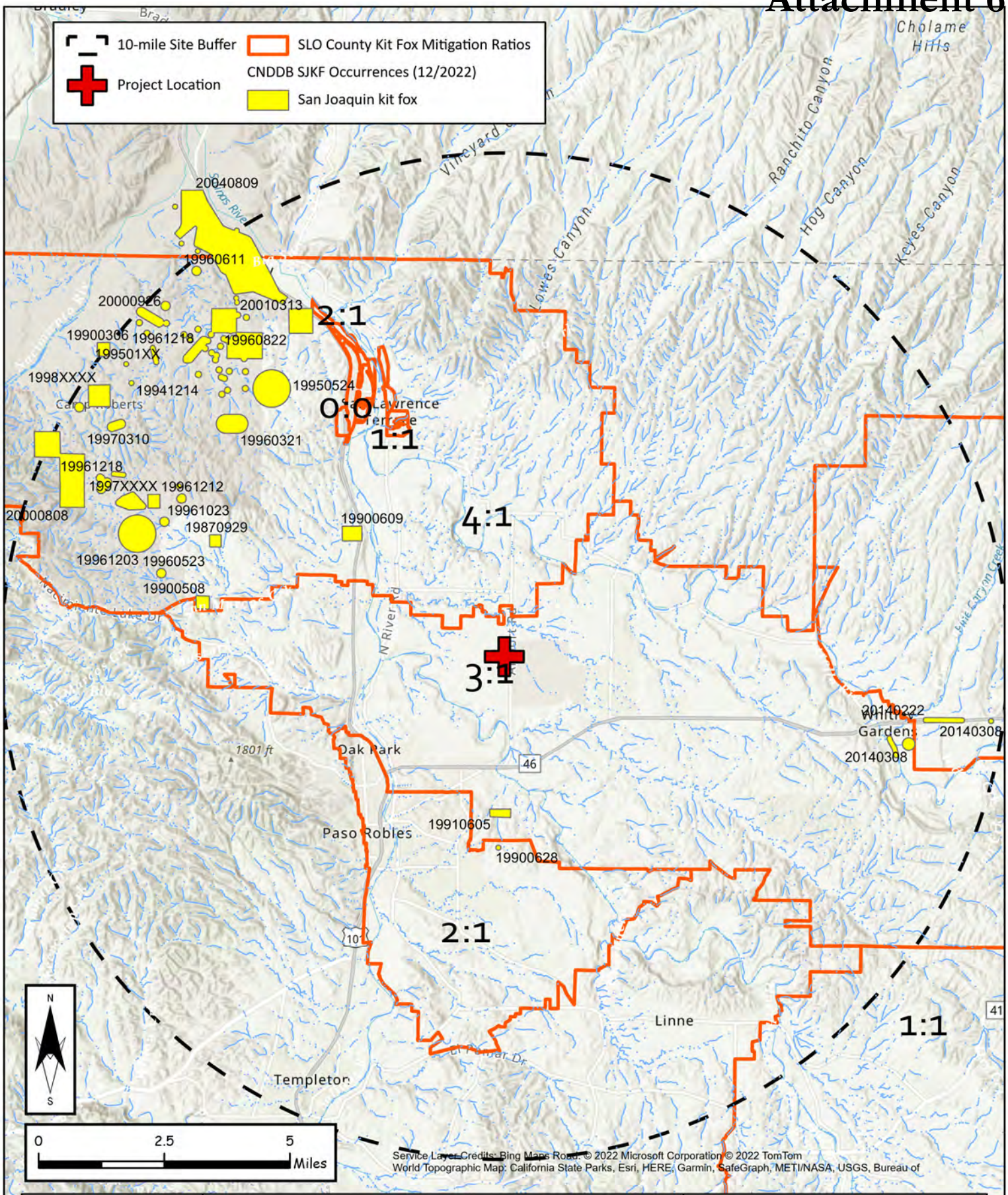
Stravinski-Daou Project	**Figure 3**
Revised Biological Resources Assessment	**CNDDB 10-Mile (Botanical)**

Attachment 6



sage institute LLC
updated 12/16/2022

Stravinski-Daou Project	Figure 4
Revised Biological Resources Assessment	CNDDB 10-Mile (Wildlife)



sage institute updated 12/16/2022	Stravinski-Daou Project	**Figure 5**
	Revised Biological Resources Assessment	**CNDDB 10-Mile SJKF**

APPENDIX B

TABLE B-1: CNDDB SPECIAL-STATUS SPECIES (UPDATED DECEMBER 2022)

Table B-2
CNDDB Special-Status Species Recorded Occurrences (10-mile Radius; Dec. 2022)

Attachment 6

Scientific Name	Common Name	FedList	CalList	SRank	CNPS Rare Plant Rank	General Habitat Description	Micro Habitat Description	# of CNDDB Occurrences w/in 10 miles	Potential to Occur Onsite
BIRDS									
Agelaius tricolor	tricolored blackbird	None	Threatened; SSC	S1S2	--	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	3	low
Aquila chrysaetos	golden eagle	None	None; FP	S3	--	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	1	low / foraging only
Athene cunicularia	burrowing owl	None	None; SSC	S3	--	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	5	low / winter only
Buteo regalis	ferruginous hawk	None	None	S3S4	--	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats.	Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	1	low / foraging only
Buteo swainsoni	Swainson's hawk	None	Threatened	S3	--	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	2	low / foraging only
Falco mexicanus	prairie falcon	None	None	S4	--	Inhabits dry, open terrain, either level or hilly.	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	2	low / foraging only
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	S2	--	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	2	none
REPTILES / AMPHIBIANS									
Anniella pulchra	northern California legless lizard	None	None; SSC	S3	--	Sandy or loose loamy soils under sparse vegetation.	Soil moisture is essential. They prefer soils with a high moisture content.	5	none
Emys marmorata	western pond turtle	None	None; SSC	S3	--	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	3	none
Masticophis flagellum ruddocki	San Joaquin coachwhip	None	SSC	S2?	--	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley.	Needs mammal burrows for refuge and oviposition sites.	3	none
Phrynosoma blainvillii	coast horned lizard	None	SSC	S3S4	--	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	1	none
Spea hammondii	western spadefoot	None	SSC	S3	--	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	14	none
MAMMALS									
Ammospermophilus nelsoni	Nelson's antelope squirrel	None	Threatened	S2S3	--	Western San Joaquin Valley from 200-1200 ft elev. On dry, sparsely vegetated loam soils.	Dig burrows or use k-rat burrows. Need widely scattered shrubs, forbs and grasses in broken terrain with gullies and washes.	1	none
Antrozous pallidus	pallid bat	None	SSC	S3	--	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	1	none
Corynorhinus townsendii	Townsend's big-eared bat	None	SSC	S2	--	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	2	low
Neotoma macrotis luciana	Monterey dusky-footed woodrat	None	SSC	S3	--	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats.	Nests constructed of grass, leaves, sticks, feathers, etc. Population may be limited by availability of nest materials.	3	none
Perognathus inornatus psammophilus	Salinas pocket mouse	None	SSC	S1	--	Annual grassland and desert shrub communities in the Salinas Valley.	Fine-textured, sandy, friable soils. Burrows for cover and nesting.	4	none
Taxidea taxus	American badger	None	SSC	S3	--	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	23	low
Vulpes macrotis mutica	San Joaquin kit fox	Endangered	Threatened	S2	--	Annual grasslands or grassy open stages with scattered shrubby vegetation.	Need loose-textured sandy soils for burrowing, and suitable prey base.	28	low
INVERTEBRATES									
Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None	S3	--	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools.	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	12	none
Polyphylla nubila	Atascadero June beetle	None	None	S1	--	Known only from inland sand dunes in San Luis Obispo County.		1	none
Trimerotropis occulens	Lompoc grasshopper	None	None	S1S2	--	Known only from Santa Barbara and San Luis Obispo counties.	Rocky gravelly habitats	1	none
PLANTS									
Abies bracteata	bristlecone fir	None	None	S2S3	1B.3	Lower montane coniferous forest, broadleafed upland forest, chaparral, riparian woodland.	Rocky sites in Monterey and San Luis Obispo counties. Sometimes serpentine. 150-1465 m.	1	none
Agrostis hooveri	Hoover's bent grass	None	None	S2	1B.2	Chaparral, cismontane woodland, closed-cone coniferous forest, valley and foothill grassland.	Sandy sites. 60-765 m.	1	none
Antirrhinum ovatum	oval-leaved snapdragon	None	None	S3	4.2	Chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland.	From open hillsides to small vernal pools in clay or gypsum soils w/in grassland or woodland. Sites often alkaline. 200-1000 m.	1	none
Aristocapsa insignis	Indian Valley spineflower	None	None	S1	1B.2	Cismontane woodland.	Sandy substrates. 180-1070 m.	1	none
Calycadenia villosa	dwarf calycadenia	None	None	S3	1B.1	Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps.	Open, dry meadows, hillsides, gravelly outwashes. 240-1350 m.	2	none
Castilleja densiflora var. obispoensis	San Luis Obispo owl's-clover	None	None	S2	1B.2	Valley and foothill grassland, meadows and seeps.	Sometimes on serpentine. 9-485 m.	3	none
Caulanthus lemmonii	Lemmon's jewelflower	None	None	S3	1B.2	Pinyon and juniper woodland, valley and foothill grassland.	75-1585 m.	3	none
Delphinium umbraculorum	umbrella larkspur	None	None	S3	1B.3	Cismontane woodland, chaparral.	Mesic sites. 215-2075 m.	1	none
Eriastrum luteum	yellow-flowered eriastrum	None	None	S2	1B.2	Broadleafed upland forest, cismontane woodland, chaparral.	On bare sandy decomposed granite slopes. 240-580 m.	1	none
Horkelia cuneata var. puberula	mesa horkelia	None	None	S1	1B.1	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	1	none
Horkelia cuneata var. sericea	Kellogg's horkelia	None	None	S1?	1B.1	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral.	Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 5-430 m.	1	none
Juncus luciensis	Santa Lucia dwarf rush	None	None	S3	1B.2	Vernal pools, meadows and seeps, lower montane coniferous forest, chaparral, Great Basin scrub.	Vernal pools, ephemeral drainages, wet meadow habitats and streamsides. 280-2035 m.	3	none
Lepidium jaredii ssp. jaredii	Jared's pepper-grass	None	None	S1S2	1B.2	Valley and foothill grassland.	Alkali flats and sinks. Sandy, alkaline, sometimes adobe soils. 335-1005 m.	1	none
Monolopia gracilens	woodland woollythreads	None	None	S3	1B.2	Chaparral, valley and foothill grassland, cismontane woodland, broadleafed upland forest, North Coast coniferous forest.	Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns, but may have only weak affinity to serpentine. 120-975 m.	1	none
Navarretia nigelliformis ssp. radians	shining navarretia	None	None	S2	1B.2	Cismontane woodland, valley and foothill grassland, vernal pools.	Apparently in grassland, and not necessarily in vernal pools. 60-975 m.	9	none
Plagiobothrys uncinatus	hooked popcornflower	None	None	S2	1B.2	Chaparral, cismontane woodland, valley and foothill grassland.	Sandstone outcrops and canyon sides; often in burned or disturbed areas. 210-855 m.	1	none
NATURAL COMMUNITIES									
Valley Oak Woodland	Valley Oak Woodland	None	None	S2.1	--	--	--	4	none

APPENDIX C

SAN JOAQUIN KIT FOX HABITAT EVALUATION FORM (UPDATED DECEMBER 2022)

San Joaquin Kit Fox Habitat Evaluation Form

Cover Sheet

Project Name: Stravinski-Daou Project **Date**: December 12, 2022

Project Location*: 5715 Airport Road, Paso Robles, CA

(See Appendix A Location Maps)

*Include project vicinity map and project boundary on copy of U.S.G.S. 7.5 minute map (size may be reduced)

U.S.G.S. Quad Map Name: **Paso Robles**

Lat/Long or UTM coordinates (if available): 35.674398 -120.637552

Project Description: The updated project description consists of subdividing the approximately 19.75-acre property into two (2) parcels, roughly equal in size at 9.87-acres each. Phase 1 proposes to construct an approximately 196,000 square foot warehouse building for refrigerated wine storage, distribution, and a fulfillment center. Phase 2 proposes to construct an approximately 157,000 square foot wine production facility. Phase 2 interior uses include barrel storage, bottling/packages areas, warehousing, and fermentation areas. The exterior uses include a crush pad, mechanical yards, and wastewater treatment.

Project Size Acres Amount of Kit Fox Habitat Affected Acres

Quantity of WHR Habitat Types Impacted (i.e. - 2 acres annual grassland, 3 acres blue oak woodland)

WHR type: Cropland 17.5 Acres

WHR type: Urban/Developed 2.5 Acres

WHR type_____Acres

WHR type_____Acres

Comments: Review of available aerial photography shows that the project site has been in active cultivation with alfalfa and dryland farming, and appurtenant structures, going back to at least 1977. The proposed project site is surrounded on all sides by a variety of commercial, industrial, and agricultural uses.

San Joaquin Kit Fox Habitat Evaluation Form

Form Completed By: Jason Kirschenstein, Principal Biologist, Sage Institute, Inc.

Is the project area within 10 miles of a recorded San Joaquin kit fox observation or within contiguous suitable habitat as defined in question 2 (A-E)

Yes – Continue with evaluation form
No – Evaluation form/surveys are not necessary

1. Importance of the project area relative to Recovery Plan for Upland Species of the San Joaquin Valley, California (Williams et al., 1998)

   A. Project would block or degrade an existing corridor linking core populations or isolate a subpopulation (20)
   B. Project is within core population (15)
   C. Project area is identified within satellite populations (12)
   D. Project area is within a corridor linking satellite populations (10)
   E. Project area is not within any of the previously described areas but is within known kit fox range (5)

2. Habitat characteristics of project area.

   A. Annual grassland or saltbush scrub present >50% of site (15)
   B. Grassland or saltbush scrub present but comprises<50% of project area (10)
   C. Oak savannah present on >50% of site (8)
   D. Fallow ag fields or grain/alfalfa crops (7)
   E. Orchards/vineyards (5)
   F. Intensively maintained row crops or suitable vegetation absent (0)

3. Isolation of project area.

   A. Project area surrounded by contiguous kit fox habitat as described in Question 2a-e (15)
   B. Project area adjacent to at least 40 acres of contiguous habitat or part of an existing corridor (10)
   C. Project area adjacent to <40 acres of habitat but linked by existing corridor (i.e., river, canal, aqueduct) (7)
   D. Project area surrounded by ag but less than 200 yards from habitat (5)
   E. Project area completely isolated by row crops or development and is greater than 200 yards from potential habitat (0)

4. Potential for increased mortality as a result of project implementation. Mortality may come from direct (e.g., - construction related) or indirect (e.g., - vehicle strikes due to increases in post development traffic) sources.

   A. Increased mortality likely (10)
   B. Unknown mortality effects (5)
   C. No long term effect on mortality (0)

5. Amount of potential kit fox habitat affected.

   A. >320 acres (10)
   B. 160 - 319 acres (7)
   C. 80 - 159 acres (5)
   D. 40 - 79 acres (3)
   E. < 40 acres (1)

6. Results of project implementation.

   A. Project site will be permanently converted and will no longer support foxes (10)
   B. Project area will be temporarily impacted but will require periodic disturbance for ongoing maintenance (7)
   C. Project area will be temporarily impacted and no maintenance necessary (5)
   D. Project will result in changes to agricultural crops (2)
   E. No habitat impacts (0)

7. Project Shape

   A. Large Block (10)
   B. Linear with > 40 foot right-of-way (5)
   C. Linear with < 40 foot right-of-way (3)

8. Have San Joaquin kit foxes been observed within 3 miles of the project area within the last 10 years?

   A. Yes (10)
   B. No (0)

Scoring

1.	Recovery importance	20
2.	Habitat condition	7
3.	Isolation	15
4.	Mortality	10
5.	Quantity of habitat impacted	1
6.	Project results	10
7.	Project shape	10
8.	Recent observations	0
TOTAL		**73**

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES
1602 Spring Street, Paso Robles, CA 93446
(805) 237-9626 • Fax (805) 237-9181 • www.althouseandmeade.com

March 31, 2022
Project No.1340.01

Stravinski Development Group
c/o Brian Doswald
413 W. Yosemite Avenue, Ste 105
Madera, CA 93637
Email: bdoswald@stravinski.com

Re: Tree Evaluation Letter Report, APN 025-434-002
5175 Airport Road,City of Paso Robles, California

Dear Mr. Doswald:

This letter report provides tree assessment results conducted on an approximate 19.7-acre property (Property) located west of Airport Road, north of Highway 46 in the City of Paso Robles, California. The Property is situated along the northern boundary of the City's limit. The majority of the Property is undeveloped, with a single-family residence, barn, water tank, and a secondary housing structure clustered in the northeast portion. Proposed development includes demolition of the existing structures except for the water tank, and construction of a distribution center, biorention/detention pond, parking, and landscaping (Project).

Location coordinates are 120.64316°W, 35.67647 N (WGS 84) in the Paso Robles USGS 7.5' topographic quadrangle (Figure 1 and Figure 2). Consistent with the City of Paso Robles Oak Tree Preservation Ordinance (City 2002), all oak trees within and adjacent to the Project footprint were assessed and a summary of tree health and management recommendations are provided. This letter also details oak tree mitigation measures for Project development; including oak replacement criteria for removed and impacted trees, as well as protection measures to non-impacted oak trees.

Oak Tree Preservation Ordinance

The Oak Tree Preservation Ordinance provides policies, regulations and specifications necessary to govern preservation of oak trees within the City and to control their pruning and/or removal. The provisions apply to private property owners, tree maintenance services and Arborists, and new development, redevelopment and any discretionary considerations by the City that result in development of intensities that could impact existing oak trees. Preservation of existing oak trees and opportunities to promote the establishment of new oak trees is considered for development projects or development related entitlements.

Pursuant to the City's Oak Tree Preservation Ordinance oak tree protection measures are for trees measured at six inches or greater in diameter at breast height (dbh), which is 4.5 feet above ground

level. Any oak tree slated for removal requires a permit which are processed through the City's Community Development Department. Permit for pruning oak trees are in the purview of the City's Community Development Department. Oak trees marked for removal require mitigation, where the total dbh of replacement tree (or caliper) shall be equivalent to 25 percent of the total dbh of trees removed.

Trees not marked for removal or completely avoided are assessed according to their Critical Root Zone (CRZ). The City of Paso Robles defines the CRZ as the area circumscribed around the tree's trunk using a radius of one foot per one-inch dbh. For this document, CRZ is defined as the area using a radius of one foot per one-inch dbh. Although not specified in the ordinance, mitigation of CRZ impacts are often assessed according to the percent of CRZ impact, i.e. less than 50 percent or greater than 50 percent.

Oak Tree Evaluation

Althouse and Meade certified Arborist Cory Meyer and Althouse and Meade biologist, Valerie Mattos, visited the site at 5175 Airport Road on February 9, 2022, to field-verify surveyed trees and assess the health of 6 valley oaks (*Quercus lobata*). Mr. Meyer performed visual inspections from the ground and used standardized tree health criteria (Table 1). All 6 trees were tagged onsite with numbered round aluminum tags. Tree identification tag numbers were documented on field maps and representative photographs were taken.

TABLE 1. TREE HEALTH RATING SYSTEM

Rating	Condition
0	**Deceased**
1	**Very poor -** Evidence of massive past failures, extreme disease and or is in severe decline
2	**Poor -** May be saved with attention to any of the following - pruning, insect/pest eradication and future monitoring
3	**Fair -** Some past failures, some pests or structural defects that may be mitigated with pruning
4	**Fair -** May have had minor past failures, deadwood or minor structural defects
5	**Good -** Relatively healthy tree with little structural and or pest defects
6	**Good -** Healthy tree that probably can be left in its natural state
7, 8, 9	**Very good -** Ratings reserved for trees that have had proper arboricultural pruning and attention or have no apparent structural defects
10	**Excellent -** Specimen tree with excellent structure and foliage and has had many years of proper care (i.e. park or arboretum)

Individual Trees

An individual tree assessment and representative photos are provided below and summarized in Table 2. Tree locations are depicted on Figure 3.

TABLE 2. TREE ASSESSMENT DATA

Tag #	Species	Tree Condition	Trunk DBH (in.)	Tree Height (ft.)	Canopy Spread (ft.)	Notes
1	*Q. lobata*	4	25	25	35	Topped / under power lines
2	*Q. lobata*	3	4/6	15	12	Low Vigor / lichen on branches
3	*Q. lobata*	2	67	50	55	Past failures and cavities
4	*Q. lobata*	3	12	30	20	Pit scale insects/ included bark
5	*Q. lobata*	4	22	32	28	Included bark in trunk/galls
6	*Q. lobata*	4	17	32	30	Pit scale insect infestation

Tree No. 1

Tree No. 1 is a valley oak with a 25-inch dbh. The height and canopy spread were estimated at 25 feet and 35 feet, respectively. This oak received a rating of 4 for tree condition due to the compromised structure from past pruning. Utility Arborists have topped the tree as it grows directly under Airport Road power lines (Photo 1). The current overhead power lines will be moved underground. In addition, Airport Road is to be widened to accommodate a center turn lane, which will impact the critical root zone of this oak by >30%. New utilities, sewer, and water will also be installed and will have additional impacts on the critical root zone. This oak is proposed for removal due to the construction impacts.

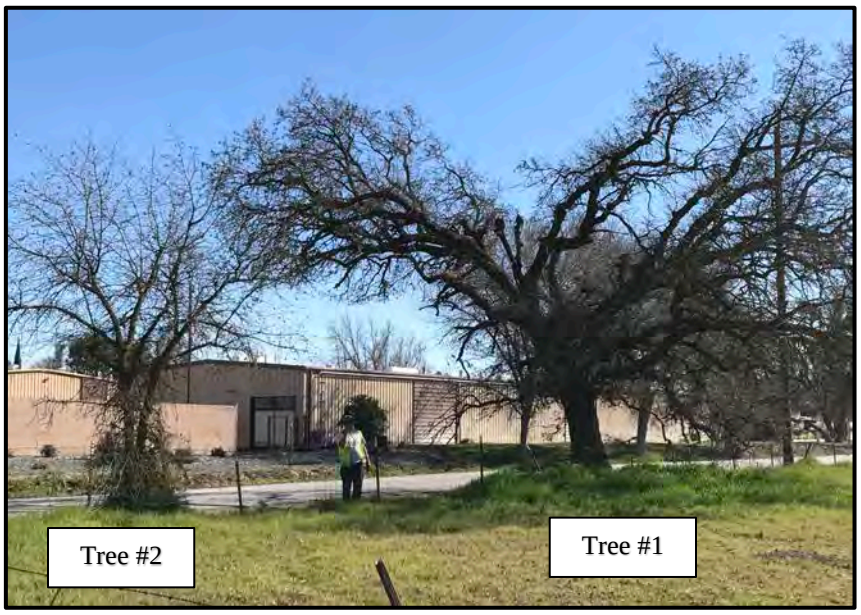


Photo 1. Tree No.1 (right) and Tree No.2 (left) located next to each other and along Airport Road. Note the overhead power lines above the tree canopy. View east. February 9, 2022.

Tree No. 2

Tree No. 2 is a valley oak with two trunks (4 and 6-inch dbh). The height and canopy spread were estimated at 15 feet and 12 feet, respectively. This oak received a health rating of 3 because it has low vigor. This tree grows near Tree No. 1 and under the power lines along Airport Road (Photo 1).

The new utilities, sewer, and water will have significant impacts to this tree, therefore it is proposed for removal.

Tree No. 3

Tree No. 3 is a valley oak with a 67-inch dbh. The height and canopy spread were estimated at 50 feet and 55 feet, respectively. The canopy is unbalanced and growing primarily to the north. This oak was rated a 2 for the condition because of poor structure, past branch failures, and apparent cavities in the upper trunk (Photo 2). The tree is located in the proposed parking area and is proposed for removal.

Photo 2. Tree No.3 View southeast. February 9, 2022.

Tree No. 4

Tree No. 4 is a valley oak with a 12-inch dbh. The height and canopy spread were estimated at 30 feet and 20 feet, respectively (Photo 3). This oak received a rating of 3 for condition as it has included bark. Included bark tissue often develops where two or more stems grow closely together, causing weak, under-supported branch angles. Bark often grows around the branching stem attachment and into the union between the two stems. Bark has no strong supportive fiber strength as wood does, so the connection is much weaker than a union without included bark. The tree also has an oak pit scale infestation causing stress. Oak pit scales are insects that suck juices from soft tissue and new growth and cause twig dieback. This condition can be treated by proper pesticide application. By eradicating the pit scale and proper trimming, this tree can remain.

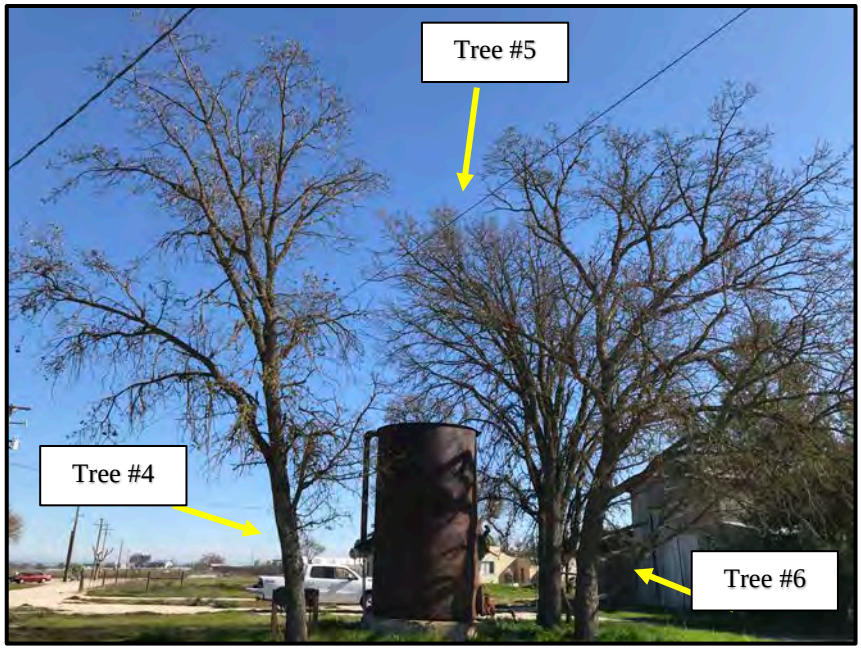


Photo 3. Tree No.4, 5, and 6, view east. These trees will remain because the proposed parking area is designed to accommodate these three oaks. February 9, 2022.

Tree No. 5

Tree No. 5 is a valley oak with a 22-inch dbh. The height and canopy spread were estimated at 32 feet and 28 feet, respectively. This tree received a rating of 4 for condition. This oak also has included bark at some of the branching attachments. This tree will need trimming for clearance, some selective thinning of branches, and can remain.

Tree No. 6

Tree No. 6 is a valley Oak with a 17-inch dbh. The height and canopy spread were estimated at 32 feet and 30 feet, respectively. This oak received a rating of a 4 for condition. It also has pit scale insect infestation. The pit scale infestation can be treated. The tree will need trimming for clearance, some selective thinning of branches, and can remain.

Impact Discussion

For this impact discussion, CRZ is defined as the area using a radius of one foot per one-inch dbh. Table 3 and Figure 3 provides an overview of each tree location and type of impact based on review of the Site Plan (Ward Architects, 3/22/2022). The locations of all assessed trees will be impacted with Trees No. 1, 2 and 3 to be removed completely (100 percent). The total dbh of removed trees is equivalent to 102 inches.

The existing ground surface within the CRZ of any oak tree shall not be cut, filled, compacted or pared. Excavation adjacent to any oak tree shall not be permitted where damage to the root system will result (City 2002). As indicated in the Site Plan, 3 oak trees will have minor CRZ impacts.

TABLE 3. OAK TREE IMPACTS

Tag #	Species	CRZ (ft.)	Percent Impact	Type of Impact
1	*Q. lobata*	25	100	Removal
2	*Q. lobata*	4/6	100	Removal
3	*Q. lobata*	67	100	Removal
4	*Q. lobata*	12	0	Remain
5	*Q. lobata*	22	0	Remain
6	*Q. lobata*	17	0	Remain

No protective measures are required for individual trees slated for removal; however, protected trees in the project area will require additional protective measures during any tree removal and construction activities. The Tree Protection Zone (TPZ) for protected trees shall be designated on construction plans to identify areas where trees are to be preserved and where special care is necessary to protect living trees. Tree protection fencing will be installed as per construction plans and will be maintained throughout construction. For work within the TPZ, tree removal and construction means and methods must be approved by the project Arborist prior to initiating work. Work within the TPZ will be subject to monitoring by the project Arborist. The TPZ should be outside the CRZ whenever possible.

Note that root systems of trees, depending on the species, may extend well beyond the canopy dripline and maybe two to three times beyond the CRZ. Any disturbance inside this area can cause damage to tree roots. In addition, nearby trenching, paving, or altering drainage patterns outside the immediate CRZ may also significantly affect a tree.

Tree No. 1 and 2 are growing along Airport Road under overhead power lines. Airport Road is to be widened to accommodate a center turn lane, which will impact the critical root zone of Tree No.1 by >30 percent. In addition, the overhead power lines are to be moved underground. New utilities, sewer, and water will also be installed and significantly impact the critical root zones of Trees No.1 and 2. Therefore, these oaks are proposed for removal due to the construction impacts of road widening and new utility installations.

Tree No. 3 is in poor condition and is in the proposed parking lot area. Therefore, this oak is proposed for removal.

Tree No. 4, 5, and 6 are to remain. The parking area was designed to accommodate these three oaks. There are pipes and electrical associated with an old well and water tank close to these three oaks that must be capped off at ground level. Its recommended that the water tank and concrete foundation remains in place, as there will be much less impact on these trees than trying to work around the trees to remove the tank and foundation. The project Arborist needs to be onsite for any excavation and grading in the CRZ of these three oaks this includes potential removal of the water tank and concrete foundation.

Mitigation Recommendations

Oak trees removed by the project shall be replaced in accordance with the City's Oak Tree Preservation Ordinance. Planting small trees in quantity to account for the mitigated dbh

equivalency will satisfy this requirement. Mitigation for the removal of three oak trees (Tree No.1, 2, and 3) is 25 percent of the total dbh (102-inches), equivalent to 25.5-inches in caliper for oak replacement trees. Rounding this to 26 (or nine, 3-inch caliper valley oaks). Mitigation trees are described by their diameter measured as "caliper". American Horticulture describes this measurement for trees larger than seedling size:

"caliper measurement shall be taken six inches above the ground level for field grown stock and from the soil line for container grown stock, which should be at or near the top of the root flare, and six inches above the root flare for bare root plants, up to and including the four-inch caliper size interval (i.e., from four inches up to, but not including, 4½ inches). If the caliper measured at six inches is four and one-half inches or more, the caliper shall be measured at 12 inches above the ground level, soil line, or root flare, as appropriate. Seldom are tree trunks perfectly round. The most accurate measurement will result from the use of a diameter tape. Caliper measurements taken with manual or electronic "slot" or "pincer" type caliper tools should be the average of the smallest and largest measurements."

Mitigation for removed oaks could be satisfied by planting a combination 1- inch, 1.5-inch or 3-inch caliper trees so long as the total combination totals 26 inches (e.g., nine 3-inch caliper oaks, seventeen 1.5-inch caliper oaks, or a combination depending on availability). Suppose replacement caliper trees of appropriate size are not available as specified in the mitigation measure. In that case, smaller replacement trees in higher quantities deemed acceptable by the City may be planted. Mitigation trees shall be sourced from California's central coast region.

The landscape plan includes nine valley oaks of 3-inch caliper size, equivalent to 36-inch box trees to be planted on the site to satisfy mitigation requirements. A copy of the Landscape Plan is provided in Attachment 1.

Tree Protection Zone Restrictions for Trees No. 4, 5 and 6

- No ground disturbance, grading, trenching, construction activities or structural development shall occur within the tree protection zone (TPZ; e.g., the dripline of protected trees) except as specifically authorized by the project's development permit and Project Arborist.
- Setbacks for TPZ fencing may be adjusted under guidance of the Project Arborist.
- All temporary vehicle and equipment access areas within TPZ boundaries will require a minimum 6-inch layer of wood chip mulch to mitigate soil compaction over the critical root zone (CRZ). Additionally, the Project Arborist may require the addition of plywood or rubber mats over the mulch in frequently traveled sensitive areas.
- No equipment, soil, or construction materials shall be placed, staged, or stored within the TPZ. No oil, gasoline, chemicals, paints, solvents, or other damaging materials shall be deposited within the TPZ or in drainage channels, swales or areas that may lead to the TPZ.
- Unless otherwise directed by the Project Arborist, all work done within the TPZ, including digging, trenching and planting, shall be done with hand tools or small hand-held power tools that are of a depth and design that will not cause root damage.
- Where trenching or digging within the TPZ is specifically permitted, the work shall be conducted in a manner that minimizes root damage, as directed by the Arborist. All roots larger than 1-inch in diameter shall be clean cut with sharp pruning tools and not left ragged.

- Any exposed roots shall be re-covered with soil the same day they were exposed if possible. If they cannot, they must be covered with burlap or another suitable material and wet down 2 times per day until reburied.
- Grade changes outside of the TPZ shall not significantly alter drainage to protected trees. Grading within the TPZ shall use methods that minimize root damage and ensure that roots are not cut off from air. Where erosion may be a factor, return and protect the original grade or otherwise stabilize the soil.
- Protected trees shall not be used for posting signs, electrical wires or pulleys; for supporting structures; and shall be kept free of nails, screws, rope, wires, stakes and any other unauthorized fastening devices or attachments.

Tree Protection Fencing

Fencing shall be temporary, readily visible, orange snow drift/construction fencing, and a minimum of 4-feet high. Fencing shall be secured to 6-foot t-posts, driven into the ground by 12 inches, and placed at intervals of 8 feet minimum. Fencing can be fastened to the t-posts with bailing wire or zip ties. Fencing shall be installed outside the CRZ unless modifications are approved by the Project Arborists. Fencing shall effectively: 1) keep the foliage, crown, branch structure and trunk clear from damage by equipment, materials or disturbances; 2) preserve roots and soil in an intact and non- compacted state; and 3) identify the TPZ. Fencing shall be maintained for the duration of construction. Fencing shall be removed as the last item of contract work.

Signs

One English language and one Spanish language, readily visible, durable, waterproof sign shall be installed on tree protection fences in 4 equidistant locations around each individual protected tree or tree clusters. Signs placed on fencing around a stand of protected trees shall be placed at approximately 50- foot intervals. The size of each sign must be a minimum of 16 inches wide and must contain the wording below. The lettering in the word "WARNING" ("ADVERTENCIA") must be in capital letters at least 2 inches in height; the phrase "TREE PROTECTION ZONE" ("ZONA DE PROTECCIÓN DE ÁRBOLES") must be in capital letters at least 1 inch in height; all other lettering must be at least ½ inch in size.

Other Recommendations

- **Preconstruction**. If construction is planned to occur between February 1 and September 15, a qualified biologist shall survey both Project trees and vegetation within 100 feet of Project area for nesting birds (300 feet for raptors) within one week of construction activities. If nesting birds are present the biologist will coordinate with Project manager to minimize impacts to nesting birds.
- **During Construction**. An Arborist shall determine when to be onsite to monitor all grubbing, trenching, digging, and grading during construction activities within the TPZ. If required, the Arborist shall inform the City of Paso Robles Community Development Department when tree protective fencing may be removed.
- **Unanticipated Tree Damage Reporting**. In the event that unanticipated or unauthorized impacts are inflicted on protected trees, the Project Arborist shall be immediately notified. The Project Arborist shall inspect damaged trees and prepare unanticipated damage reports with remediation recommendations to the Project Manager. Any damage or wounds to a tree shall

be corrected within 24 hours of notification by a certified Arborist using International Society of Arboriculture (ISA) guidelines.

- **Post-Construction Arborist Monitoring and Reporting**. Post-construction monitoring and reporting will be performed by the Arborist as required by the City of Paso Robles.

Thank you for allowing us to be of assistance. If you have any questions or concerns, please call me or Valerie Mattos at (805) 237-9626.

Sincerely,

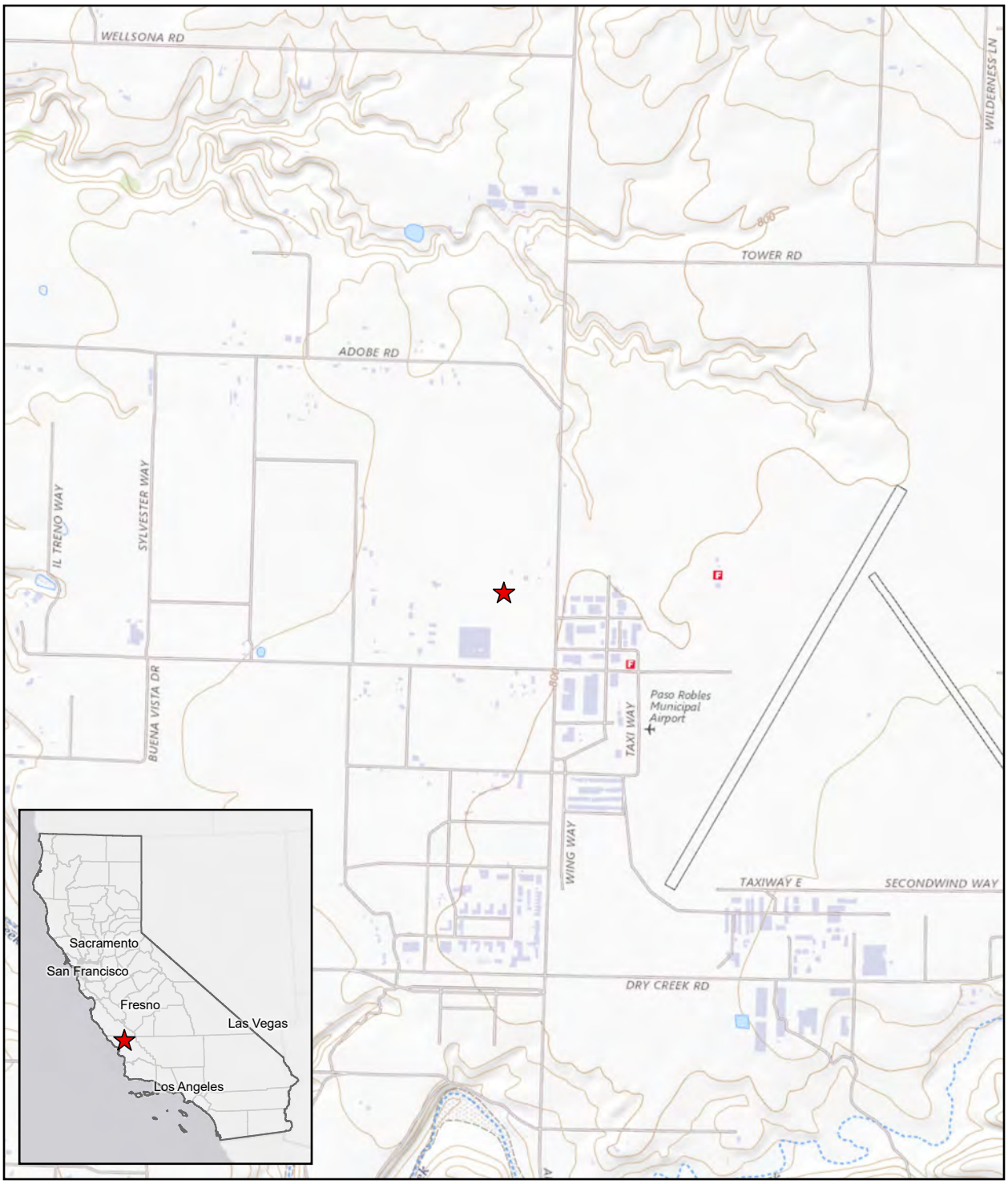
Cory Meyer
Certified Arborist, ISA Certification No. WE 7678-A

Figures

- **Figure 1. USGS Topographic Map**
- **Figure 2. Tree Survey**
- **Figure 3. Tree Impacts**

Attachment 1. Preliminary Tree Plan (Ward Architects, 3/25/2022)

Figure 1. United States Geological Survey Topographic Map



Legend

★ Project Location

N

0 1,000 2,000 Feet

5175 Airport Road
Map Center: 120.64316°W 35.67647°N
Paso Robles, San Luis Obispo County

USGS Quadrangle: Paso Robles

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
February 16, 2022 02:05 PM by SAF

Figure 2. Tree Survey

Legend

Property (19.7 acres)

Valley Oak (*Quercus lobata*)

Critical Root Zone

N

0 100 200 Feet

5175 Airport Road
Map Center: 120.64313°W 35.67653°N
Paso Robles, San Luis Obispo County

Imagery Source: ESRI World Imagery, 07/23/2021

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
March 30, 2022 02:09 PM by SAF

Figure 3. Tree Impacts

Legend

- Property Boundary
- Tree Protection Fencing
- Site Plan*

Oak Impact Status

- Removed
- Protected

N

0 100 200 Feet

5175 Airport Road
Map Center: 120.64209°W 35.67651°N
Paso Robles, San Luis Obispo County

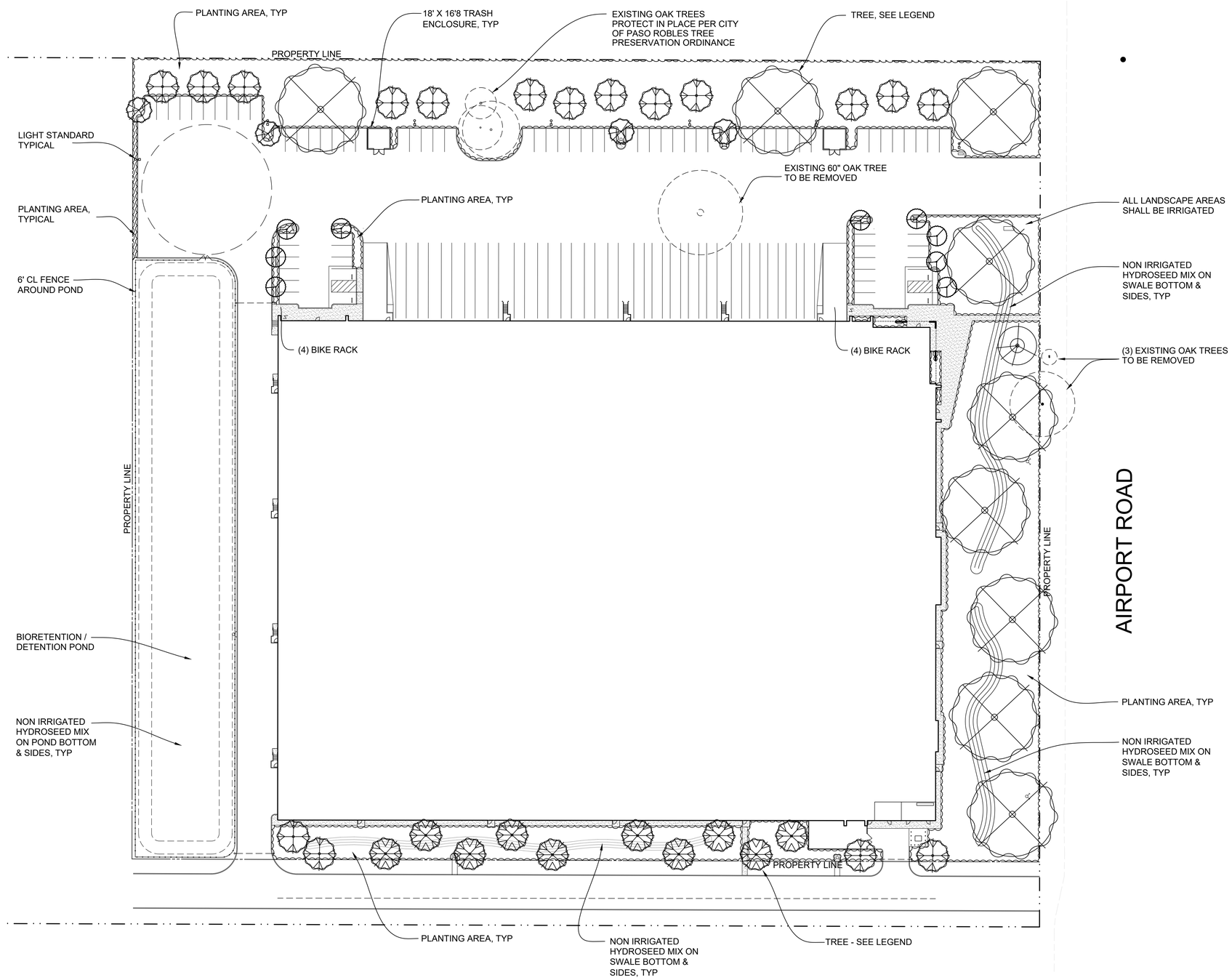
*Ward Architects, Inc., 03/25/2022

Imagery Source: ESRI World Imagery, 08/07/2018

ALTHOUSE AND MEADE, INC.
BIOLOGICAL AND ENVIRONMENTAL SERVICES

Map Updated:
March 30, 2022 04:00 PM by SAF

Attachment 1. Preliminary Tree Plan (Ward Architects, 3/25/2022)



PRELIMINARY LANDSCAPE PLAN

SCALE: 1" = 40'

NORTH

WAI
Ward Architects, Inc.
www.wardarchitects.com
architecture | landscape architecture

PO Box 1649
Coeur d'Alene, Idaho 83816
Phone 208 820 8800

Owner:

SDG Paso Robles 413, LLC
413 W. Yosemite, Suite 105
Madera, CA 93637
559 674 0906

Project:

SDG Paso Robles 194 Distribution Center
5175 Airport Road
Paso Robles, CA 93446

APN 025-434-002

Contractor:

Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
Madera, CA 93637

Sheet:

PRELIMINARY TREE PLAN

DATE: March 25, 2022

REVISION:

ARCHITECTS STAMP: SHEET:

L1

PLANT LEGEND

TREES

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
	ARBUTUS 'MARINA' - MULTI	NCN	36" BOX	1
	CHITALPA T. 'PINK DAWN' STD.	PINK DAWN CHITALPA	15 GAL	17
	GEIJERA PARVIFLORA STD.	AUSTRALIAN WILLOW	15 GAL	10
	LAGERSTROEMIA I. 'NATCHEZ' STD.	CRAPE MYRTLE	15 GAL	4
	LAGERSTROEMIA I. 'TUSKARORA' STD.	CRAPE MYRTLE	24" BOX	9
	QUERCUS LOBATA STD.	VALLEY OAK	36" BOX	9*

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
	ABELIA X GRANDIFLORA' KALEIDOSCOPE'	VARIEGATED GLOSSY ABELIA	1 GAL	4' O.C.
	ABUTILON P. 'THOMPSONII'	VARIEGATED FLOWERING MAPLE	5 GAL	4' O.C.
	ANIGOZANTHUS - ORANGE VARIETY	KANGAROO PAW	1 GAL	3' O.C.
	ARBUTUS U. 'ELFIN KING'	DWARF STRAWBERRY TREE	5 GAL	5' O.C.
	ARCTOSTAPHYLOS D. 'HOWARD MCMINN'	VINE HILL MANZANITA	5 GAL	8' O.C.
	BERBERIS T. 'ORANGE ROCKET'	ORANGE ROCKET BARBERRY	5 GAL	3' O.C.
	CARPENTERIA C. 'ELIZABETH'	BUSH ANEMONE	5 GAL	4' O.C.
	CEANOTHUS 'CONCHA'	CALIFORNIA WILD LILAC	5 GAL	5' O.C.
	CEANOTHUS T. 'EL DORADO'	CALIFORNIA WILD LILAC	5 GAL	8' O.C.
	CISTUS L. 'BLANCHE'	WHITE ROCK ROSE	5 GAL	8' O.C.
	COLEONEMA P. 'SUNSET GOLD'	S.G. BREATH OF HEAVEN	1 GAL	5' O.C.
	COPROSMA 'EVENING GLOW'	MIRROR PLANT	5 GAL	4' O.C.
	COPROSMA 'TEQUILA SUNRISE'	MIRROR PLANT	5 GAL	4' O.C.
	CORREA PULCHELLA- ORANGE FLOWERS	AUSTRALIAN FUCHSIA	1 GAL	5' O.C.
	CORREA P. 'PINK FLAMINGO'	AUSTRALIAN FUCHSIA	1 GAL	3' O.C.
	CORREA 'WYN'S WONDER'	VARIEGATED AF	1 GAL	5' O.C.
	ECHIUM C. 'STAR OF MADEIRA'	VARIEGATED PRIDE OF MADEIRA	5 GAL	8' O.C.
	EUONYMUS J. 'GREEN SPIRE'	GREEN SPIRE EUONYMUS	5 GAL	2' O.C.
	GREVILLEA L. 'MT. TAMBORITHA'	WOOLLY GREVILLEA	1 GAL	4' O.C.
	HETEROMELES A. 'DAVIS GOLD'	DAVIS GOLD TOYON	5 GAL	8' O.C.
	MAHONIA 'GOLDEN ABUNDANCE'	G.A. OREGON GRAPE	5 GAL	8' O.C.
	MYRICA CALIFORNICA	PACIFIC WAX MYRTLE	5 GAL	15' O.C.
	NANDINA D. 'MOON BAY'	DWARF HEAVENLY BAMBOO	5 GAL	2' O.C.
	PHORMIUM 'APRICOT QUEEN'	NEW ZEALAND FLAX	5 GAL	4' O.C.
	PHORMIUM 'BRONZE BABY'	NEW ZEALAND FLAX	1 GAL	4' O.C.
	PHORMIUM 'EVENING GLOW'	NEW ZEALAND FLAX	5 GAL	4' O.C.
	PHORMIUM 'GUARDSMAN'	NEW ZEALAND FLAX	5 GAL	8' O.C.
	PHORMIUM 'MAORI CHIEF'	NEW ZEALAND FLAX	5 GAL	7' O.C.
	PHORMIUM 'TONY TIGER'	DWARF NEW ZEALAND FLAX	1 GAL	2' O.C.
	PHOTINIA X FRASERII	FRASER'S PHOTINIA	5 GAL	10' O.C.
	PITTOSPORUM T. 'MARJORIE CHANNON'	VARIEGATED TOBIRA	5 GAL	8' O.C.
	PITT. T. 'TURNER'S VARIEGATED DWARF'	DWARF TOBIRA	1 GAL	3' O.C.
	PITTOSPORUM T. 'WHEELER'S DWARF'	DWARF TOBIRA	1 GAL	5' O.C.
	RHAMNUS A. 'VARIEGATA'	VARIEGATED ITALIAN BUCKTHORN	15 GAL	8' O.C.
	RHAMNUS C. 'EVE CASE'	EVE CASE COFFEEBERRY	5 GAL	6' O.C.
	SALVIA X 'BIG SWING'	SALVIA	1 GAL	2' O.C.
	TEUCRIUM F. 'AZUREUM'	AZURE BUSH GERMANDER	5 GAL	5' O.C.
	TEUCRIUM F. 'COMPACTUM'	COMPACT BUSH GERMANDER	1 GAL	3' O.C.
	WESTRINGIA F. 'BLUE GEM'	COAST ROSEMARY	5 GAL	4' O.C.
	WESTRINGIA F. 'WYNABIE HIGHLIGHT'	VARIEGATED COAST ROSEMARY	5 GAL	4' O.C.

GROUND COVERS

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
	ACACIA R. 'LOW BOY'	ACACIA	1 GAL	10' O.C.
	CEANOTHUS G. H. 'YANKEE POINT'	CALIFORNIA WILD LILAC	1 GAL	10' O.C.
	MYOPORUM P. 'PUTAH CREEK'	NCN	1 GAL	10' O.C.

GRASSES

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
	CALAMAGROSTIS A. 'KARL FOERSTER'	FEATHER REED GRASS	1 GAL	3' O.C.
	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	1 GAL	3' O.C.
	LOMANDRA L. 'BREEZE'	DWARF MAT RUSH	1 GAL	4' O.C.
	LOMANDRA L. 'LIME TUFF'	DWARF MAT RUSH	1 GAL	3' O.C.
	LOMANDRA L. 'PLATINUM BEAUTY'	VARIEGATED DWARF MAT RUSH	1 GAL	3' O.C.
	MISCANTHUS S. 'MORNING LIGHT'	EULALIA	1 GAL	4' O.C.
	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	5' O.C.
	SESLERIA AUTUMNALIS	AUTUMN MOOR GRASS	1 GAL	2' O.C.

OTHER

* TREE CALIPER TO BE 3" MINIMUM TO MEET THE TOTAL 25" CALIPER MITIGATION MEASURE PER THE CITY OF PASO ROBLES REQUIREMENTS. TREE SIZE AND CALIPER TO COMPLY WITH OAK TREE REPLACEMENT AGREEMENT AND PER SECTION 10.01.050 F OF ORDINANCE NO 835 N,S,

NCN - NO COMMON NAME
O.C. - ON CENTER

Ward Architects, Inc.
www.wardarchitects.com
architecture | landscape architecture

PO Box 1649
Coeur d'Alene, Idaho 83816
Phone 208 820 8800

Owner:

SDG Paso Robles 413, LLC
413 W. Yosemite, Suite 105
Madera, CA 93637
559 674 0906

Project:

SDG Paso Robles 194 Distribution Center
5175 Airport Road
Paso Robles, CA 93446

APN 025-434-002

Contractor:

Industrial and Commercial Contractors, LP
413 W. Yosemite, Suite 105
Madera, CA 93637

Sheet:

TREE & SHRUB PLANTING LEGEND

DATE: March 25, 2022

REVISION:

ARCHITECTS STAMP: SHEET:

L2

Attachment 8

45dB Acoustics, LLC
www.45dB.com
(805) 250-1566

PO Box 1717
Buellton, CA 93427

May 31, 2022
45dB Project # 22028

Acoustical Analysis:	**Requested by:**	**Client/Owner:**
Wine Distribution Center 5175 Airport Rd. Paso Robles, CA 93446	MW Architects Attn: CJ Horstman c.horstman@mwa.bz	Stravinsky Development Group, Inc. Attn: Neil Thompson 413 W. Yosemite Ave. Ste 105 Madera, CA 93637

1 Summary

45dB Acoustics (**"45dB")** has reviewed the applicable noise-related regulations for this wine distribution warehouse center at the above address in the City of Paso Robles, bordering San Luis Obispo County. Residences exist to the immediate north and west of the project, within the County of San Luis Obispo. Properties in the other directions are commercial land uses and exist within either the County, or the City of Paso Robles.

Modeled noise levels across the site range from below CNEL 40 at the west side to 75 dBA at the east side along Airport Road. Road traffic noise from Airport Road is the principal noise source for the area.

Utilizing measurements reported by another acoustics consultant from an existing similar facility, the proposed project was modeled using 3D noise propagation software SoundPLAN® to analyze the potential noise impact on the neighboring land uses. Noise levels associated with the project are anticipated to comprise of: one HVAC unit at the north elevation for the offices of the warehouse; a warehouse chiller; and the noise associated with the truck traffic and loading at the shipping docks. Refrigerated trucks are not expected and were not included as a noise source.

The proposed project is anticipated to increase the hourly LAeq and CNEL/Ldn sound levels for this site by less than 1 dB, except for at 5215 Airport Road where (hourly and CNEL) levels increase up to 3 dB. If indeed the dwelling at 5215 Airport Road is a residential use to which the noise regulations apply mitigating berm of 7 feet in height and 190 feet long along the northern property line as described herein is needed to mitigate only this property.

for 45dB Acoustics, LLC:

Sarah Taubitz, ASA, INCE

This report (including any enclosures and attachments) has been prepared for the exclusive use and benefit of the addressee(s) and solely for the purpose for which it is provided. No part of this report shall be reproduced, distributed, or communicated to any third party without written permission. We do not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party

Contents

1 Summary ..... **i**

2 Introduction **1**

3 Applicable Regulations **2**

3.1 Commercial/Industrial Land Uses (City of Paso Robles) *2*

3.2 Residences (San Luis Obispo County) *2*

4 Existing Site Ambient Sound Levels **6**

5 Predicted Sound Levels with Project **7**

5.1 Warehouse Shipping Activity (Northern Side of Project) *7*

5.2 Office HVAC Unit (North Elevation) *8*

5.3 Warehouse Chiller (South Elevation) *9*

6 Evaluation and Recommendations **9**

6.1 Recommended Mitigation *10*

7 Figures **11**

8 Appendix **23**

8.1 Characteristics of Sound *23*

8.2 Terminology/Glossary *24*

8.3 SoundPLAN Acoustics Software *26*

8.3.1 ISO 9613-2 26

8.3.2 Traffic Noise Model 26

Figures

FIGURE 1: AERIAL MAP OF SITE SURROUNDINGS AND MEASUREMENT LOCATIONS 11

FIGURE 2: PROJECT SITE PLAN 12

FIGURE 3: SOUND LEVEL METER "LT-2" ON WOODEN POST NEAR PROJECT'S NORTHERN PROPERTY LINE (FACING ENE) 13

FIGURE 4: 24-HOUR NOISE LEVELS AT PROJECT SITE 14

FIGURE 5: GENERAL PASO ROBLES, CA WEATHER FOR MAY 6, 2022 (AFTER WEATHERUNDERGROUND.COM) 15

FIGURE 6: GENERAL PASO ROBLES, CA WEATHER FOR MAY 7, 2022 (AFTER WEATHERUNDERGROUND.COM) 16

FIGURE 7: DAYTIME ("LD") SOUND LEVEL CONTOURS, EXISTING AREA 18

FIGURE 8: 3D VIEW OF SITE GEOMETRY, INCLUDING PROPOSED PROJECT 19

FIGURE 9: DAYTIME ("LD") SOUND LEVEL CONTOURS, WITH PROPOSED PROJECT 20

FIGURE 10: DAYTIME ("LD") SOUND LEVEL CONTOURS WITH MITIGATING NOISE BERM 21

FIGURE 11: PLACEMENT AND MINIMUM LENGTH OF MITIGATION BERM 22

Tables

TABLE 1 PASO ROBLES' NOISE ELEMENT STANDARDS FOR NON-TRANSPORTATION SOURCES (REPRINTED) 4
TABLE 2: COUNTY OF SAN LUIS OBISPO NOISE ELEMENT MAXIMUM NOISE EXPOSURE DUE TO STATIONARY NOISE SOURCES 5
TABLE 3: SAN LUIS OBISPO COUNTY MUNICIPAL CODE EXTERIOR NOISE LEVEL STANDARDS 6
TABLE 4: SOUND LEVELS AT RECEIVERS OF INTEREST 10
TABLE 5: YORK CHILLER NOISE SPECIFICATION 17
TABLE 6: SOUND LEVEL CHANGE RELATIVE LOUDNESS/ACOUSTIC ENERGY LOSS 23

2 Introduction

This sound level assessment and analysis was carried out to determine the noise impacts associated with the proposed wine distribution center. **45dB Acoustics, LLC** ("**45dB**") has predicted sound levels across the site, performed on-site ambient sound measurements, and evaluated the project's suitability in reference to local regulations. Neighboring properties—particularly the residence to the immediate north within the County—have been considered. The following factors are also considered:

- The topographical relationship of potential noise sources and the dwelling site
- Identification of noise sources and their characteristics, including predicted sound levels at the exterior of the proposed dwelling, considering present and future land usage
- Basis for the sound level prediction—for this project, acoustically modeled from published data—noise attenuation measures to be applied, and an analysis of the noise insulation effectiveness of the proposed construction showing that the prescribed interior noise level requirements are met
- Information on fundamentals of noise and vibration to aid in interpreting the report

The project would replace a currently unoccupied residence located in the City of Paso de Robles, with the San Luis Obispo County line at the northern property line. An occupied home/dwelling located immediately north, within the County, just across the project's northern property line (Figure 1). A commercial business (JW Welding) is planned to the immediate south, while a residential home at 1245 Mission St is located on the opposite (south) side of the project.

The project is planned to have the following operations, per the Client:

> "Hours of operation for the storage and distribution functions are normally 8 AM to 5 PM Monday thru Friday during the months of January, February, the first half of March, June, July and the first half of August and 6 AM to 8 PM Monday thru Friday (with some Saturdays) during peak seasonal months of the last half of March, April, May, last half of August, September, October, November and December. The tenant projects a total employee count of 20 during the low season months ramping up to 30 employees during the high season months.
>
> Trucking deliveries and shipping movements are usually between the hours of 9 AM and 3 PM Monday through Friday and never before 8 AM nor later than 5 PM and never on the weekends."

For the purposes of an acoustic study, with trucks as the dominant noise source on site, the operating hours of 8am to 5pm on weekdays were utilized for a conservative analysis. Most days and times of the year will have substantially less noise emitting from the proposed warehouse project.

3 Applicable Regulations

Throughout this document, noise level limits and levels are assumed to be A-weighted decibel levels.

The County border forms the northern boundary of the property.

The project itself is located within City of Paso Robles. For commercial and industrial land uses, The City of Paso Robles' exterior noise standards for locally regulated noise sources are 60 dBA LAeq and 80 Lmax during daytime hours, and 55 dBA LAeq and 75 LAmax during evening hours, reprinted in Table 1. Daytime hours are defined as 7am to 7pm, while evening is 7pm to 10pm. Nighttime limits are not defined for this land use because commercial and industrial properties are assumed to be unoccupied at night.

3.1 Commercial/Industrial Land Uses (City of Paso Robles)

A welding company is planned to share the project's southern property line. The Paso Robles Regional Airport is further to the east, beyond several commercial uses along the east side of Airport Road. Paso Robles Wine Services, another wine distribution warehouse center similar to the proposed project, is located southwest of the project site. A construction company's offices are located to the immediate south of the project site. These land uses are highlighted yellow in Figure 1.

Approximately 1,000 ft to the north of the property site sits the Estrella Adobe Church (5660 Airport Road) and, although churches are also potential sensitive receptors, if the project is compliant or sufficiently mitigated for the home at 5215 Airport Road, then it will also be compliant with the Estrella Adobe Church.

3.2 Residences (San Luis Obispo County)

The nearest potentially sensitive noise receptors evaluated in this study are the residential homes/dwellings—even those on agriculturally zoned land—at:

- 5215 Airport Road, in the County of San Luis Obispo, with home/dwelling approximately 43 feet from the project's northern property line
- 6065 Buena Vista Drive, in the County of San Luis Obispo
- 6240 Buena Vista Drive, in the County of San Luis Obispo
- 6055-6065 Buena Vista Drive, in the County of San Luis Obispo

The above residences are highlighted blue in Figure 1.

San Luis Obispo County's Noise Element of the General Plan provides maximum noise exposure due to stationary (i.e., non-transit sources), reprinted in Table 2. For residential uses, this is 50 dBA LAeq and 70 LAmax during daytime hours, and 45 dBA LAeq and 65 dBA LAmax during nighttime hours. Daytime is defined as 7am to 10pm. These limits are to be evaluated at the receiving land use property line.

Table 3 shows the County's exterior noise level limits within the Municipal Code. The limits match those within the Noise Element. Note 2 states that if the existing ambient exceeds these levels, then the applicable limits shall be the ambient plus 1 dB. We note that this means that a new noise source must be 7 dB or more *below* the existing ambient in order to not raise the total new noise level by more than 1 dB.

Table 1 Paso Robles' Noise Element Standards for Non-Transportation Sources (reprinted)

Table 1
Noise Standards for Locally Regulated (non-transportation) Noise Sources
Paso Robles Noise Element

Receiving Land Use	Period[3]	Exterior Areas[1] Lmax[4]	Exterior Areas[1] Leq[5]	Interior Spaces[2] Lmax[4]	Interior Spaces[2] Leq[5]
Residential	Day	75	55	60	45
	Evening	70	50	55	40
	Night	65	45	45	35
Mixed Use Residential	Day	---	---	60	45
	Evening	---	---	55	40
	Night	---	---	45	35
Hotels, Hospitals[6] & Nursing Homes	Day	75	60	60	45
	Evening	75	55	55	40
	Night	70	50	45	35
Uptown Town Center S.P. Area (UTCSP) Residential	Day	80	60	60	45
	Evening	75	55	55	40
	Night	70	50	45	35
Theaters & Auditoriums	Day	75	55	40	35
	Evening	70	50	40	35
	Night			40	35
Churches, Meeting Halls, Libraries	Day	75	55	55	45
	Evening	70	50	55	40
Schools[7]	Day	---	---	55	40
	Evening	---	---	55	40
Office/Professional	Day	80	60	60	45
	Evening	75	55	60	45
Commercial/Retail Buildings	Day	80	60	60	50
	Evening	75	55	60	50
Playgrounds, Parks, etc.	Day	75	55	---	---
	Evening	75	55	---	---
Industrial	Day	80	60	60	50
	Evening	75	55	60	50

Specific Notes:

1. Noise sensitive areas are defined within the acoustic terminology section.
2. Interior noise level standards are applied within noise-sensitive areas of the various land uses, as defined in the acoustic terminology section, with windows and doors closed.
3. Daytime hours = 7 am – 7 pm, Evening hours = 7 pm – 10 pm, Nighttime hours = 10 pm – 7 am.
4. Lmax = Highest measured sound level occurring during a given interval of time (Typically 1 hour).
5. Leq = Average or "Equivalent" noise level during the worst-case hour in which the building is in use.
6. Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.
7. Exterior areas of school uses are not typically noise-sensitive. As a result, the standards for schools are focused on the interior office and classroom spaces.

General Notes Applicable to All Noise Standards and Land Uses:

a. Where the noise source in question consists of speech or music, or is impulsive in nature, or contains a pure tone, the noise standards of this table are reduced by 5 dB.
b. Where ambient noise levels exceed the noise level standards shown above, the noise standards shall be increased in 5 dBA increments to encompass the ambient.
c. Reductions in the noise standards for noise sources identified in general note "A" above shall be applied after any increases warranted by elevated ambient conditions prescribed in general note "B", subject to verification through a noise study.

Table 2: County of San Luis Obispo Noise Element Maximum Noise Exposure Due to Stationary Noise Sources

Table 2. Maximum Noise Exposure for Noise-Sensitive Uses Due to Stationary Noise Sources

Duration	Day (7a.m to 10 p.m.)	Night (10 p.m. to 7 a.m.)
Hourly L_{eq} in dB[1,2]	50	45
Maximum level in dB[1,2]	70	65
Maximum impulsive noise in dB[1,3]	65	60

[1] *As determined at the property line of the receiver. When determining 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] *Sound level measurements shall be made with slow meter response.*

[3] *Sound level measurements shall be made with fast meter response.*

Source: Brown-Buntin Associates

Table 3: San Luis Obispo County Municipal Code Exterior Noise Level Standards

B. **Exterior noise level standards.** The exterior noise level standards of this Section are applicable when a land use affected by noise is one of the following noise-sensitive uses: residential uses listed in Section 22.06.030 (Allowable Land Uses and Permit Requirements), except for residential accessory uses and temporary dwellings; health care services (hospitals and similar establishments only); hotels and motels; bed and breakfast facilities; schools (pre-school to secondary, college and university, specialized education and training); churches; libraries and museums; public assembly and entertainment; offices, and outdoor sports and recreation.

1. No person shall create any noise or allow the creation of any noise at any location within the unincorporated areas of the county on property owned, leased, occupied or otherwise controlled by the person which causes the exterior noise level when measured at any of the preceding noise-sensitive land uses situated in either the incorporated or unincorporated areas to exceed the noise level standards in the following table. When the receiving noise-sensitive land use is outdoor sports and recreation, the following noise level standards shall be increased by 10 dB.

EXPAND

Maximum Allowed Exterior Noise Level Standards		
Sound levels	**Daytime** **7:00 a.m. to 10:00 p.m.**	**Nighttime (1)** **10:00 p.m. to 7:00 a.m.**
Hourly Equivalent Sound Level (L_{eq}, dB)	50	45
Maximum level, dB	70	65

;sz=8q;**Notes:**

(1) Applies only to uses that operate or are occupied during nighttime hours.

2. In the event the measured ambient noise level exceeds the applicable exterior noise level standard in Subsection B.1, the applicable standard shall be adjusted so as to equal the ambient noise level plus one dB.
3. Each of the exterior noise level standards specified in Subsection B.1 shall be reduced by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.
4. If the intruding noise source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient noise level can be measured, the noise level measured while the source is in operation shall be compared directly to the exterior noise level standards.

4 Existing Site Ambient Sound Levels

A 3D geometric model of the situation is created within the noise modeling software SoundPLAN®. Buildings and main roads are modeled on the terrain to create a realistic model of the outdoor noise propagation for the area.

All sound contour plots, in plan view, are presented at a height of 1.5 m / 5 feet (AGL) within this report, and all are in units of A-weighted dB rel 20µPa for direct comparison with the applicable regulations.

Measured sound levels of the existing ambient enable for adjustment of the acoustic model if necessary. Sound levels were measured at two locations on the project site, named “LT-1”, at the property’s fence line approximately 40 ft from the centerline of Airport Road, and “LT-2” as

indicated in Figure 1. A photo of LT-1 is shown in Figure 3, located approximately 10 feet to the south of the existing fence line facing the northern property line. Calibrated Class 2 sound level meters (SoftdB model Piccolo II) were field calibrated before and after the measurements using a Class 1 Larson Davis CAL200 calibrator. Measurements were acquired from 3pm Friday May 6 to 3pm Saturday May 7, 2022. The data was appended into the 24-hour time series shown in Figure 4, meaning that 3pm – midnight is May 6 data, and that hours 00 to 15 (midnight to 3pm) are from May 7, 2022.

The resulting measured 24-hour Community Noise Equivalent Level, CNEL, was 75 dBA for location LT-1 near Airport Road and 65 dBA at location LT-2. There was some breeze noted by personnel while on site, and historical weather did note significant winds during the daytime hours—Figure 5 and Figure 6 weather data for May 6 and May 7, respectively, are highlighted in green to denote when measurements were occurring. (This weather data is general for the City of Paso Robles and may not be accurate for this specific project site.) The measured nighttime levels were significantly higher than would be normally expected due to traffic noise alone based upon published traffic levels from 2006 (adjusted upward to 2022 assuming 1% per year increase). The elevated nighttime levels may have been in part due to the significant birdsong in the area noted during the survey, along with elevated traffic on a Friday night. Somewhat degraded road pavement condition and traffic speeds may have also contributed to the measurement results that were approximately 3 dB higher than CNEL levels as predicted from published traffic counts alone. If road surface condition is improved through resurfacing in the future, and birdsong is reduced at these locations with the project in place, then non-project related ambient noise levels may be reduced from what was measured here.

The Federal Highway Administration's Traffic Noise Model (TNM) calculation method is utilized to predict outdoor noise propagation from road traffic. Resulting CNEL sound level contours for the existing site are shown in Figure 7. For the residential use at 5215 Airport Road, noise levels are approximately CNEL 58 (at the western property line) to CNEL 75 (at the eastern property line along Airport Road).

Predicted Sound Levels with Project

Each project-related noise source is described in the subsections below.

4.1 Warehouse Shipping Activity (Northern Side of Project)

The Client provided a noise report entitled "*Lombard 151 Warehouse, American Canyon, CA Noise Technical Report, Including Sound Level Estimates for the Proposed SDG Commerce 330 Wine Storage Warehouse"* by RCH Group, dated February 20, 2019. This report provided noise levels measured at an existing similar wine storage warehouse named "Lombard 151" located at 265 Lombard Street in American Canyon, CA. Their weekday measurement location of 70 feet away from the approximate middle of the active shipping dock side of the warehouse was 62-66 dBA LAeq during the daytime and 57-58 dBA LAeq during the nighttime. The resulting weekday CNEL was 66-67 dBA—though this is expected to be elevated above the daytime levels and not due to warehouse-related noise but rather due to distant traffic and railroad activities.

The RCH Group's report for the Lombard 151 project noted:

> "The following observations were made regarding the noise environment at this location:
>
> • The site had minimal activity when the RCH noise analyst was on-site.
> • Trucks that used the site made a variety of noises while at the site, including: truck idling, break pressure adjustments, and back-up beepers. Trucks shut down their engines when loading and off-loading.
> • Some off-site noise reaches the project site and would add to the total site noise.
> • The loudest on-site noise observed was from weed whackers and leaf blowers that were used to maintain the vegetation at the edge of the loading dock area on February 5th.
> • The Lombard 151 Warehouse property site is just south and adjacent to a train cars storage area and there was occasional noise from activities in the train storage area
> • There were no noise sources at the south of the building, it is mainly a block wall. The measured noise was primarily from other non-ambient noise sources from further south and east and west, such as distant noise from Highway 29. The Lombard 151 Warehouse building was a barrier to all the noise sources on the north side of the building."

In our model of the proposed warehouse at 5175 Airport Road, the combination of a linear noise source representing medium and heavy (semi) truck operations, along with an area noise source applied to the northern elevation of the building, were adjusted to match the median daytime reported sound level of 64 dBA LAeq as reported for the Lombard Street site. There was some degree of train noise and distant highway noise in the measurements made for the Lombard Street, we can reasonably assume that those measured levels are conservatively high as compared to the levels that can be anticipated at the 5175 Airport Road site, presuming similar warehouse capacity and activity. Shipping dock and related truck traffic was assumed for the hours of 8am to 3pm on weekdays. A low level of traffic within the parking lot is assumed to exist from 6am to 8pm—so, within a few "nighttime hours" before and after the main shipping activity hours. We assume no on-site activity during weekends.

Refrigerated semi-trailer trucks can be problematic for noise, as the refrigerator units for the containers tend to be high level, low-frequency tonal, and are located at a higher height toward the top of the truck containers. The Client reported that **refrigerated trucks are not anticipated at this site.**

4.2 Office HVAC Unit (North Elevation)

According to the Client, a 3- to 4-ton compressor type air-conditioning unit is planned to be located at the "Office HVAC Pad", close to the northern elevation of the building, near the bike rack and entrance to the facility. Although a model is not yet selected, based upon our experience with this equipment, we assumed a sound power level ("LWA") of approximately 86 dBA rel 10^{-12} W, corresponding to a sound pressure level of 75 dBA rel 20µPa at a distance of 1 meter.

4.3 Warehouse Chiller (South Elevation)

A warehouse chiller is planned to be located in an equipment yard at the southern elevation of the proposed warehouse near Airport Road, facing the commercial land located to the south, (planned to be a welding company). A 72.25-ton, 100kW compressor, liquid-refrigerant York Chiller set, with Sound Power Levels as shown in Table 5, were included in the model and analysis. The sound power level at 100% load of 94 dBA was assumed for 24/7 operation for a conservative analysis.

5 Evaluation and Recommendations

All sound levels are in A-weighted decibel units to compare directly with applicable regulations. Results will accordingly show decibels with a precision of one-tenth of a decibel for evaluation purposes only; a change of 0.1 dB is entirely too small a change to be discerned by the human ear.

The sound level contours are provided for visualization purposes inshows resulting sound levels during daytime hours. For proposed new sources of noise that are not anticipated to operate at night, the daytime sound levels are the most appropriate Daytime hourly sound levels are the primary metric to evaluate since the distribution activities of the warehouse primarily occur during daytime hours. The related maximum ("Lmax or "LAmax") limits within the regulations do also apply while evaluating any proposed project. Maximum short-duration noises for this project include mainly the backup beeps from trucks while parking. We anticipate that backup noises are within 20dB above the hourly LAeq levels from the trucking activities, such that if the hourly LAeq levels for the site comply, then the maximum levels for the site will also comply with the applicable regulations. We assume trucks will not idle while parked.

The warehouse itself provides mitigation from Airport Road traffic noise to the homes to the west of the project site, e.g., "Home 2". If a warehouse chiller louder than the 94 dBA @ 100% load York model (discussed previously in Section 4.3) is placed at the southern elevation, a mitigating solidly-constructed noise barrier wall (e.g., CMU block, stucco on studs) would need to be added there to mitigate for land uses to the south.

Although the land to the immediate north of the project is zoned agricultural according to County records, for this study we assume that the home located at 5215 Airport Road is a residential use and that residential noise limits must be respected. As was previously stated, if road surface condition is improved through resurfacing in the future, and birdsong is reduced at these locations with the project in place, then non-project related ambient noise levels may be reduced from what was measured here, which only serves to reinforce a need for mitigation for a residential use at 5215 Airport Road.

Table 4: Sound Levels at Receivers of Interest

Receiver	Existing CNEL/Ldn Ambient (dBA)	Existing Daytime Hourly Ambient $L_{eq,d}$ (dBA)	With Project Daytime Ambient Leq,d (dBA)	Anticipated Daytime Change (dB)	With Berm-Mitigated Project Daytime Ambient Leq,d (dBA)	Anticipated Mitigated Daytime Change (dB)
Home 1, SW corner of lot	59.3	57.9	60.6	**+2.7**	58.3	+0.4
Home 2	42.9	41.4	41.4	0	-	-
G Weimann Construction	56.9	55.5	55.5	0	-	-

5.1 Recommended Mitigation

The proposed project would increase levels at 5215 Airport Road southern property line by up to approximately 3 dB (Figure 4). As the County Municipal Code limits increases to 1 dB or less, the project noise emission from the north side of the project would require mitigation, assuming that the County noise code applies to the dwelling at 5215 Airport Road.

Ideal mitigation is provided by a noise wall or berm of at least 7ft in height. The berm must start at the eastern setback, as planned, and extend a minimum of 210 ft (64m) straight westward along the project's northern property line. The berm is depicted in the sketch in Figure 11.

Construction noise of the project is assumed to be contained within the hours of 7am to 9pm and only on weekdays, per the County's Noise Standards (Section 22.10.120). We also note that the City of Paso Robles states: *"Construction and demolition activities located within one thousand feet of* noise-*sensitive land uses provided they occur during normal daytime hours, excluding Sundays and federal holidays, subject to the conditions imposed by city permit. For construction activities, daytime hours are defined as seven a.m. to seven p.m. imparts reduced hours of 7am to 7pm for construction activities. Construction activities occurring between the hours of seven p.m. and seven a.m. must comply with the interior* noise *level standards identified in Table 1 unless an exception has been granted by the city planning department. An exception for concrete pours or other construction activities requiring an early morning start time may be authorized by the community development director.".*

We do not anticipate any significant groundborne vibration from the finished project.

The conclusions and recommendations of this acoustical analysis are based upon the information known to 45dB Acoustics, LLC ("**45dB**") at the time the analysis was prepared concerning the proposed site plans, traffic volumes, and proposed event types. Any significant changes to these factors will require a reevaluation of the findings of this report. Additionally, any significant future changes in site plan, noise regulations, or other factors beyond **45dB**'s control may result in long-term noise results that differ from those described by this analysis.

6 Figures

Figure 1: Aerial map of site surroundings and measurement locations

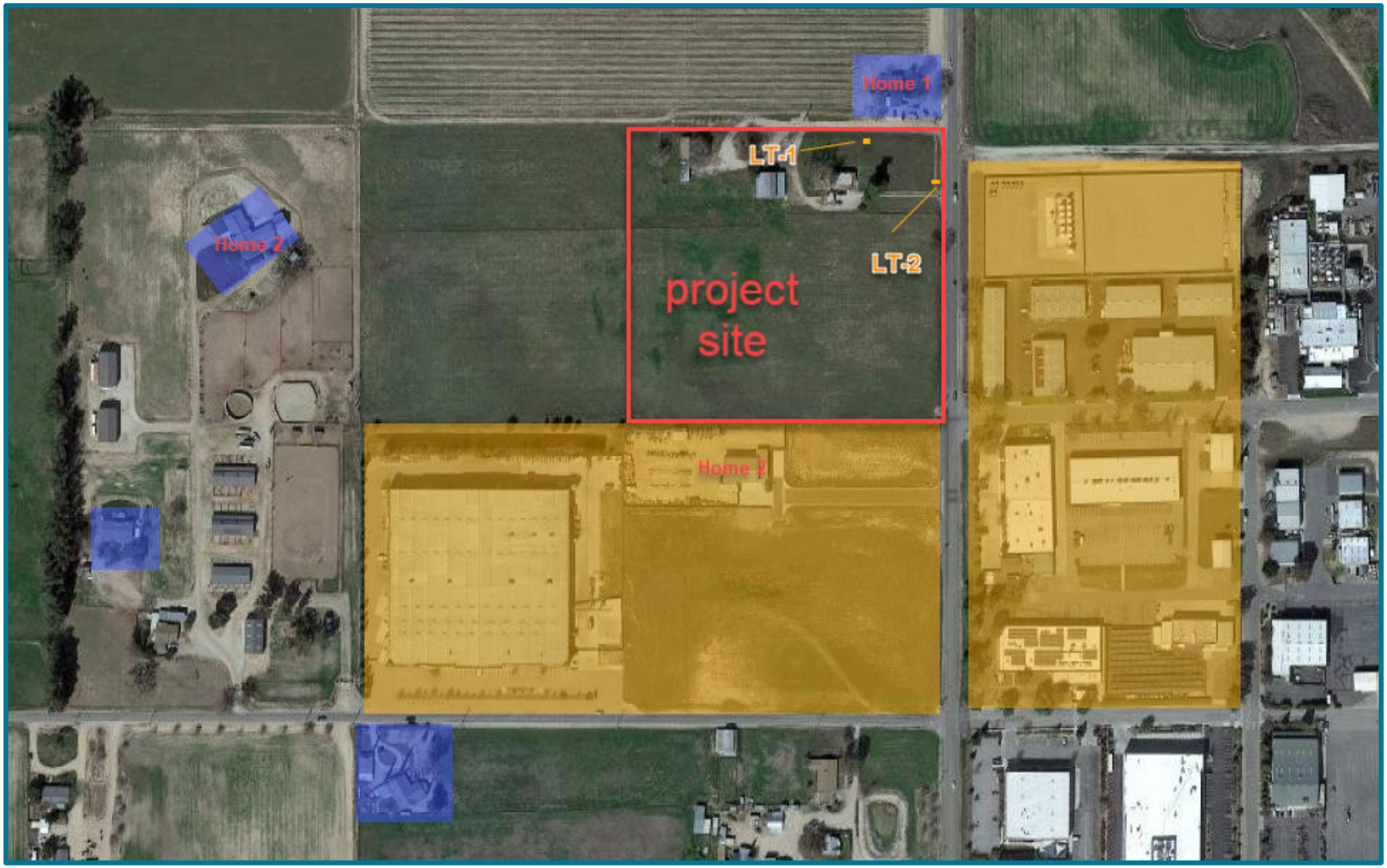


Figure 2: Project site plan

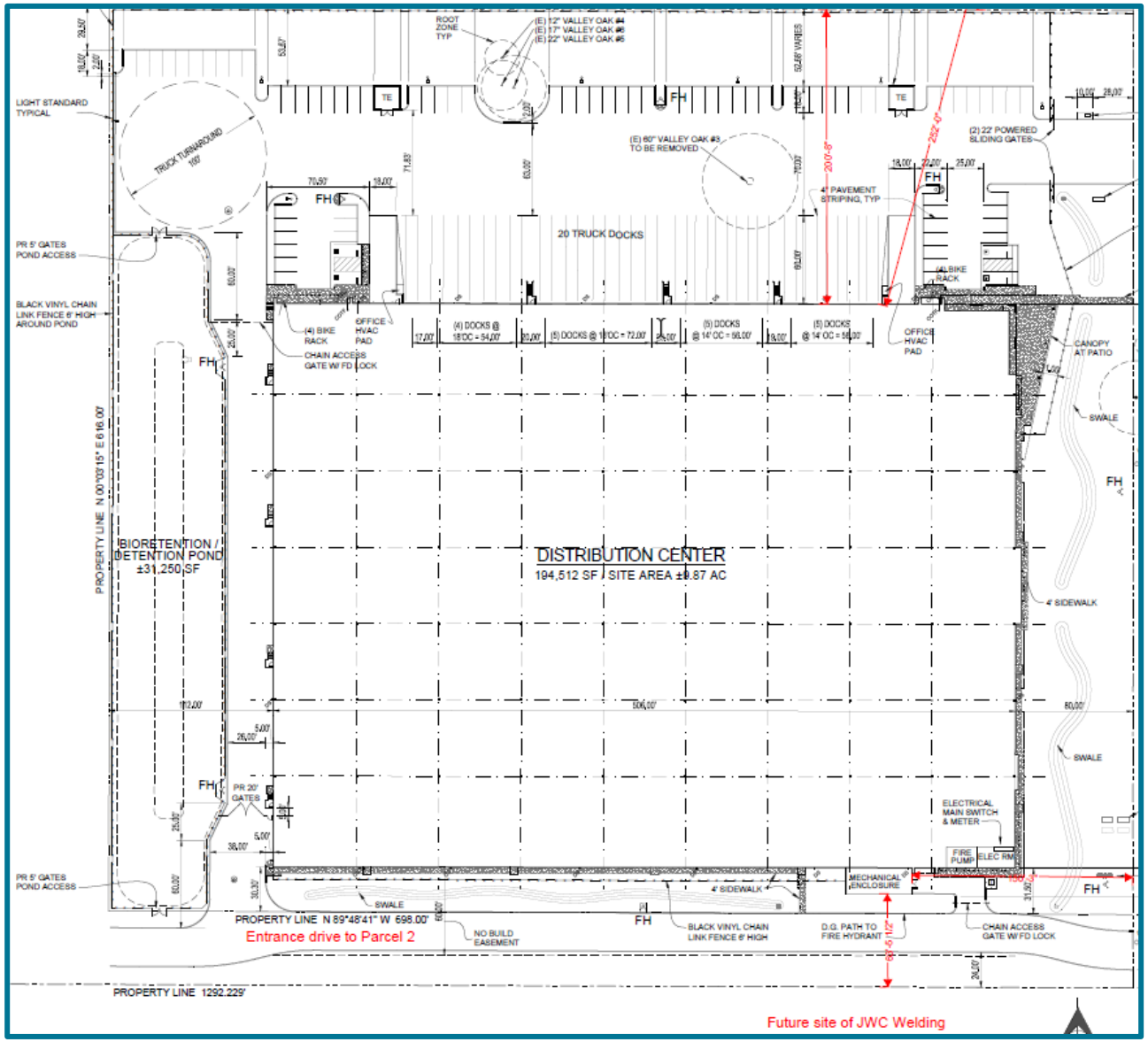


Figure 3: Sound level meter "LT-2" on wooden post near project's northern property line (facing ENE)

Figure 4: 24-hour noise levels at project site

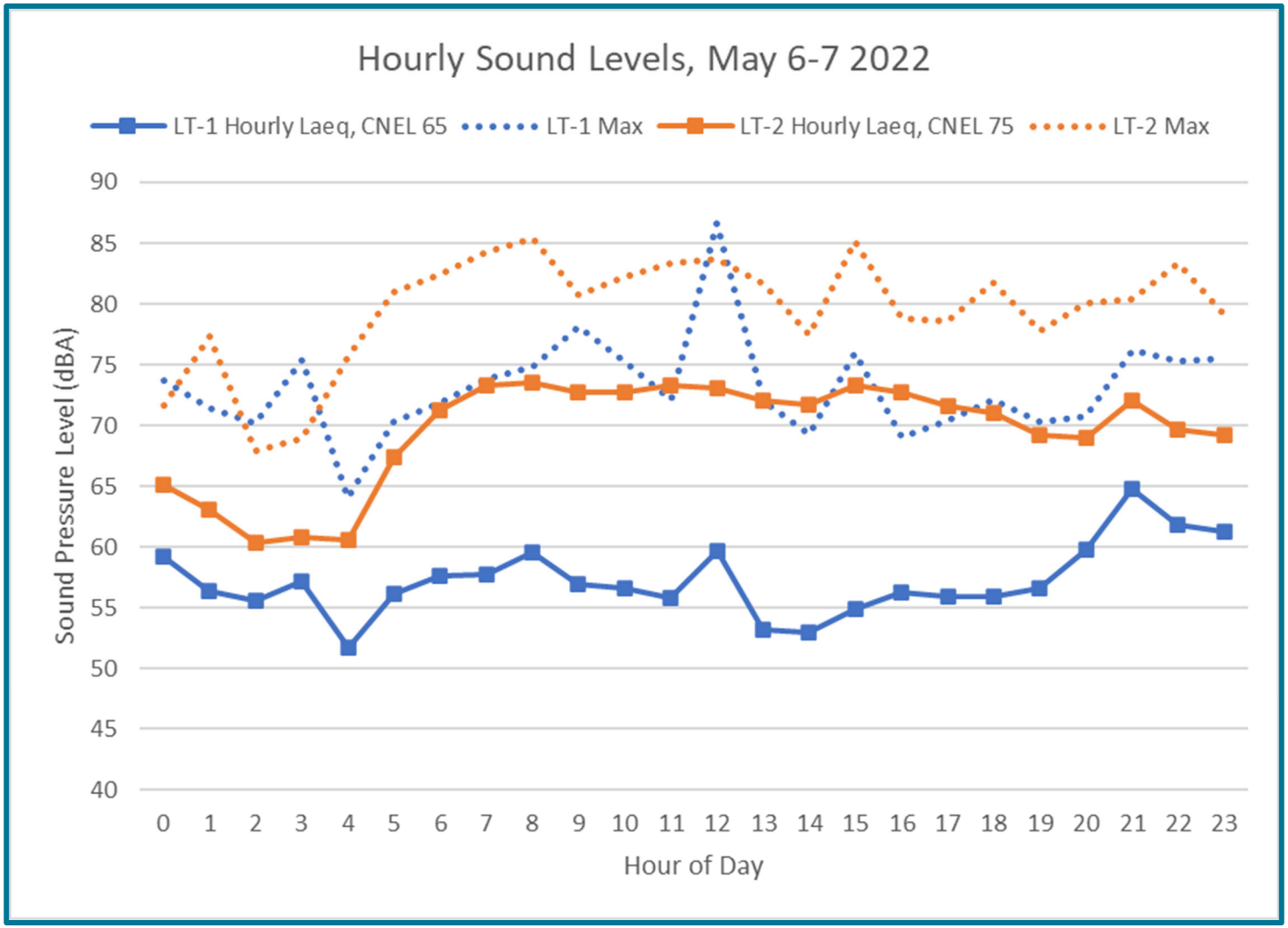


Figure 5: General Paso Robles, CA weather for May 6, 2022 (after weatherunderground.com)

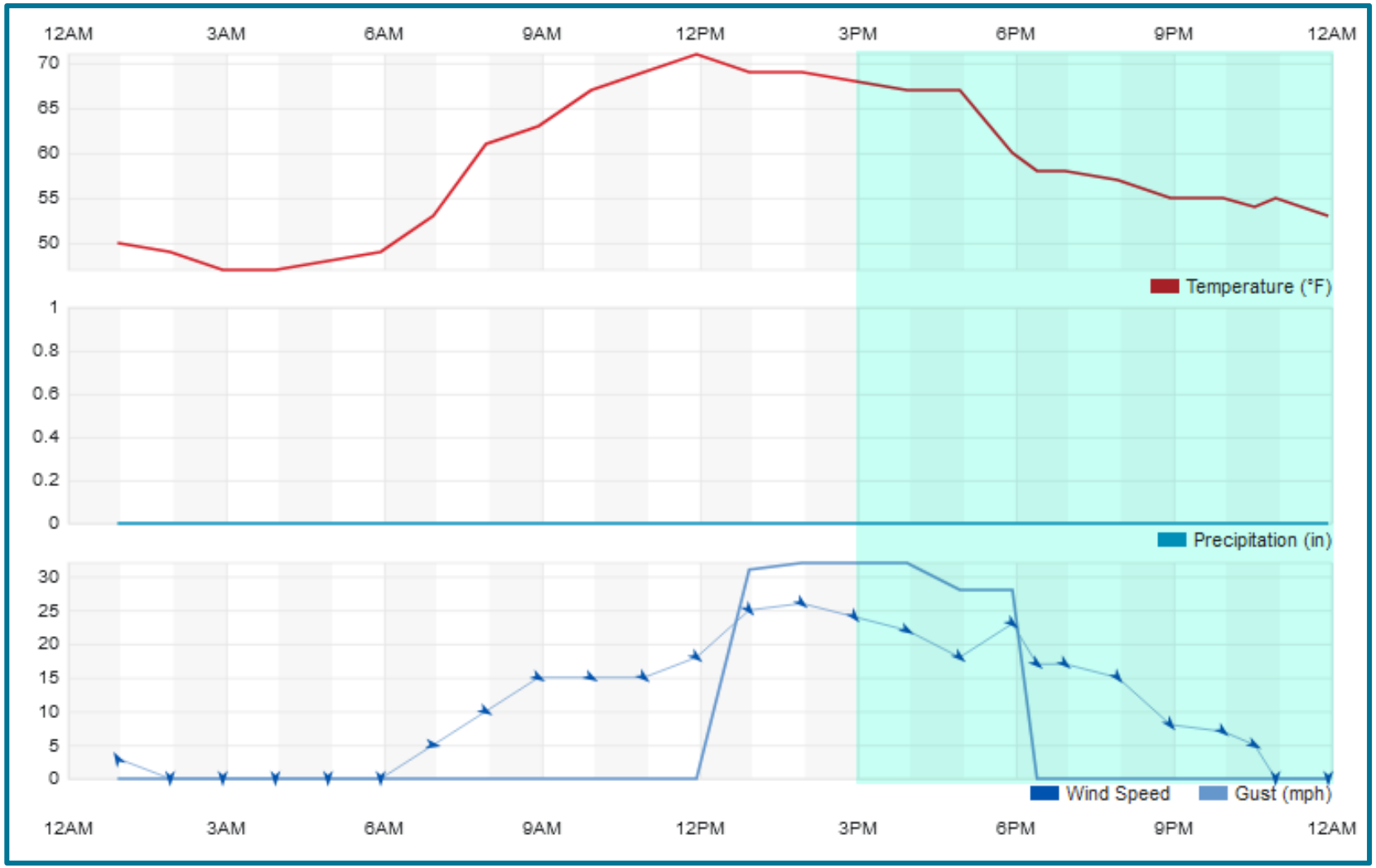


Figure 6: General Paso Robles, CA weather for May 7, 2022 (after weatherunderground.com)

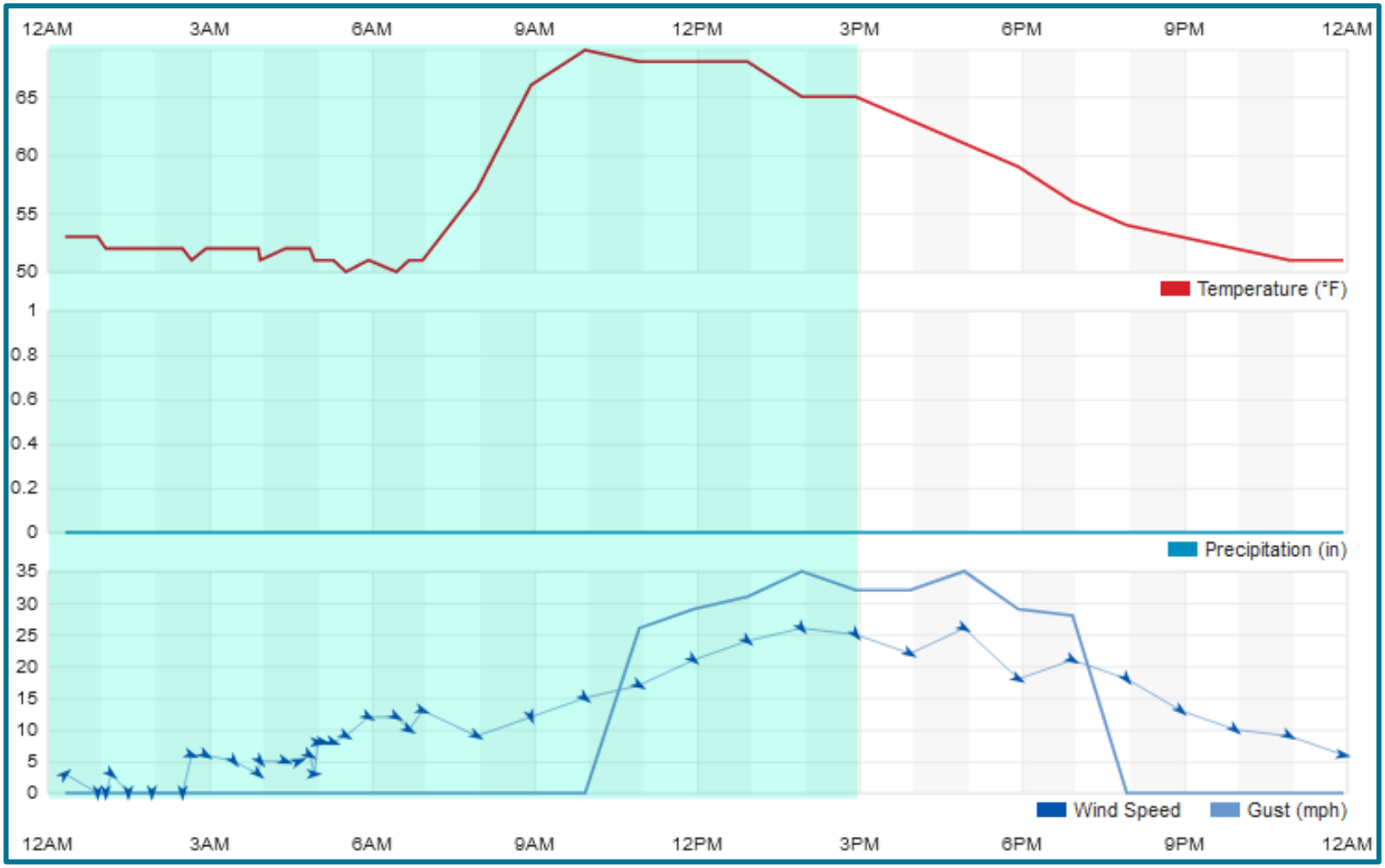


Table 5: York Chiller noise specification

Sound Power Levels (In Accordance with AHRI 370)										
Load %	Ambient (°F)	63 Hz (dB)	125 Hz (dB)	250 Hz (dB)	500 Hz (dB)	1 kHz (dB)	2 kHz (dB)	4 kHz (dB)	8 kHz (dB)	LWA
100	104.0	96	95	91	91	88	87	81	77	94
79	85.7	90	89	85	86	82	83	76	72	89
59	85.7	84	83	80	81	78	82	74	67	86
66	67.4	72	68	69	78	76	81	72	63	84
44	67.4	70	67	67	76	74	79	70	61	82
47	55.0	70	67	67	76	74	79	70	61	82
22	55.0	67	64	64	73	71	76	67	58	79

Note: Unit is equipped with Low Sound Fans with VSD Control.
Measurement of sound pressure used to obtain the sound power data presented is based on AHRI-370.
Air-cooled chillers are rated in terms of sound power not sound pressure. Johnson Controls provides estimates of sound pressure, but this is not the rating metric.
For an air-cooled chiller, sound pressure calculated from sound power varies depending on how the chiller is assumed to behave, i.e. the radiation model. In other words, determining sound pressure from sound power requires making assumptions that result in different answers at a given distance from the chiller. The environment also influences sound pressure in the field installation. Sound pressure estimation radiation models pertaining to air-cooled chillers include the 'traditional' hemispherical model, parallelepiped model and equivalent hemispherical model.
Regarding sound power, Johnson Controls references tolerance limits based on ASHRAE guidelines. These are +/- 6dB in the 63Hz octave band, +/- 4dB in all other octave bands and +/- 3dB for the overall dBA.
Tolerance limits are based on uncertainties associated with:
1. Measurement Test Procedure
2. Repeatability
3. Production / Manufacturing Variability
Standard deviation associated with air-cooled chiller sound data is a measure of spread i.e. it indicates the range of probability of sound levels. Note that for operating conditions other than AHRI's Standard Rating Condition, higher levels of uncertainty can be expected.
Lead times for factory performance testing depend on test laboratory availability. Please confirm with Johnson Controls Customer Service.

Figure 7: Daytime ("Ld") sound level contours, existing area

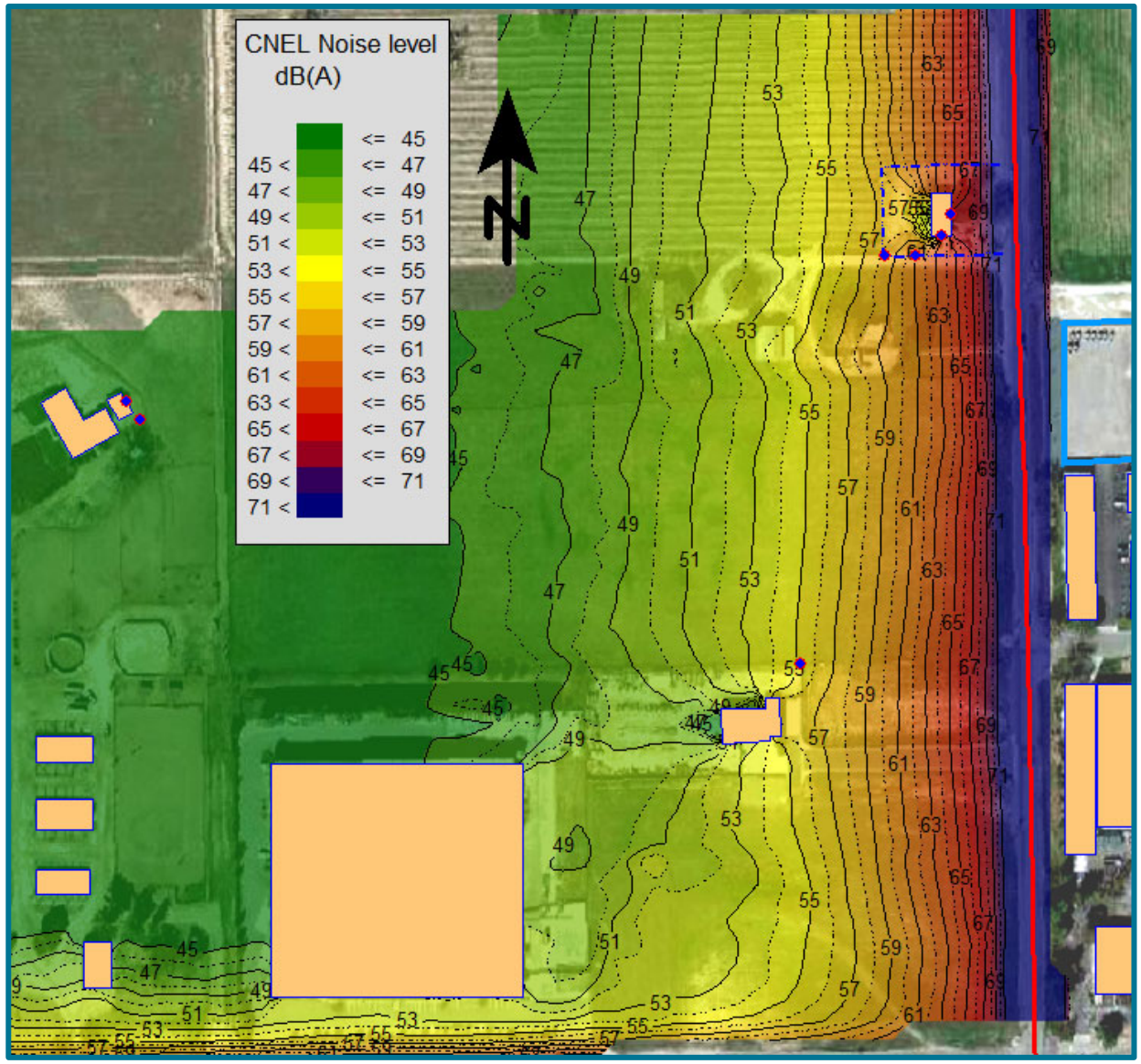


Figure 8: 3D view of site geometry, including proposed project

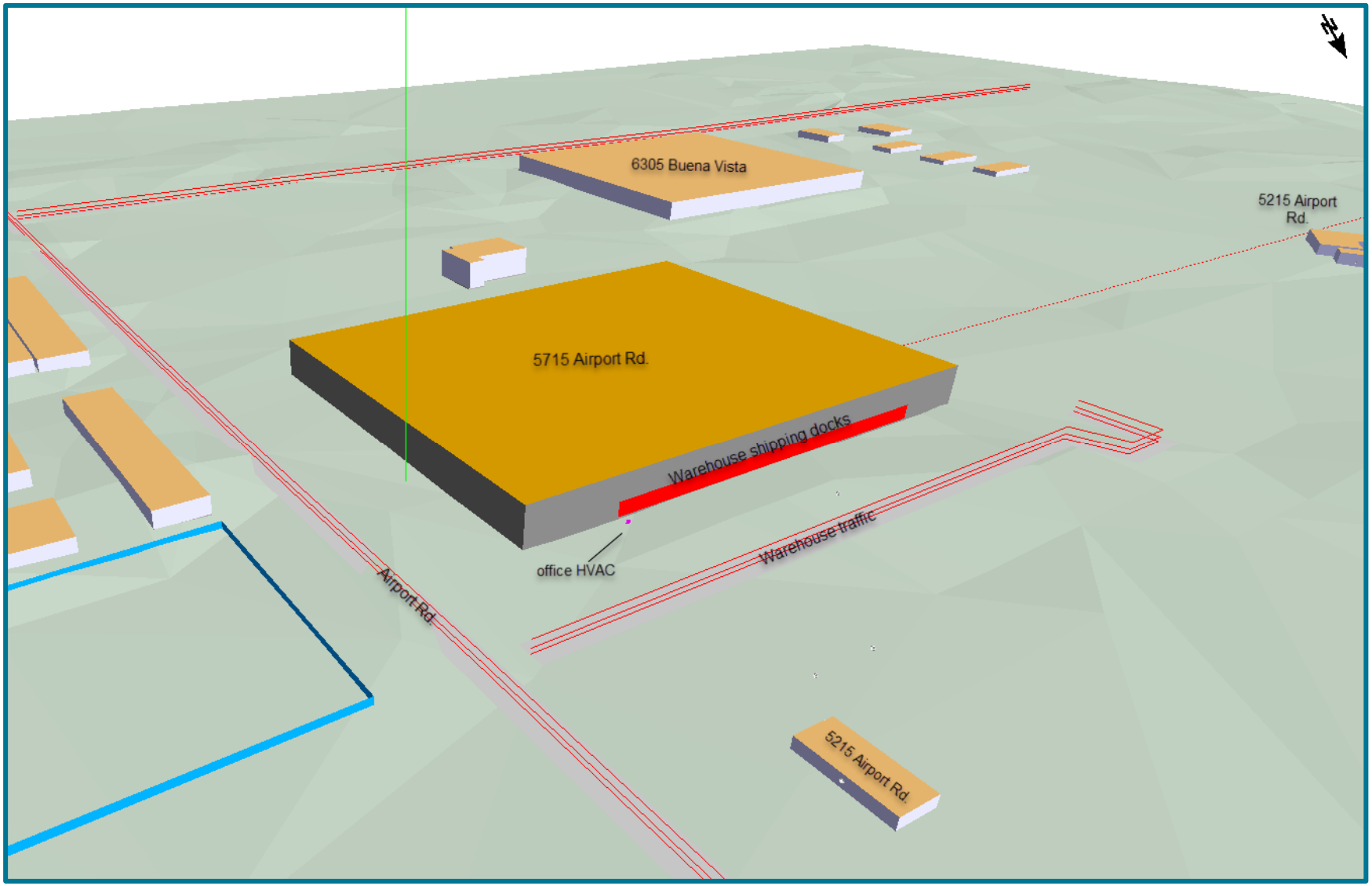


Figure 9: Daytime ("Ld") sound level contours, with proposed project

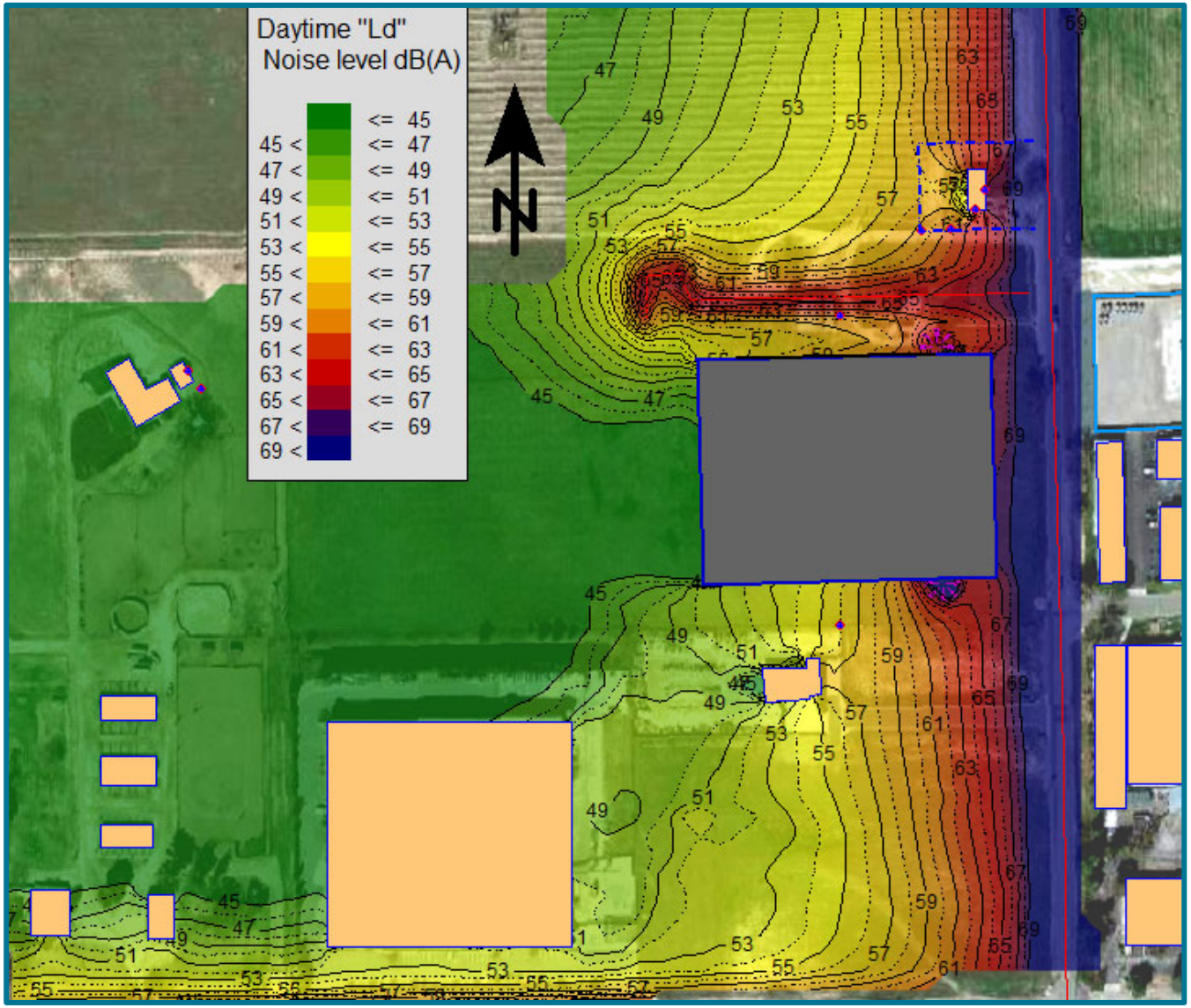


Figure 10: Daytime ("Ld") sound level contours with mitigating noise berm at dwelling

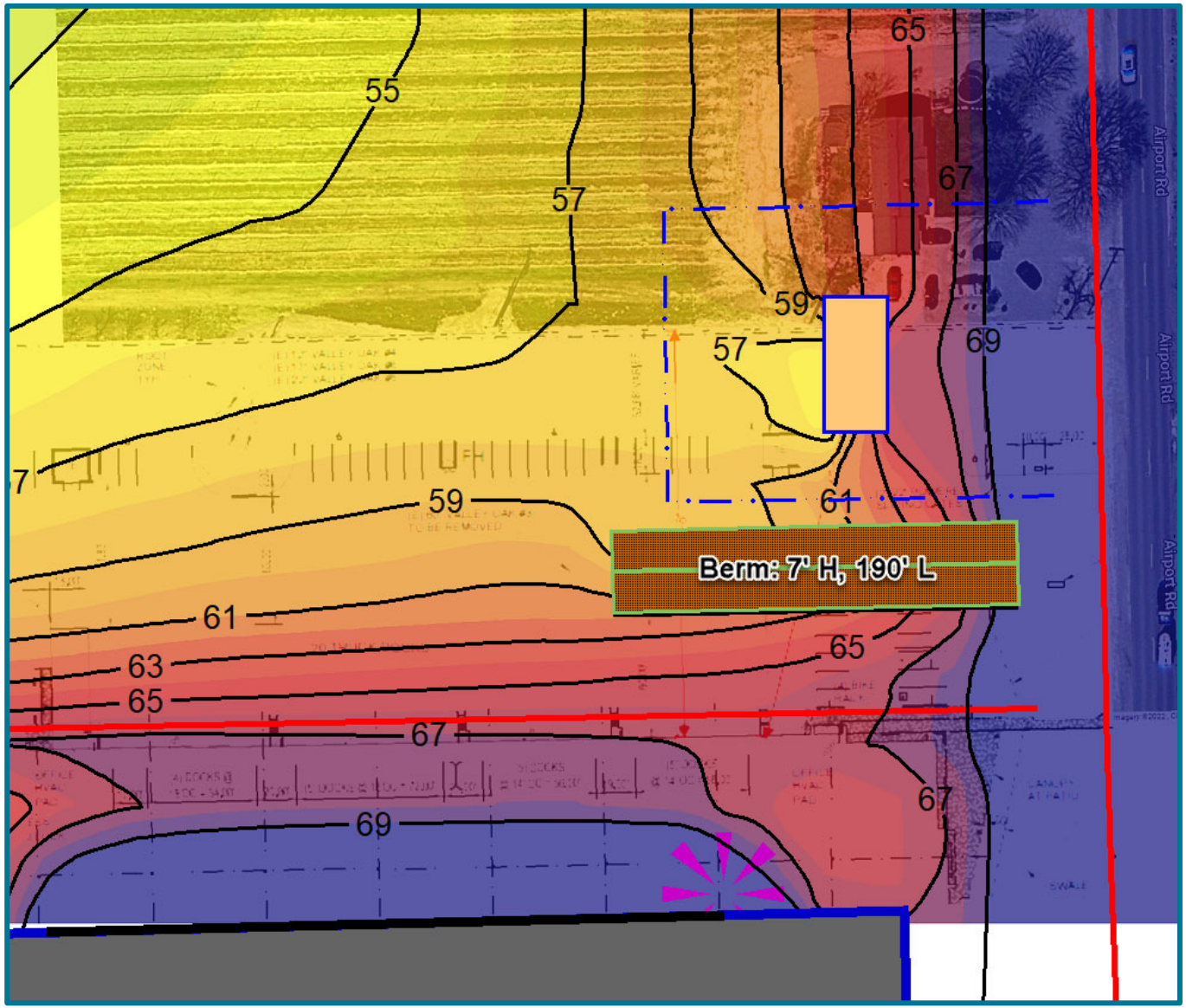
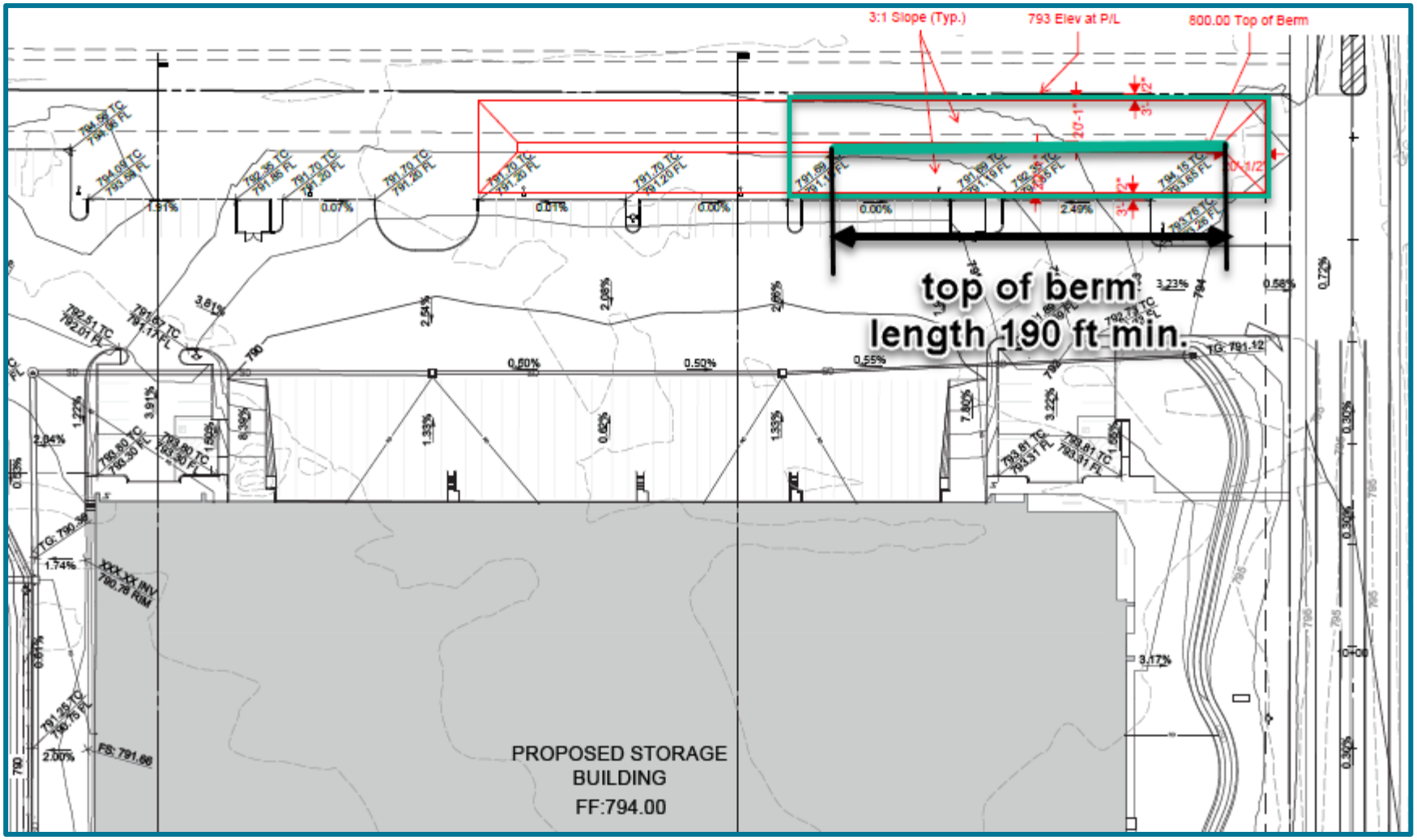


Figure 11: Placement and minimum length of mitigation berm



7 Appendix

7.1 Characteristics of Sound

When an object vibrates, it radiates part of its energy as acoustical pressure in the form of a sound wave. Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). The human hearing system is not equally sensitive to sound at all frequencies. Therefore, to approximate this human, frequency-dependent response, the A-weighted filter system is used to adjust measured sound levels. The normal range of human hearing extends from approximately 0 to 140 dBA. Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. Because of the physical characteristics of noise transmission and of noise perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 6 below presents the subjective effect of changes in sound pressure levels.

Table 6: Sound Level Change Relative Loudness/Acoustic Energy Loss

0 dBA	Reference 0%
-3 dBA	Barely Perceptible Change 50%
-5 dBA	Readily Perceptible Change 67%
-10 dBA	Half as Loud 90%
-20 dBA	1/4 as Loud 99%
-30 dBA	1/8 as Loud 99.9%

Source: Highway Traffic Noise Analysis and Abatement Policy and Guidance, U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch, June 1995.

Sound levels are generated from a source and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. This phenomenon is known as spreading loss. Generally, sound levels from a point source will decrease by 6 dBA for each doubling of distance. Sound levels for a highway line source vary differently with distance because sound pressure waves propagate along the line and overlap at the point of measurement. A closely spaced, continuous line of vehicles along a roadway becomes a line source and produces a 3 dBA decrease in sound level for each doubling of distance. However, experimental evidence has shown that where sound from a highway propagates close to “soft” ground (e.g., plowed farmland, grass, crops, etc.), a more suitable drop-off rate to use is not 3.0 dBA but rather 4.5 dBA per distance doubling (FHWA 2010).

When sound is measured for distinct time intervals, the statistical distribution of the overall sound level during that period can be obtained. The Leq is the most common parameter associated with such measurements. The Leq metric is a single-number noise descriptor that represents the average sound level over a given period of time. For example, the L50 noise level is the level that is exceeded 50 percent of the time. This level is also the level that is exceeded 30 minutes in an hour. Similarly, the L02, L08 and L25 values are the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour. Other values typically noted during a noise survey are the Lmin and Lmax. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, State law requires that, for planning purposes, an artificial dB increment be added to quiet-time noise levels in a 24-hour noise descriptor called the CNEL or Ldn. This increment is incorporated in the calculation of CNEL or Ldn, described earlier.

7.2 Terminology/Glossary

A-Weighted Sound Level (dBA)
The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made. A-weighting de-emphasizes the low and very high frequency components of the sound in a manner similar to the response of the average human ear. A-weighted sound levels correlate well with subjective reactions of people to noise and are universally used for community noise evaluations.

Air-borne Sound
Sound that travels through the air, differentiated from structure-borne sound.

Ambient Sound Level
The prevailing general sound level existing at a location or in a space, which usually consists of a composite of sounds from many sources near and far. The ambient level is typically defined by the Leq level.

Background Sound Level
The underlying, ever-present lower level noise that remains in the absence of intrusive or intermittent sounds. Distant sources, such as Traffic, typically make up the background. The background level is generally defined by the L90 percentile noise level.

Community Noise Equivalent Level (CNEL)
The Leq of the A-weighted noise level over a 24-hour period with a 5-dB penalty applied to noise levels between 7 p.m. and 10 p.m. and a 10-dB penalty applied to noise levels between 10 p.m. and 7 a.m. CNEL is similar to Ldn.

Day-Night Sound Level (Ldn)
The Leq of the A-weighted noise level over a 24-hour period with a 10-dB penalty applied to noise levels between 10 p.m. and 7 a.m. Ldn is similar to CNEL.

Decibel (dB)
The decibel is a measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

DBA or dB(A)
A-weighted sound level. The ear does not respond equally to all frequencies, and is less sensitive at low and high frequencies than it is at medium or speech range frequencies. Thus, to obtain a single number representing the sound level of a noise containing a wide range of frequencies in a manner representative of the ear's response, it is necessary to reduce the effects of the low and high frequencies with respect to the medium frequencies. The resultant sound level is said to be A-weighted, and the units are dBA. The A-weighted sound level is also called the noise level.

Energy Equivalent Level (Leq)
Because sound levels can vary markedly in intensity over a short period of time, some method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, one describes ambient sounds in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called Leq. In this report, an hourly period is used.

Field Sound Transmission Class (FSTC)
A single number rating similar to STC, except that the transmission loss values used to derive the FSTC are measured in the field. All sound transmitted from the source room to the receiving room is assumed to be through the separating wall or floor-ceiling assembly.

Noise Reduction (NR)
Noise reduction is the difference between outdoor sound level and indoor sound level. It is not identical to Sound Transmission Class.

Outdoor-Indoor Transmission Class (OITC)
A single number classification, specified by the American Society for Testing and Materials (ASTM E 1332 issued 1994), that establishes the A-weighted sound level reduction provided by building facade components (walls, doors, windows, and combinations thereof), based upon a reference sound spectrum that is an average of typical air, road, and rail transportation sources. The OITC is the preferred rating when exterior façade components are exposed to a noise environment dominated by transportation sources. Once built, as much as a 5-point reduction in Apparent Outside-Inside Transmission Class (OITC) from the original, as-designed OITC may be expected.

Percentile Sound Level, Ln
The noise level exceeded during *n* percent of the measurement period, where *n* is a number between 0 and 100 (e.g., L10 or L90)

Sound Transmission Class (STC)
STC is a single number rating, specified by the American Society for Testing and Materials, which can be used to measure the sound insulation properties for comparing the sound transmission capability, in decibels, of interior building partitions for noise sources such as speech, radio, and television. It is used extensively for rating sound insulation characteristics of building materials and products.

Structure-Borne Sound
Sound propagating through building structure. Rapidly fluctuating elastic waves in gypsum board, joists, studs, etc.

Subjective Loudness Level
In addition to precision measurement of sound level changes, there is a subjective characteristic which describes how most people respond to sound:

- A change in sound level of 3 dBA is *barely perceptible* by most listeners.
- A change in level of 6 dBA is *clearly perceptible*.
- A change of 10 dBA is perceived by most people as being *twice* (or *half*) as loud.

7.3 SoundPLAN Acoustics Software

SoundPLAN®, the software used for this acoustic analysis, is an acoustic ray-tracing program dedicated to the prediction of noise in the environment. Noise emitted by various sources propagates and disperses over a given terrain in accordance with the laws of physics. The software calculates sound attenuation of environmental noise, even over complex terrain, uneven ground conditions, and with complex obstacles. Up to three reflections for each noise source are taken into account to closely and accurately predict real-world acoustics. Worldwide, governments and engineering associations have created algorithms to calculate acoustical phenomena to standardize the assessment of physical scenarios. Accuracy has been validated in published studies to be + / - 2.7 dBA with an 85% confidence level.

7.3.1 ISO 9613-2

For industrial and other noise sources besides road traffic, SoundPLAN calculates the sound field in accordance with ISO 9613-2 "Acoustics - Attenuation of sound during propagation outdoors, Part 2: General Method of Calculation." The standard states that "this part of ISO 9613 specifies an engineering method for calculating the attenuation of sound during propagation outdoors, in order to predict the levels of environmental noise at a distance from a variety of sources. The method predicts the equivalent continuous A-weighted sound pressure level under meteorological conditions favorable to propagation from sources of known sound emissions. These conditions are for downwind propagation under a well-developed moderate ground-based temperature inversion, such as commonly occurs at night." Uncertainty of calculations with this method are +/-1 dB for sources less than 10m in height and within 1000m of the receiver.

7.3.2 Traffic Noise Model

The Federal Highway Administration Traffic Noise Model (TNM), implemented into the SoundPLAN® software, was used for the road traffic sound level modeling in this study. TNM contains the following components:

1. Modeling of five standard vehicle types, including automobiles, medium trucks, heavy trucks, buses, and motorcycles, as well as user-defined vehicles.
2. Modeling both constant- and interrupted-flow traffic using a field-measured data base.
3. Modeling effects of different pavement types, as well as the effects of graded roadways.
4. Sound level computations based on a one-third octave-band data base and algorithms.
5. Graphically-interactive noise barrier design and optimization.
6. Attenuation over/through rows of buildings and dense vegetation.
7. Multiple diffraction analysis.
8. Parallel barrier analysis.
9. Contour analysis, including sound level contours, barrier insertion loss contours, and sound-level difference contours.

These components are supported by a scientifically founded and experimentally calibrated acoustic computation methodology, as well as a flexible data base, made up of over 6000 individual pass-by events measured at forty sites across the country.

State of California ▯ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 **of** 14 ***Resource Name or #:** 5175 Airport Road
P1. Other Identifier:

***P2.Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** San Luis Obispo
***b. USGS 7.5' Quad** *Paso Robles, Calif.* **Date** 1948 (1984 ed.) **T** 26S; **R** 12E; SE ¼ of SE ¼ of Section 11; **M.D.B.M.**
c. Address 5175 Airport Road City Paso Robles Zip 93446
d. UTM:
e. Other Locational Data: Assessor's Parcel Number (APN) 025-434-002. From the intersection of Buena Vista Drive and Airport Road, head north on Airport Road approximately 0.22 miles (1,180 feet) to the driveway of 5175 Airport Road.

***P3a. Description:** The resource at 5175 Airport Road comprises a single-story Spanish Eclectic-style residence constructed in 1928 (**Building [B] 1**) situated on 18.63 acres of agricultural land in Paso Robles, San Luis Obispo County, California. The residence is part of a small farm complex consisting of a detached garage of the same style (**B2**), and a barn (**B3**) constructed circa 1975 (continued on page 4).

***P3b. Resource Attributes:** HP2. Single-family residence; HP33. Farm/Ranch

***P4.Resources Present:** X Building X Structure

P5b. Photo No. 1: **Residence** (**B1**), east elevation. View to the west. Photo taken 7/22/19 (see continuation, pages 8-14, for additional photos).

***P6. Date Constructed/Age and Source:**
☒ Historic, 1928 (San Luis Obispo County Assessor Records)

***P7. Owner and Address:**
Raymond E. Dodd, Jr. and Nancy Dodd
PO Box 1751, Paso Robles, CA 93447

***P8. Recorded by:** Katie Vallaire
LSA, 201 Creekside Ridge Ct. #250
Roseville, CA 95678

***P9. Date Recorded:** 7/30/19

***P10. Survey Type:** Intensive

***P11. Report Citation**: N/A

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record

State of California ▯ The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** 5175 Airport Road ***NRHP Status Code**
Page 2 **of** 14

B1. Historic Name: NA
B2. Common Name: NA
B3. Original Use: Single-Family Residence B4. Present Use: Single-Family Residence

***B5. Architectural Style:** Spanish Eclectic

***B6. Construction History:** The **residence** (**B1**) was constructed in 1928 at its present location. The **garage** (**B2**) was likely constructed at the same time. The **barn** (**B3**) was constructed circa 1975. The **shed** (**B4**) and the **metal tank** (**S1**) appear to have been constructed in the 1940s or 1950s.

***B7. Moved?** ☒ **No** **Original Location:** N/A

***B8. Related Features:** The parcel contains agricultural land and landscaping comprised of mature trees and vegetation. The residence (B1) is accessed by a long driveway that contains two entrance pillars clad in stucco.

B9a. Architect: unknown b. Builder: unknown

***B10. Significance:** **Theme**: Settlement **Area** Estrella, San Luis Obispo County, California
Period of Significance: N/A **Property Type** Single-family Residence and Farm **Applicable Criteria** N/A
Research indicates that 5175 Airport Road is not historically significant under any of the California Register of Historical Resources eligibility criteria. Although 5175 Airport Road is associated with the Rude and Dodd families, no evidence was found to indicate a specific, significant contribution to San Luis Obispo County's history that would elevate their statuses as important in local, state, or national history. Furthermore, the farm complex and residence are not historically associated with an important event in Paso Robles' history; the buildings and structures are not historically significant architecturally; and there is no substantial evidence that additional research of the buildings or structures would yield important data to future researchers (see continuation, page 5).

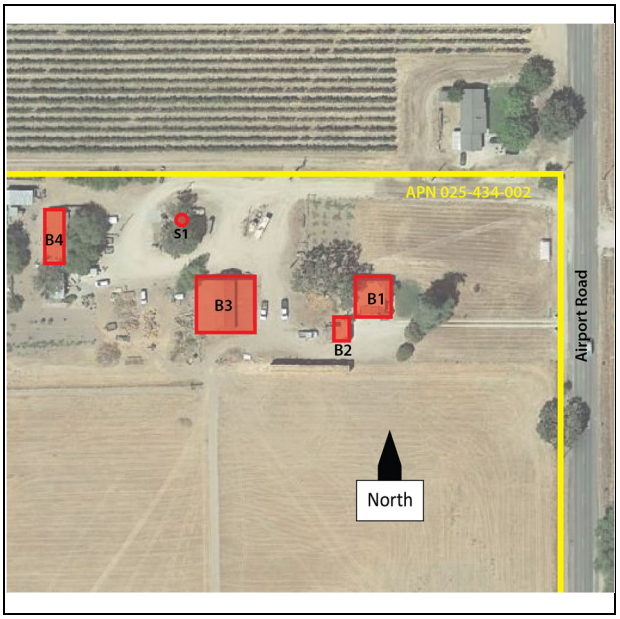
B11. Additional Resource Attributes: N/A

***B12. References:** See continuation, page 6.

B13. Remarks: N/A

***B14. Evaluator:** Katie Vallaire

***Date of Evaluation:** 07/26/2019



(This space reserved for official comments.)

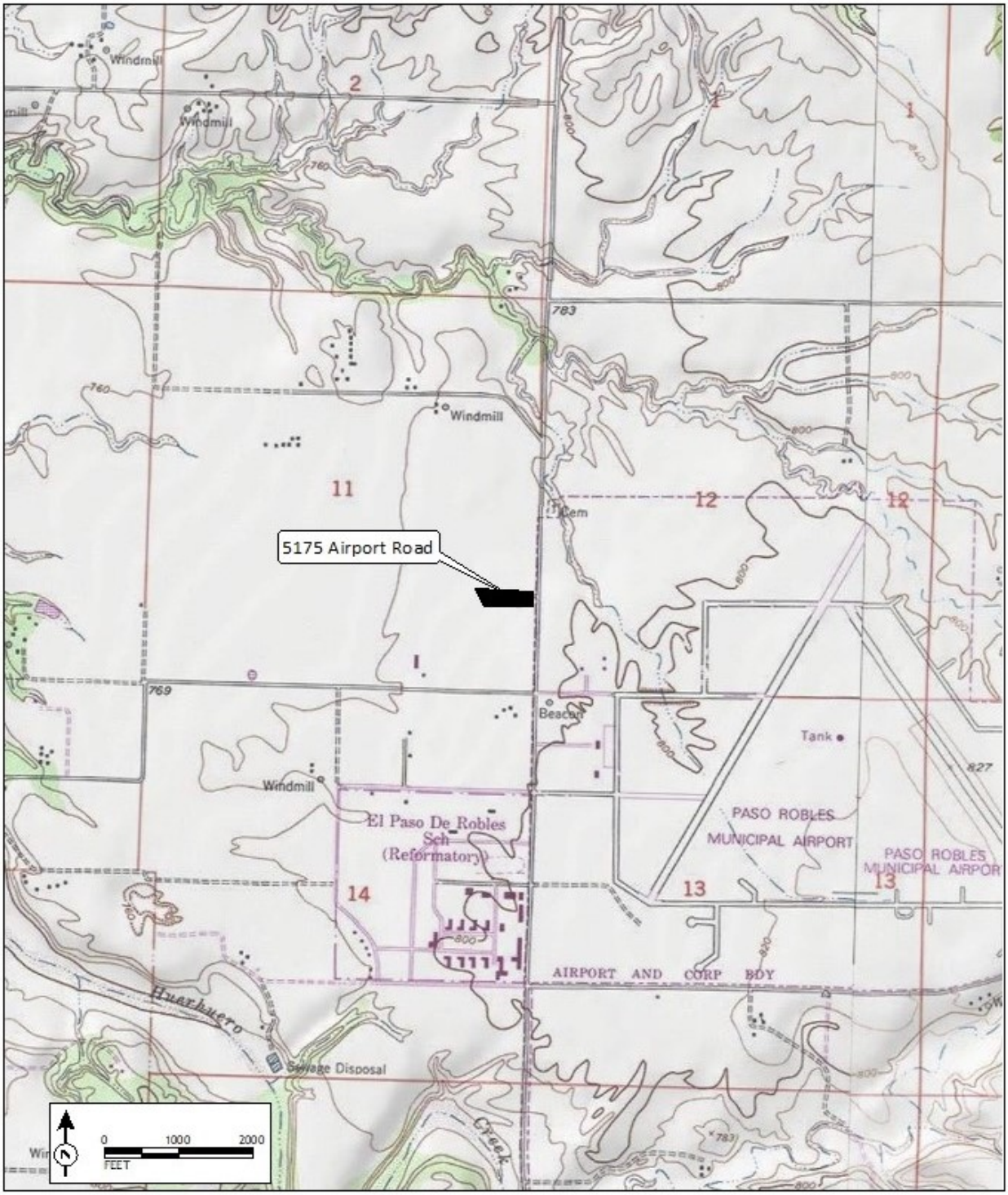
State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 3 **of** 13 ***Resource Name or #** 5175 Airport Road

***Map Name:** Paso Robles, Calif. ***Scale:** 1:24000 ***Date of map:** 1948 (rev. 1984)



P3a. Description (continued from page 1):

B1 contains an irregular-shaped plan and multi-level roofs. It is clad in textured stucco. The primary roof is flat and has a parapet above the front entrance on the east elevation. The east elevation contains a large focal arched glass door that opens to the front patio. The doorway is flanked on both sides by an iron sconce. Shed roofs extend from the east elevation and are covered in Spanish tiles. A moderately pitched gabled roof extends off the west elevation to cover the back room extension. The residence contains numerous windows on the west and north elevations; many are wood-framed double hung windows containing multi-paned upper sashes with wood muntins or long, thin multi-paned casement windows with wood muntins. The room extension on the west elevation contains aluminum framed sliding windows and a back door on the south elevation facing the garage. An arcaded wing wall extends from the west elevation to the south and connects to the garage's northeast corner. The south elevation of the residence contains an inset back porch shaded by a shed roof covered in Spanish tiles, a long, skinny arched window, and a tapered chimney that has an arched chimney crown (see photo nos. 1-6).

The **garage (B2)** has an L-shaped footprint on a rectangular concrete foundation. It has a flat roof with parapets. The northwest corner of the garage comprises an open-air kennel. The walls on the L inset are clad in vertical flush board siding; however, the remainder of the garage is clad in textured stucco. Its east elevation contains the garage door, a multi-paned casement window, and a decorative iron sconce. An arcaded wing wall connects the southwest corner of the residence (B1) to the northeast corner of the garage. The garage's north elevation contains a door that faces the back door of the residence. The west elevation contains a dog door within the L inset, opening to the open kennel area. The rear (west elevation appears patched with stucco. The garage and/or kennel area possibly extended westward at one time; a concrete stem foundation extends from the west foundation walls (see photo nos. 7-9).

B3 is a monitor barn with a rectangular footprint and concrete foundation. It is of wood frame construction and is clad primarily in corrugated metal sheet panels. Its roof is also covered in corrugated metal sheets. The main barn entry is located on the north elevation. The door to the main entry is covered in corrugated metal sheet panels. The west wing's north elevation contains a pedestrian door covered in a corrugated metal sheet. Its east wing contains flush board siding and has a hung door on a rail track on its north elevation. The southeast half of the east elevation is open. The south elevation contains a pedestrian door covered in a corrugated metal sheet, and the west wing's south elevation has a barn door covered in corrugated metal sheet panels (see photo nos. 10-11).

B4 is an agricultural shed with a long rectangular plan. It has a shed roof with overhanging boxed eaves covered in metal sheet panels. All elevations are clad in board and batten siding. A glass greenhouse is attached to its south elevation. The east elevation has numerous doors and windows and a shed roof extension that covers the front porch. The windows appear to be aluminum framed sliding windows,

and the northernmost door is multi-paneled glass French doors with wood muntins. The north elevation contains a double casement window. The west elevation contains a casement window and what appears to be a boarded up window. The agricultural shed appears to be a fruit processing (see photo nos. 12-14).

The **metal tank (S1)** has a circular plan and is situated on a raised poured concrete foundation. It appears to be approximately 20 feet tall and constructed of steel framing, steel panels, and the opening is bolted shut. It resembles an old wine tank (see photo no. 15).

***B10. Significance** (continued from page 2):

Historic Context

Settlement is an important theme in the growth and development of Paso Robles. The buildings and structures on this farm complex were constructed between 1928 and 1975 in a rural area of Paso Robles historically known as "Estrella Plains." Settlement increased in Paso Robles and surrounding areas over time as new modes of transportation were introduced to the area. Settlement increased further after Paso Robles became a tourist destination for its hot springs between 1891 and into the 1930s, after the construction of Camp Roberts and Estrella Army Airfield (Paso robles Municipal Airport) in the 1940s and 1950s, and after Paso Robles became a premier wine destination in the 1970s to present. The residence was constructed in 1928 on land that had been used for agriculture since at least the 1880s. Agriculture was the prime reason people settled in the rural outskirts of Paso Robles. During this time, the farms and ranches on the outskirts of Paso Robles grew grains and wheat or was used for livestock. Wine grape production increased dramatically in the early 1970s and currently remains one of Paso Robles largest tourist attractions.

Property History

The 1869 General Land Office Plat includes Section 11 of Township 26 south, Range 12 east, of the Mount Diablo Base and Meridian as containing "level land soil 1st & 2nd rate" but does not depict any buildings or roads nearby. The 1874 *Official Map of the County of San Luis Obispo* depicts no large ranches or development; however, the land is within the Estrella School District. In 1879, Amador Rude purchased a section of land in the "Estrella Plains" on which he constructed a homestead and began planting grain. Rude's parents had travelled across the United States in 1852, settling in Placerville so Thomas, Rude's father, could take up mining. Eventually, the family moved to San Francisco where Thomas worked as a bricklayer, to Sonoma County, where he took up politics and worked in stock raising and farming, and finally to San Luis Obispo County where he bought a ranch in 1878. In 1881, Rude purchased and moved to Joseph Moody's farm (as depicted on the 1874 *Official Map of the County of San Luis Obispo*) and deeded the old homestead to his mother, Mary. In 1892, at 61 years of age, Mary Louisa Rude made a cash purchase in San Francisco for the southeast quarter of Section 11.

Thomas had died that same year by falling off a horse. Mary continued to live with her son, Amador, on his farm with numerous nieces and nephews. In 1911, Mary passed away. Rude continued to farm until at least 1920, when, at age 63, the US Census lists him living alone. He rented a portion of his property to his nephew. He passed away in 1935 and was buried in the Estrella Adobe Cemetery, just north of the Section 11 property (Morrison and Haydon 1917; Bureau of Land Management 2019; Ancestry 2019).

The property remained in the Rude family likely until circa 1930. Rude sold property to the Dodd family in 1934. The Dodds rented the residence at 5175 Airport Road to numerous people throughout the 1980s and 1990s; with Gelene Dodd and her future husband Chris Coelho living in the house for a short while in 1996. The Dodd family currently owns the property.

Evaluation

This resource does not appear eligible under any criteria for listing in the California Register of Historical Resources (CRHR).

Research indicates that the 5175 Airport Road residence and farm complex are associated with the overall settlement growth of the rural outskirts of Paso Robles in the mid-20th century. The residence and garage were constructed in 1928 and have been used as such throughout their existence. The barn was constructed circa 1975. Although agricultural development contributed to the settlement of the area, no evidence was identified to associate this resource as a contributor to an important event in local, state, or national history. It does not possess specific, important associations with the historic contexts of settlement or agriculture to distinguish it from other buildings with similar construction history and use in the area. Therefore, LSA concludes that 5175 Airport Road does not appear significant under Criterion 1 of the CRHR.

Research indicates that the property was associated with the Rude family and the Dodd family. Although both families are known locally for their associations with rural settlement and agriculture in the area, no specific, significant contribution to agriculture was identified that would elevate them as significant historical figures in local, statewide, or national history. Therefore, this resource does not appear eligible under Criterion 2 of the CRHR.

The residence and garage possesses the general architectural characteristics of the Spanish Eclectic style – a popular and well-represented style in the area spanning the years 1915 to 1940. They are not exceptional examples of the style that would warrant listing in the CRHR. The other buildings and structures are vernacular in style and have been maintained throughout the years as part of a working farm complex. Research did not indicate that any of these vernacular buildings and structures embody distinctive characteristics of a type, period, or method of construction; they do not represent the work of a master or possess high artistic values; and they do not represent a significant and distinguishable

entity whose components may lack individual distinction. For these reasons, this resource does not appear eligible under Criterion 3 of the CRHR.

Criterion D of the NRHP and Criterion 4 of the CRHR are usually used to evaluate the potential for archaeological deposits to contain information important in understanding the past lifeways of the area's early historic-period and pre-contact inhabitants. Their application to architecture is less common in eligibility evaluations due to the prevalence of multiple media that thoroughly document the form, materials, and design of a given building type. Consequently, information about the style and construction techniques, as represented by the buildings or structures on this property, can be obtained from other widely available sources on this familiar architectural style. Additionally, further study of this resource will not result in new information about construction techniques. Therefore, this resource does not appear eligible under Criterion 4 of the CRHR.

Conclusion. In conclusion, this resource lacks historic significance; therefore, it does not appear to be eligible for listing in the CRHR under any criteria and does not appear to be a historical resource for the purposes of CEQA.

***B12. References** (Continued from page 2):

Ancestry.com
2019 Searchable historical records online database, www.Ancestry.com, accessed July 2019.

Bureau of Land Management
2019 General Land office Records. Searchable online database, https://glorecords.blm.gov/default.aspx, accessed July 2019. U.S. Department of Interior.

Morrison, Annie L., and John H. Haydon
1917 History of San Luis Obispo County and Environs, California. Historic Record Company, Los Angeles.

Photographs (continued from page 1)**:**

Photo No. 2: B1, residence, facing northwest. Photo taken 07/22/2019.

Photo No. 3: Northeast corner of B1 (residence), facing southwest. Photo taken 7/22/2019.

Photographs (continued):

Photo No. 4: B1 west elevation, facing northeast. Photo taken 7/22/2019.

Photo No. 5: Northwest corner of B1 (residence), facing southeast. Photo taken 7/22/2019.

Photographs (continued):

Photo No. 6: B2 southeast corner, facing northwest. Photo taken 7/22/2019.

Photo No. 7: B2 northwest corner, facing southeast. Photo taken 7/22/2019.

Photographs (continued):

Photo No. 8: B2 southeast corner; facing northwest. Photo taken 7/22/2019.

Photo No. 9: Entrance pillars to B1, facing west. Photo taken 7/22/2019.

Photographs (continued):

Photo No. 10: B3 northeast corner, facing southwest. Photo taken 7/22/2019.

Photo No. 11: B3 southwest corner, facing northeast. Photo taken 7/22/2019.

Photographs (continued):

Photo No. 12: B4 southeast corner, facing northwest. Photo taken 7/22/2019.

Photo No. 13: B4 northeast corner, facing southwest. Photo taken 7/22/2019.

Photographs (continued):

Photo No. 14: B4 northwest corner, facing southeast. Photo taken 7/22/2019.

Photo No. 15: S1, facing east. Photo taken 7/22/2019.

KATIE VALLAIRE

SENIOR CULTURAL RESOURCES MANAGER

EXPERTISE

- Cultural Resources Management
- Historical Archaeology
- Architectural History
- Historic Preservation

EDUCATION

M.A., Public History, California State University, Sacramento, 2011

B.A., Anthropology, Cultural Resource Management Certificate, California State University, Chico, 2005

PROFESSIONAL EXPERIENCE

Senior Cultural Resources Manager, LSA, Roseville, California, June 2015–Present

Archaeologist/Architectural Historian, Ric Windmiller Consulting, Auburn, California, May 2013–June 2015

Cultural Resources Manager, LSA, Roseville, California, July 2013–June 2015

Artifact Reproduction Specialist, Millennia Molding and Casting Company, Sacramento, California, October 2005–June 2015

Staff Archaeologist, Far Western Anthropological Research Group, Davis, California, January–November 2011

Curator Assistant (Intern), California State Museum Resources Center, West Sacramento, California, September 2010–June 2011

PROFESSIONAL RESPONSIBILITIES

Ms. Vallaire has over 17 years of experience in cultural resources management and historic preservation throughout California. Her principal professional abilities include, but are not limited to, identification, evaluation, and treatment of cultural resources; and preparation of technical documents as required for compliance with CEQA, NEPA, and Section 106 of the National Historic Preservation Act. Her expertise includes archival research, field survey, archaeological excavation, collections management, Historic American Buildings Survey/Historic American Engineering Record documentation, tribal consultation, cultural resources eligibility evaluations, finding of effects analyses, artifact reproduction, and oral history.

Ms. Vallaire is a Registered Professional Archaeologist, is listed on the Directory of Professionals in Public History, and is qualified under the Secretary of the Interior's *Professional Qualifications Standards* as a Historian, Architectural Historian, and Archeologist. Additionally, she is approved to work as a Principal Investigator on projects that require U.S. Department of the Interior permits to conduct archaeological investigations under authority of the Archaeological Resources Protection Act and the Antiquities Act of 1906.

PROJECT EXPERIENCE

UTILITIES

City of West Sacramento, Linden West Backyard Water Main and Meter Installation Project
West Sacramento, California

Ms. Vallaire acted as the Environmental Project Manager, the Principal Investigator for archaeology, and the Principal Architectural Historian for this City of West Sacramento infrastructure project. The reports she prepared for this project include a Cultural Resources Study and an Archaeological Work Plan. She also assisted the City with its Assembly Bill 52 consultation.

City of West Sacramento, Washington District Sustainable Community Infrastructure Project
West Sacramento, California

Ms. Vallaire was responsible for preparing the Cultural Resources Study, the Archaeological Work Plan, the Archaeological Test Excavation report of findings, and the Cultural Resources section in the focused EIR for this City of West Sacramento project. She also assisted the City with its Assembly Bill 52 consultation and contributed to the Data Recovery Report. The City proposed to make several infrastructure improvements to its historic Washington District including pedestrian/bicycle paths, parking, streetscape, utilities replacements, and sewerage and water lines. Known environmental constraints consist of buried cultural resources within the project area.

Southern California Edison, West of Devers Project
Riverside and San Bernardino Counties, California

Ms. Vallaire reviewed and contributed to the cultural resources report, as well as the built environment cultural resource evaluations and records. SCE proposed the West of Devers Project to upgrade transmission facilities

KATIE VALLAIRE

SENIOR CULTURAL RESOURCES MANAGER

LSA

PROFESSIONAL EXPERIENCE (CONT.)

Curator Assistant (Intern), California State Museum Resources Center, West Sacramento, California, September 2010–June 2011

Archaeologist, Solano Archaeological Services, Suisun City, California, August 2008–September 2010

Cultural Resource Specialist, Pacific Legacy, Inc., Cameron Park, California, September 2005–August 2008

Archaeological Technician, Archaeological Research Program, California State University, Chico, June 2004–August 2005

PROFESSIONAL CERTIFICATIONS

RPA No. 32791044, Register of Professional Archaeologists

VOLUNTEER EXPERIENCE

Sutter's Fort Environmental Living Program, January 2016, 2017, 2019

Preservation Sacramento Annual Home Tour Docent, September 2015, 2016, 2017, 2018, 2019

Archaeological Excavation at Garrapata State Park, Carmel, California Department of Parks and Recreation, May 2010

Archaeological Excavations at Site Ca-CCo-548, Marsh Creek, California Department of Parks and Recreation, 2006–2012

Archaeological Survey/ Excavation at Site Ca-Col-267, Thompson Canyon Watershed, Archaeological Research Program, California State University, Chico, 2004–2005

between the Vista and San Bernardino Substations and the Devers Substation. This upgrade included replacing existing 220 kV transmission lines with new, higher-capacity 220 kV transmission lines and structures and modifications and replacement of ancillary facilities.

First Solar, Inc., American Kings Solar Facility
Kings County, California

Ms. Vallaire directed cultural resources staff to prepare the Cultural Resources Study for this project. LSA was retained to prepare technical studies to support an IS/MND with an Addendum. First Solar, Inc., proposed construction of a 125 MW alternating current photovoltaic electrical generating station on 966 acres, located on the east side of 25th Avenue, south of SR-198, and west of Avenal Cutoff Road, in Kings County.

County of Lake, Lakeport Water Main Loop Project
Lakeport, California

Ms. Vallaire directed cultural resources staff to provide archaeological monitoring services in conjunction with the Big Valley Rancheria for this City of Lakeport utility project. She also contributed to the monitoring report.

County of Merced, Merced Municipal Well Site 22
Merced, Merced County, California

Ms. Vallaire directed cultural staff to prepare a Cultural Resources Study for this utility installation project located at 3987 Hatch Road in Merced. The study consisted of records searches, a literature review, a historic map review, consultation outreach, and a field survey, and did not identify any cultural resources.

BRIDGES

County of San Benito, Panoche Road Bridge Replacement Project
San Benito County, California

Ms. Vallaire directed cultural staff and prepared a supplemental Archaeological Survey Report, Extended Phase I (XPI) Proposal, XPI Report, and Historic Property Survey Report for this project. One bedrock milling station, an isolated lithic core, and an isolated hopper mortar were identified during the studies; however, no subsurface deposits were identified. Ms. Vallaire coordinated with Caltrans and the engineering team to avoid effects to cultural resources on this project.

City of Walnut Creek, Las Trampas Creek Bridge at South Main Street Replacement Project
Walnut Creek, Contra Costa County, California

Ms. Vallaire assisted in preparation of the Archaeological Survey Report, prepared the Extended Phase I (XPI) Proposal, directed the cultural staff, and coordinated with project engineers and Caltrans for this project. The XPI investigation included working with WRECO to excavate 20-foot-deep cores in downtown Walnut Creek.

City of West Sacramento, Sycamore Pedestrian Overcrossing Project
West Sacramento, California

Ms. Vallaire conducted multiple tasks for this project. The City of West Sacramento, in cooperation with the FHWA and Caltrans, proposed a

KATIE VALLAIRE

SENIOR CULTURAL RESOURCES MANAGER

LSA

VOLUNTEER EXPERIENCE (CONT.)

Flint Knapping Workshop Instructor, Indian Youth Environmental Camp, Lake Berryessa, Cortina Indian Rancheria, California, 2004

PROFESSIONAL AFFILIATIONS

California Council for the Promotion of History

Society for Historical Archaeology

Society for California Archaeology

Preservation Sacramento

PRESENTATIONS

"A Diachronic Analysis of Personal Adornment among Populations that Lived within the Ethnolinguistic Territory of the Patwin People of Central California," Society for California Archaeology Annual Meeting, Yosemite, California, 2017

"Creating Space: Historic Infill of Slough Lots in Downtown Marysville, California," Society for California Archaeology Annual Meeting, Redding, California, 2015

"The Central California Archaeological Foundation: What we can Learn from their Archival Records and their Role in the History of California Archaeology," Society for California Archaeology Northern Data Sharing Meeting, Trinidad, California, 2013

pedestrian overcrossing bridge over I-80. Drake Haglan and Associates retained LSA to prepare an Archaeological Survey Report and Historic Property Survey Report for the project. Ms. Vallaire managed the cultural resources budget and hours, directed the cultural resources staff, assisted the City with Assembly Bill 52 consultation, prepared the Historic Property Survey Report, and contributed to the Archaeological Survey Report.

County of Lake, Clover Creek at First Street Bridge Replacement Project, Bridge 14C-0015
Lake County, California

Ms. Vallaire served as the Principal Architectural Historian for this project. She conducted background research, consulted with interested parties, evaluated two built environment resources for listing in the National Register and the California Register, and prepared the Historical Resources Evaluation Report. The County of Lake Public Works Department, in cooperation with the FHWA and Caltrans, proposed replacement of Bridge No. 14C-0015 on First Street over Clover Creek located approximately 0.1 mile east of Main Street near the community of Upper Lake.

County of Stanislaus, Kilburn Road Bridge Replacement Project
Stanislaus County, California

Ms. Vallaire was responsible for preparing the Historic Property Survey Report, drafting the Memorandum of Agreement, and preparing a Finding of Adverse Effect document for this Harbors, Beaches and Parks-funded project. The County of Stanislaus, in conjunction with Caltrans, proposed replacing the Kilburn Road over Orestimba Creek Bridge. The bridge proposed for replacement is a historic property under Section 106.

County of Stanislaus, Gilbert Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement
Ceres, California

Ms. Vallaire managed the cultural resources staff, coordinated with Caltrans, conducted the background research, and prepared the Historic Property Survey Report and Archaeological Survey Report for this bridge replacement project in Ceres.

County of Fresno, Little Dry Creek Bridges Replacement on Millerton Road Project
Fresno County, California

Ms. Vallaire is the Principal Investigator on this project and has consulted with tribes and interested parties; conducted background research and a records search; supervised field surveys and Extended Phase I investigations; and prepared an Archaeological Survey Report, an Extended Phase I Proposal and Report, and an Archaeological Evaluation Proposal for a multicomponent site identified in the APE. The County of Fresno, in coordination with Caltrans and in partnership with the FHWA, proposed four bridge replacements under the Federal Highway Bridge Program for this project.

City of Vacaville, Aldridge Road Bridge over Putah South Canal Replacement Project
Vacaville, California

Ms. Vallaire coordinated with Caltrans, Solano Irrigation District, and the U.S. Bureau of Reclamation to delineate an APE, conduct field surveys, and determine the effects the project would have on historic properties identified within the APE. For this project, the U.S. Bureau of Reclamation granted LSA Field Authorization Permit

No. 16-CCAO-033. An Archaeological Survey Report, Historic Property Survey Report, and Finding of No Adverse Effect were prepared for this project to meet both Caltrans and U.S. Bureau of Reclamation standards. The City of Vacaville, in coordination with Caltrans and in partnership with the FHWA, proposed replacing the Aldridge Road Bridge over Putah South Canal for this project.

County of Stanislaus, Hickman Road over Tuolumne River Bridge Replacement Project
Stanislaus County, California

Ms. Vallaire was responsible for managing the cultural resources team for this project. The cultural resources team coordinated with Caltrans in delineating an APE map; consulted with tribes and interested parties; conducted background and archival research and a field survey; and prepared technical studies, including an Archaeological Survey Report and a Historical Resources Evaluation Report. One architectural resource was evaluated for the purposes of this study and was determined not eligible for listing in the National Register or the California Register. This resource was recorded in the Evaluation Report and on DPR 523 series forms.

County of Stanislaus, San Joaquin River Bridge at Hills Ferry (River Road) Seismic Retrofit
Stanislaus and Merced Counties, California

Ms. Vallaire is serving as the Principal Investigator and Principal Architectural Historian on this bridge project. She is currently preparing the cultural resources studies that include an Archaeological Survey Report, a Historic Property Survey Report, and a Finding of No Adverse Effect – Standard Conditions: Environmentally Sensitive Area Action Plan for a previously unrecorded site that was identified in the APE.

County of Placer, Walerga Road Bridge Replacement over Dry Creek Project
Placer County, California

Ms. Vallaire managed the cultural resources staff, conducted background research, coordinated with Caltrans and the USACE, assisted the County with Assembly Bill 52 consultation, and prepared the supplemental Historic Property Survey Report and supplemental Archaeological Survey Report for this bridge replacement project. The County of Placer proposes to replace the existing three-span reinforced concrete slab bridge over Dry Creek at Walerga Road approximately 3.5 miles west of Roseville between Baseline Road and PFE Road.

City of San Rafael, Southern Heights Boulevard Bridge Replacement Project
San Rafael, California

Ms. Vallaire managed the cultural resources staff, conducted background research, evaluated four built environment resources for listing in the National Register or California Register, and coauthored the Historical Resources Evaluation Report and Historic Property Survey Report for this bridge replacement project.

County of Plumas, Sloat-Poplar Valley Road Bridge Replacement Project
Plumas County, California

Ms. Vallaire managed the cultural resources staff, coordinated with Caltrans, conducted background research and a field survey, and prepared the Historic Property Survey Report and Archaeological Survey Report for this bridge replacement project. The Plumas County Department of Public Works, in coordination with Caltrans, proposed the replacement of the Sloat-Poplar Valley Road Bridge over the Middle Fork Feather River.

County of Placer, Dowd Road over Coon Creek Bridge Replacement Project
Placer County, California

Ms. Vallaire directed cultural resources staff, conducted background research and a field survey, and prepared a supplemental Historic Property Survey Report and Archaeological Survey Report for this bridge replacement project. The Placer County Department of Public Works, in coordination with Caltrans and in partnership with the FHWA, proposed the replacement of the Dowd Road Bridge over Coon Creek due to structural deficiency.

County of Placer, Dowd Road over Markham Ravine Bridge Replacement Project
Placer County, California

Ms. Vallaire directed cultural resources staff, conducted background research and a field survey, and prepared a supplemental Historic Property Survey Report and Archaeological Survey Report for this bridge replacement project. The Placer County Department of Public Works, in coordination with Caltrans and in partnership with the FHWA, proposed the replacement of the Dowd Road Bridge over Markham Ravine due to structural deficiency.

City of Nevada City, Nevada Street at Deer Creek Bridge Replacement
Nevada County, California

Ms. Vallaire is the Principal Archaeologist and Architectural Historian for this bridge replacement project. Ms. Vallaire directed staff and contributed to preparing the APE map, Historic Property Survey Report, Historical Resources Evaluation Report, and Archaeological Survey Report for the project, and assisted the City with its Assembly Bill 52 consultation efforts. The City of Nevada City, in conjunction with Caltrans, proposes to replace the functionally obsolescent bridge located adjacent to the City of Nevada City's historic downtown district.

County of Placer, Watt Avenue at Dry Creek Bridge Replacement Project
Placer County, California

Ms. Vallaire served in multiple roles for this bridge replacement project. The County of Placer, in coordination with Caltrans and the FHWA, proposed widening Watt Avenue and replacing the Watt Avenue over Dry Creek Bridge. The project had the potential to affect contributors to the historic Union Cemetery, and an Extended Phase I (XPI) investigation was warranted. Ms. Vallaire directed the cultural staff for this project; coordinated with Caltrans, project engineers, historical societies, cemetery staff, and tribal groups, assisted in the preparation of the Archaeological Survey Report, and prepared the Historical Resources Evaluation Report, XPI Proposal, XPI Report, and Historic Property Survey Report for this project.

INTERCHANGES/ROADWAYS

City of West Sacramento, E & F Street Frontage Improvements Project
West Sacramento, Yolo County, California

Ms. Vallaire was responsible for preparing the Cultural Resources Study, the Archaeological Work Plan, and the Data Recovery Plan; and drafting the SHPO transmittal letter and Memorandum of Agreement to comply with Section 106 for this HUD-funded project. She assisted the City with their Assembly Bill 52 and Section 106 consultation obligations and met with City and engineering staff to determine appropriate mitigation and treatment for a historic property within the APE of this project.

County of Fresno, Goodfellow Avenue Shoulder Improvements Project
Fresno County, California

Ms. Vallaire was responsible for preparing the Archaeological Survey Report and Historic Property Survey Report for this Section 106 project. She conducted the background research, consultation, and field survey for this project to comply with Caltrans standards.

City of Manteca, SR-120/Union Avenue Interchange Reconstruction Project
Manteca, California

Ms. Vallaire prepared the cultural resources supplemental studies for an alternative diverging diamond interchange at SR-120/Union Avenue. The City of Manteca and Caltrans are proposing to improve the existing SR-120/South Union Road overcrossing and ramps, construct auxiliary lanes, and install signals for the SR-120/South Union Road interchange in Manteca.

County of Stanislaus, Sperry Avenue at I-5 Interchange Project
Stanislaus County, California

Ms. Vallaire is the Principal Investigator for this interchange project and has managed and conducted the cultural resources studies, including an Archaeological Survey Report, an Extended Phase I investigation, and a Finding of Effects document. Caltrans, in conjunction with the County of Stanislaus and the City of Patterson, proposes to construct improvements to the I-5/Sperry Avenue interchange.

North County Corridor Transportation Expressway Authority, North County Corridor New SR-108 Project
Stanislaus County, California

Ms. Vallaire supervised the field survey, conducted archival and background research, consulted with tribes and interested parties, evaluated numerous built environment resources, and contributed to the Historical Resources Evaluation Report for this project. The North County Corridor Transportation Expressway Authority, in conjunction with Caltrans, as assigned by the FHWA, proposed relocating SR-108, which runs through Riverbank and Oakdale.

County of Yuba, North Beale Road Improvements Project
Yuba County, California

Ms. Vallaire conducted field studies that included archaeological presence/absence excavations and trench monitoring for this road improvements project. Two archaeological cultural resources were identified, and Ms. Vallaire coauthored the Extended Phase I Report for this project. The County of Yuba, in coordination with Caltrans, and in partnership with the FHWA, proposed the project, which consisted of constructing a median, reconstructing sidewalks and crosswalks, improving existing bicycle lanes, planting vegetation, and installing new light posts along North Beale Road.

County of Placer, Auburn Folsom Safety Improvement Project
Placer County, California

Ms. Vallaire served as Cultural Resources Lead for this project, which included preparation of the Historic Property Survey Report, Archaeological Survey Report, and Environmental Site Assessment Action Plan. The project was redesigned in areas to avoid sensitive cultural resources. LSA also conducted periodic monitoring during construction.

County of Nevada, Hinton Road Realignment/Hirschdale Road Bridges Removal Project
Hirschdale, California

Ms. Vallaire served in multiple roles for this project. The County of Nevada, with funding administered through the FHWA and in coordination with Caltrans, proposed constructing a new road between Boca Quarry Road and Hinton Road, improving Hinton Road, and removing the Truckee River Bridge (17C0045) and the Hinton Overhead (17C0046) in Hirschdale. For this project, Ms. Vallaire conducted archival research, consultation with interested parties, and a field survey, and prepared a supplemental Historic Property Survey Report and Historical Resources Evaluation Report to evaluate the Truckee River Bridge and the Hinton Overhead Bridge for their association with the Lincoln Highway. Both bridges were found not eligible for listing on the National Register, and this finding received SHPO concurrence.

County of San Joaquin, Grantline Road Corridor Project
San Joaquin County, California

Ms. Vallaire managed the cultural resources staff, conducted the field survey, and evaluated numerous built environment resources and an archaeological isolate for the purposes of this corridor project. The County of San Joaquin proposes a new corridor to direct traffic from Grantline Road south of Banta.

City of Manteca, SR-99 at SR-120 Interchange Improvements Project
Manteca, California

Ms. Vallaire conducted background research, directed cultural resources staff, and evaluated six built environment resources for the purposes of this transportation project proposed by the City of Manteca and

Caltrans. An Archaeological Survey Report, Historical Resources Evaluation Report, and Historic Property Survey Report were prepared for this project to comply with Section 106 and CEQA.

California Department of Transportation, US-50 Zinfandel Drive Interchange Improvements Project
Rancho Cordova, California

Ms. Vallaire directed cultural resources staff, conducted background research, and contributed to the Archaeological Survey Report for this Caltrans interchange improvement project.

City of West Sacramento, West Capitol Avenue Rehabilitation Project
West Sacramento, California

Ms. Vallaire managed the cultural resources staff, assisted with consultation, prepared the Historic Property Survey Report, and contributed to the Archaeological Survey Report for this road rehabilitation project. The City of West Sacramento, in coordination with Caltrans and the FHWA, is proposing to rehabilitate the deteriorating pavement along a section of West Capitol Avenue, as well as implement safety improvements including separated bike lanes, enhanced midblock crossings for pedestrians, and improved lighting.

City of Manteca, Airport Way Widening Project
Manteca, California

Ms. Vallaire evaluated 19 built environment resources for listing in the California Register, assisted with the evaluation of one historic-period archaeological site, and coauthored the Cultural Resources Study for this road widening project proposed by the City of Manteca. Mark Thomas & Company, Inc., retained LSA to prepare the Cultural Resources Study for the project.

City of West Sacramento, Riverfront Street Extension Project
West Sacramento, Yolo County, California

Ms. Vallaire served in multiple roles for this project. During the archaeological field survey and Extended Phase I testing conducted for the project, features associated with the Rice Growers Association (RGA) mill complex were identified in the APE. The City of West Sacramento recommended LSA to prepare the Historical Resources Evaluation Report (HRER) for the resource. Wood Rodgers retained LSA to prepare the HRER and revise the Historic Property Survey Report for this project. Ms. Vallaire coordinated with Caltrans staff, Wood Rodgers, City staff, and the environmental team (Areas West) to ensure that the HRER was prepared and submitted to the SHPO under a very short timeline. Ms. Vallaire conducted archival research, consultation with archaeologists who had previously recorded portions of the resource, consultation with historical societies, and an evaluation of the RGA complex as a multicomponent property for its eligibility for listing in the National Register. Ms. Vallaire found it ineligible for the National Register due to a loss of integrity, and the SHPO concurred with her findings.

RAILWAY

High-Speed Rail Authority, High-Speed Rail: Bakersfield to Palmdale Section
Kern and Los Angeles Counties, California

Ms. Vallaire was responsible for managing the archaeological resources studies during a portion of this project, including assisting in preparation of the Archaeological Treatment Plan, APE memo, the Cultural Resources section in the EIR/EIS, and the NEPA Record of Decision determination; and attending meetings with project stakeholders and agencies.

High-Speed Rail Authority, High-Speed Rail: Burbank to Los Angeles Section
Los Angeles County, California

Ms. Vallaire was responsible for managing the archaeological resources studies during a portion of this project, including assisting in preparation of the Archaeological Treatment Plan and assisting the project team with reviewing APE revisions and coordinating with agencies and project stakeholders.

High-Speed Rail Authority, High-Speed Rail: Fresno to Bakersfield Section: Bakersfield F Street Station Alignment
Kern County, California

Ms. Vallaire was responsible for managing the archaeological and traditional cultural property studies for this project. Pursuant to a Settlement Agreement between the City of Bakersfield and the High-Speed Rail (HSR) Authority, the Bakersfield F Street Station Alignment (BFSSA) was proposed as a new alternative of the Fresno to Bakersfield Section of the HSR Project. Ms. Vallaire supervised and/or conducted field surveys, archival research, literature and map reviews, archaeological sensitivity analyses, and APE mapping for the BFSSA. Ms. Vallaire also prepared the supplemental Archaeological Survey Report, Findings of Effect, and Chapter 3.17 (Cultural Resources) of the Supplemental EIR/EIS, and reviewed the Traditional Cultural Resources Study and Historic Property Survey Report.

DEVELOPMENT

Greystar, 198 McAllister Street Project
San Francisco, California

Ms. Vallaire prepared an archaeological Sensitivity Analysis document, directed the Worker Environmental Awareness Training, and directed the archaeological monitoring and salvage data recovery during construction of this project. During construction, an historic brick structure was identified with associated trash scatter. Ms. Vallaire evaluated the site for eligibility in the California Register and prepared a monitoring report for this University of California project.

California Housing Finance Agency, 921 Howard Street Project
San Francisco, California

Ms. Vallaire directed the archaeological resources staff and prepared the Archaeological Monitoring Plan for this HUD-funded project. The site location is sensitive for buried historic-period archaeological resources.

City of San Bruno, San Bruno Recreation and Aquatic Center Project
San Bruno, California

Ms. Vallaire prepared a Section 106 summary, revised the APE map, and prepared an Archaeological Monitoring Plan for this project. Ms. Vallaire also coordinated with City staff, the Army Corps of Engineers, the project developers, and SHPO to determine appropriate avoidance and treatment measures for this project.

El Dorado Hills Community Services District, Bass Lake Regional Park Project
El Dorado Hills, El Dorado County, California

Ms. Vallaire prepared the Cultural Resources Study for this project. Two historic-period sites were identified in the APE and included the Zimmerman Ranch complex and the Bass Lake complex. Ms. Vallaire evaluated both sites for their eligibility for listing in the National Register or California Register. Although both were found not eligible for wither register, one structure associated with the Bass Lake complex was found eligible under Criterion C/3 individually.

Town of Truckee, Truckee Railyard Extension Project
Truckee, California

Ms. Vallaire prepared the Archaeological Monitoring and Evaluation Plan for the project, which included a research design, an archaeological sensitivity assessment, a discussion of archaeological monitoring procedures, and a discussion on the appropriate treatment of Native American human remains. Truckee Development Associates proposed redeveloping the Truckee Railyard with residential, commercial, and mixed-use buildings in Truckee in Nevada County. The project site is located on approximately 35 acres adjacent to Truckee's historic downtown.

KATIE VALLAIRE

SENIOR CULTURAL RESOURCES MANAGER

LSA

City of Rancho Cordova, Soil Born Farms Road Improvement Project
Rancho Cordova, California

Ms. Vallaire directed the cultural resources staff and assisted the City of Rancho Cordova in conducting Assembly Bill 52 consultation for this project. The City is proposing roadway improvements, parking, and lighting improvements, and development of bicycle and pedestrian facilities near a school, park, and agricultural use facility.

Thomas Properties, Sierra College Boulevard Project
Rocklin, California

Ms. Vallaire directed staff, conducted background and archival research, conducted a field survey, and evaluated a historic-period archaeological resource in the project area. Thomas Properties proposed to construct a new retail space southwest of the intersection of Sierra College Boulevard and I-80 in Rocklin in Placer County.

Selective Ventures, LLC, 5724 North Avenue
Sacramento County, California

Ms. Vallaire managed the cultural resources staff, conducted background research, evaluated the built environment resources located on Assessor's Parcel Number 272-0040-006-0000 for listing in the California Register, and coauthored the Cultural Resources Study for the project to comply with the County of Sacramento requirements and regulations established by CEQA. Selective Ventures, LLC, proposed to divide the parcel into four parcels for future development.

Property Owner, 7772 Magnolia Avenue
Sacramento County, California

Ms. Vallaire managed the cultural resources staff, conducted background research, evaluated the built environment resources located on Assessor's Parcel Number 242-0231-083-0000 for listing in the California Register, and coauthored the Cultural Resources Study for the project to comply with the County of Sacramento requirements and regulations established by CEQA. The private property owner of the parcel proposed to divide the parcel for future development.

Sacramento Commercial Properties, Inc., 510 Sutter Street and 605 Sutter Street Properties
Folsom, California

Ms. Vallaire managed the cultural resources staff, conducted background research, and coauthored the Cultural Resources Study for the project to comply with CEQA. Sacramento Commercial Properties, Inc., and KW Commercial proposed the division and sales/development of two properties located within the Historic District of Folsom.

Flyline Investments, LLC, Osmun Avenue at 2nd Street Residential Development Project
Clovis, California

Ms. Vallaire evaluated a religious property (the Clovis Foursquare Church consisting of a 1942 church and a 1938 residence) for its eligibility for listing in the California Register, and authored the Cultural Resources Study for this proposed residential project at Osmun Avenue and 2nd Street. Flyline Investments, LLC, retained LSA to prepare the Cultural Resources Study for the project.

Property Owner, 5536 Turnbull Circle
Sacramento County, California

Ms. Vallaire evaluated the historic-period ranch at 5536 Turnbull Circle (Assessor's Parcel Number 253-0091-006-0000), managed the staff responsible for surveying the property for archaeological resources, and contributed to the preparation of the Cultural Resources Study. The private property owner of this parcel proposed a residential development on the parcel.

Thomas Properties, Sonora Wendy's Site Development Project
Sonora, California

Ms. Vallaire evaluated the Millard's Florist and Nursery Site that was identified on the property, conducted the survey and background research, and prepared the Cultural Resources Study for this site development project. SSK II LLC and Eastbay Equities proposed the construction of a new Wendy's restaurant and related site work on a vacant lot and a new curb/gutter/sidewalk along the Mono Way frontage.

County of Yolo, Esparto Park and Aquatic Center
Esparto, California

Ms. Vallaire managed this project, directed the archaeological staff, and contributed to the monitoring report of findings. LSA was retained by Yocha Dehe Wintun Nation to assist with the monitoring and excavation of human remains identified during construction for this project.

Armoto Partners, LLC, Tidewater Crossing Project
French Camp, California

Ms. Vallaire directed cultural resources staff, evaluated the Stockton Field Sewage Treatment Plant Disposal Site, and contributed to the preparation of a Supplemental Cultural Resources Study for this industrial, commercial, and residential development project. The study conformed to USACE guidance for Section 106 studies.

Property Owner, Mann Property on Antelope North Road Project
Sacramento County, California

Ms. Vallaire directed a cultural resources study for this project. As part of an application for a grading permit to allow the development of vacant industrial property for a truck storage yard at 8700 Antelope North Road, Mainland Developments, Inc., retained LSA to prepare a cultural resources study that conformed to the Section 106 guidelines set forth by the USACE. Ms. Vallaire directed the study, which consisted of a literature review, a records search, outreach to historical societies, historical map and aerial map reviews, Native American Consultation, and a field survey. No cultural resources were identified during this study.

City of Rocklin, Rocklin Block D
Rocklin, Placer County, California

Ms. Vallaire conducted background research for this project. The City of Rocklin retained LSA to conduct a cultural resources study of City Block D in Rocklin to inform its decision to potentially purchase the property. While not yet a discretionary project subject to review under CEQA, the City elected to commission this study in advance of potential future development of the project site. Ms. Vallaire conducted background research and determined that additional field investigation was not warranted because the project site was intensely surveyed and all resources identified were recorded and evaluated to current professional standards.

Marc O' Polo Enterprises, Inc., 2362 Herndon Avenue Project
Clovis, Fresno County, California

Ms. Vallaire prepared a memorandum to Marc O' Polo Enterprises, Inc., documenting a cultural resources study completed for the 7.46-acre parcel at 2362 Herndon Avenue in Clovis that complied with the requirements set forth in CEQA. Ms. Vallaire directed the study, which included a pedestrian survey, a literature review, an archaeological sensitivity assessment, a request for a Sacred Lands File records search at the Native American Heritage Commission, and a review of the California Historical Resources Information System records search results.

City of Merced, Merced Mall Expansion Project
Merced, Merced County, California

Ms. Vallaire directed the cultural resources study for this mall expansion project, which included a records search at the Central California Information Center, a review of the Sacred Lands File at the NAHC, a literature

review, and consultation outreach with the Merced County Historical Society. The project site was approximately 56 acres and located at 851 Olive Avenue in Merced.

4th & G Partners, 316 and 330 G Street
West Sacramento, Yolo County, California

Ms. Vallaire managed this project and directed the cultural resources staff. 4th & G Partners retained LSA to conduct presence/absence archaeological testing at 316 and 330 G Street in West Sacramento to inform its decision to potentially purchase the property. No precontact archaeological cultural resources were identified within the project site, but Ms. Vallaire recommended tribal consultation and monitoring if the project was implemented.

Greystar, South Campus Student Housing Project
Sacramento, Sacramento County, California

Ms. Vallaire directed the cultural, paleontological, and biological staff for this project. Greystar Worldwide, LLC, retained LSA to monitor construction of the South Campus Student Housing Project at California State University, Sacramento. Ms. Vallaire also coordinated with the United Auburn Indian Community and 347 Group to ensure that the project was monitored for tribal cultural resources. She prepared an Archaeological Monitoring Plan, a Standard Operating Procedures for Tribal Cultural Resources document, and a Monitoring Report for this project. Monitoring resulted in the identification of one historic-period archaeological site that comprised an artifact refuse scatter, abandoned underground utilities, and a segment of a foundation. Ms. Vallaire evaluated the site and found it ineligible for listing in the California Register.

TRAILS/PATHS

City of West Sacramento, Sycamore Trail Phase II & III Extension Project
West Sacramento, California

Ms. Vallaire managed the cultural resources staff, coordinated with Caltrans, assisted the City of West Sacramento with Assembly Bill 52 consultation, conducted the background research, prepared the Historic Property Survey Report, and coauthored the Archaeological Survey Report for this trail project. The City, in coordination with Caltrans, proposed a pedestrian overcrossing trail over US-50/Business 80.

City of West Sacramento, Barge Canal Trail Project
West Sacramento, California

Ms. Vallaire managed the cultural resources staff as well as the biological staff for this project. The City of West Sacramento proposed to build and improve sections of the Barge Canal Trail located in the Stone Lock District, south of the Deep Ship Water Channel. Ms. Vallaire conducted background research on the barge canal and the Stone Lock, and coauthored the Cultural Resources Study to comply with CEQA.

County of Lake, Middletown Multiuse Path Project
Middletown, California

Ms. Vallaire was responsible for multiple aspects of this pathway project. The County of Lake retained LSA to prepare an Archaeological Survey Report and Historical Resources Compliance Report for this project. Ms. Vallaire managed staff, prepared the Compliance Report, conducted research, coordinated with Caltrans, and coauthored the Archaeological Survey Report for this project.

County of San Mateo, Tunitas Creek Beach Improvement Project
San Mateo County, California

For this project, Ms. Vallaire prepared a cultural resources constraints analysis and recommendations to comply with requirements of CEQA. The assessment included background research (including a records search), a review of previously conducted studies, a pedestrian survey of the project site, a request for a Sacred Lands File records search at the NAHC, outreach to potentially interested organizations, and an evaluation of the Tunitas

Glen Depot Workers' Cabins and of the residence at 20775 Cabrillo Highway South. Both were found ineligible for listing in the California Register.

MINING

Vulcan Materials Company, Sacramento Aggregates Expansion Site Project
Sacramento County, California

Ms. Vallaire directed cultural resources staff for this mining project and contributed to the preparation of the Cultural Resources Study that was in compliance with CEQA and Section 106. Vulcan Materials Company proposed expanding its mining operations in Sacramento.

ARTIFACT CASTING

Basin Research, Sanchez Adobe Artifact Casting
San Mateo County, California

Ms. Vallaire acted as Project Manager and assisted in the production of the casts for this project. LSA prepared a set of casts for 10 obsidian points, 2 stingray barbs, and 13 bird bone whistles for a total of 25 casts. The artifacts were recovered from the Sanchez Adobe Site in San Mateo County.

Yocha Dehe Wintun Nation, Yocha Dehe Wintun Nation Casting Services
Solano County, California

Ms. Vallaire acted as Project Manager and assisted in the production of the casts for this project. LSA prepared six sets of six artifact casts for the Yocha Dehe Wintun Nation for tribal educational purposes.

River Islands Development, LLC, River Islands Development Project
Lathrop, San Joaquin County, California

Ms. Vallaire managed cultural staff, prepared the molds, created the casts, and contributed to the report preparation for this project. LSA was retained by River Islands Development, LLC, to complete a data recovery report and create 60 artifact casts for the North Valley Yokuts tribe as part of the mitigation for the project's significant impacts to precontact-period archaeological site CA-SJO-280.

SELECTED REPORTS

2021 *Archaeological Monitoring Plan: 915-921 Howard Street Project, San Francisco, California*. LSA, Roseville, California.

2020 *Cultural Resources Monitoring Report: South Campus Student Housing Project, California State University, Sacramento*. LSA, Roseville, California.

2019 *Historical Resources Evaluation Report: Riverfront Street Extension Project, West Sacramento, Yolo County, California*. LSA, Roseville, California.

2019 *Archaeological Data Recovery Report for Portions of CA-YOL-27 within the Area of Direct Impact of the Washington District Sustainable Community Infrastructure Project, West Sacramento, Yolo County, California*. LSA, Roseville, California.

2018 *Historical Resources Evaluation Report: Clover Creek Bridge at First Street Bridge Replacement Project, Lake County, California.* LSA Associates, Inc., Roseville, California.

2018 *Cultural Resources Study for the Proposed Residential Project at Osmun Avenue and Second Street, Clovis, Fresno County, California.* LSA Associates, Inc., Roseville, California.

2018 *Cultural Resources Study and Evaluation: Sonora Wendy's Site Development, Tuolumne County, California.* LSA Associates, Inc., Roseville, California.

2018 *Archaeological Data Recovery Plan for Portions of Site CA-YOL-27 within the Area of Direct Impact of the Washington District Sustainable Community Infrastructure Project, West Sacramento, Yolo County, California*. LSA Associates, Inc., Roseville, California.

2018 *Cultural Resources Study: Linden West Backyard Water Main Replacement Project, West Sacramento, Yolo County, California.* LSA Associates, Inc., Roseville, California.

2018 *Historical Resources Evaluation Report: State Route 99 at State Route 120 Interchange Improvements Project, San Joaquin County, California.* LSA Associates, Inc., Roseville, California.

2018 *Cultural Resources Study: Barge Canal Trail Project, City of West Sacramento, Yolo County, California.* LSA Associates, Inc., Roseville, California.

2017 *Archaeological Evaluation Proposal for P-10-000459/CA-FRE-459, Little Dry Creek Bridge (42C-0270) Replacement Project, Fresno County, California*. LSA Associates, Inc., Roseville, California.

2017 *Extended Phase I Report: Sperry Avenue at Interstate 5 Interchange Project, Stanislaus County, California.* LSA Associates, Inc., Roseville, California.

2016 *Archaeological Test Excavations near CA-YOL-27, Washington District Sustainable Community Infrastructure Project, City of West Sacramento, Yolo County, California*. LSA Associates, Inc., Rocklin, California.

2016 *Cultural Resources Study, Washington District Sustainable Community Infrastructure Project, City of West Sacramento, Yolo County, California*. LSA Associates, Inc., Rocklin, California.

2016 *Archaeological Monitoring and Evaluation Plan, Truckee Railyard Extension Project, Truckee, Nevada County, California*. LSA Associates, Inc., Rocklin, California.

2016 *Cultural Resources Study and Eligibility Evaluations for the Grant Line Road Corridor Project, in Tracy and Banta, San Joaquin County, California.* LSA Associates, Inc., Rocklin, California.

2016 *California High-Speed Rail Authority Fresno to Bakersfield Project Section Archaeological Survey Report for the Bakersfield F Street Station Alignment Alternative*. California High-Speed Rail Authority and Federal Railroad Administration, Washington, D.C.

2016 *California High-Speed Rail Authority Fresno to Bakersfield Section Locally Generated Alternative Findings of Effect*. California High-Speed Rail Authority and Federal Railroad Administration, Washington, D.C.

2016 *Extended Phase I Report, Little Dry Creek Bridges Replacement on Millerton Road Project, Fresno County, California* (Draft). LSA Associates, Inc., Rocklin, California.

2015 *Extended Phase I Report, North Beale Road Improvements Project, Near Linda, Yuba County, California.* LSA Associates, Inc., Rocklin, California.

2015 *Cultural Resources Study, 4660 Sierra College Boulevard Project, Rocklin, Placer County, California.* LSA Associates, Inc., Rocklin, California.

2015 *Archaeological Survey Report, Little Dry Creek Bridges Replacement on Millerton Road Project, Fresno County, California.* LSA Associates, Inc., Rocklin, California.

2015 *Archaeological Survey Report, Gilbert Road over Turlock Irrigation District Ceres Main Canal Bridge Replacement, Stanislaus County, California.* LSA Associates, Inc., Rocklin, California.

2014 *Historical Resources Assessment for the Orange Mutual Citrus Association Packing House, City of Orange, Orange County, California*. LSA Associates, Inc., Riverside, California.

2014 *Eddy's House Property, Cultural Resources Inventory & Evaluation, Sacramento County, California.* Ric Windmiller Consulting Archaeologist, Auburn, California.

2014 *Archaeological Data Recovery at CA-MRN-67, Larkspur, Marin County, California.* Holman & Associates, San Francisco, California.

2014 *Results of Archival Research and Evaluation of Thirty-Nine Resources, West of Devers Project, Riverside and San Bernardino Counties.* LSA Associates, Inc., Carlsbad, California.

2014 *Sucker Ravine-Loomis Tributary "CLOMR", Cultural Resources Inventory and Evaluation, Rocklin, Placer County, California.* Ric Windmiller Consulting Archaeologist, Auburn, California.

2014 *Orr Creek Reservoir Project Cultural Resources Inventory and Evaluation, Placer County, California.* Ric Windmiller Consulting Archaeologist, Auburn, California.

2014 *Historical Resources Evaluation Report, Pitt Street Bridge Replacement Project, City of Jackson, Amador County, California.* Ric Windmiller Consulting Archaeologist, Auburn, California.

2013 *Jackson Township Specific Plan, Background Report on Paleontological, Archaeological and Historic Resources.* Ric Windmiller Consulting Archaeologist, Auburn, California.

2013 *Supplemental Historical Resources Evaluation Report for the Hinton Road Realignment/Hirschdale Road Bridges Removal Project, Nevada County, California.* LSA Associates, Inc., Rocklin, California.

2011 *Digitizing and Transcribing the Blanchard Brothers' Civil War Letters.* Unpublished M.A. Thesis on file at California State University, Sacramento Library.

2010 *Cultural Resources Monitoring Excavation Analysis and Evaluation for two Historic Sites conducted for the Rideout Memorial Hospital Project, Marysville, California.* Schwitalla Archaeological Services, Sacramento, California.

2010 *Oral History of Nai Saevang, Sacramento Refugees Oral History Project.* On file at Special Collections, California State University, Sacramento Library.

2010 *Report of Archaeological Excavation and Analysis of the TowerMart Site (CA-SOL-364), Solano County, California.* Solano Archaeological Services, Suisun City, California.

2009 *Finding Aid for "Ray Takata Business Records" archival collection.* On file at the Center for Sacramento History.

2008 *Cultural Resources Survey, Inventory, and Evaluation for the Montana Bureau of Land Management Lewiston District Field Office in Fergus, Petroleum, and Phillips Counties.* Solano Archaeological Services, Suisun City, California.

Attachment 10

June 2022

MATERIAL CULTURE
CONSULTING

Submitted to:

ICC/Stravinski
413 W. Yosemite Avenue, Suite #105
Madera, CA 93637

CULTURAL RESOURCES ASSESSMENT
5175 AIRPORT ROAD PROJECT
CITY OF PASO ROBLES,
SAN LUIS OBISPO COUNTY, CALIFORNIA

Material Culture Consulting™
© 2021 All Rights Reserved.

CULTURAL RESOURCES ASSESSMENT: 5175 AIRPORT ROAD PROJECT CITY OF PASO ROBLES, SAN LUIS OBISPO COUNTY, CALIFORNIA

Prepared on Behalf of:
ICC/Stravinski
413 W. Yosemite Ave., Suite #105
Madera, CA 93637

Prepared By:
Lily Arias, M.A., Principal Investigator
Erin Henry, B.A.

Material Culture Consulting, Inc.
2701-B North Towne Avenue
Pomona, California 91767
626-205-8279

June 2022

Type of Study: Archaeological Resources Assessment
Archaeological Sites within Area of Potential Impact: None
Project Location: USGS 7.5' Topographic Quadrangle Paso Robles, Township 26 South, Range 12 East, Section 11, Mount Diablo Meridian
Project Area: 11.5 acres
Date of Field Survey: June 13, 2022
Key Words: Archaeology, CEQA, Paso Robles, San Luis Obispo County, Negative Survey

MANAGEMENT SUMMARY

The 5175 Airport Road Project (hereafter referred to as Project or Project Area) proposes development of a 11.5-acre site in the City of Paso Robles, San Luis Obispo County. Material Culture Consulting, Inc. (MCC) was retained by ICC/Stravinski to conduct a Phase I cultural resources investigation of the Project Area. This assessment was conducted in accordance with the California Environmental Quality Act (CEQA), along with local regulations and guidelines. This assessment included a California Historical Resources Information System (CHRIS) records search at the Central Coast Information Center (CCIC), background and literature research, a search of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC), outreach to 12 Native American tribal representatives, and a pedestrian survey of the 11.5-acre Project Area.

A records search was conducted on May 2, 2022, by staff at the CCIC located at the Santa Barbara Museum of Natural History, Santa Barbara. The records search identified 11 previously conducted cultural resources investigations within 1-mile of the Project Area, none of which intersect the Project Area. No previously recorded cultural resources were identified within the Project Area. Three previously recorded cultural resources were identified within 1-mile of the Project Area, two of which are historic and one is prehistoric and include the Estrella Adobe.

A review of historical aerial photographs and topographic maps indicate the Project Area has been occupied as early as the 1930s. Orchards are visible on historic aerial photographs and topographic maps through the late 1960s. The structures visible within the Project Area are presently standing yet vacant.

A review of the NAHC SLF did not identify sacred lands within the Project Area. The NAHC identified and provided contact information for 12 Native American tribal groups and representatives affiliated with the geographic region of the Project Area. MCC conducted outreach to each of the listed parties in an attempt to collect additional information regarding the potential sensitivity of the Project Area. As a result of this outreach, MCC received one response from Julie Tumamait-Stenslie, the Chairperson of the Barbareno/Ventureno Band of Mission Indians. This outreach was conducted for identification purposes only; no formal consultation with the Native American representatives occurred as part of this investigation.

On June 13, 2022, MCC Archaeologist Erin Henry conducted a field survey of the Project Area. During the survey, the ground visibility was approximately 0-50% due to overgrown vegetation. The Project Area was highly disturbed with evidence of previous agricultural activities and modern refuse. Other disturbances to the site include bioturbation and possible vehicle or heavy equipment use.

Based on the above findings, the probability of encountering cultural resources within the Project Area is considered moderate. Due to the historic occupation of the Project Area and the presence of the Estrella Adobe just 850 feet northeast of the Project Area MCC recommends archaeological monitoring for vegetation clearing, trimming, and removal, and during ground disturbance occurring within the first five (5) feet below surface during construction. Prior to the start of construction, a cultural resources management plan (CRMP) should be prepared and implemented during construction.

A copy of this report will be permanently filed with the CCIC at University of California, Santa Barbara. All notes, photographs, correspondence and other materials related to this project are located at Material Culture Consulting, located in Claremont, California.

TABLE OF CONTENTS

MANAGEMENT SUMMARY **2**

TABLE OF CONTENTS **3**

LIST OF FIGURES **4**

LIST OF TABLES **4**

INTRODUCTION **5**

PURPOSE OF STUDY 5
PROJECT DESCRIPTION 5
PROJECT PERSONNEL 5

REGULATORY ENVIRONMENT **9**

ANTIQUITIES ACT OF 1906 (16 UNITED STATES CODE [USC] 431-433) 9
ARCHAEOLOGICAL AND HISTORIC PRESERVATION ACT OF 1974 (16 U.S.C. 469 ET SEQ) 9
HISTORIC SITES ACT OF 1935 (16 U.S.C. 461 ET SEQ) 9
NATIONAL ENVIRONMENTAL POLICY ACT 9
NATIONAL HISTORIC PRESERVATION ACT OF 1966, AS AMENDED 9
CALIFORNIA ENVIRONMENTAL QUALITY ACT 10
CALIFORNIA HISTORICAL LANDMARKS AND POINTS OF HISTORICAL INTEREST 12

BACKGROUND **13**

ENVIRONMENTAL SETTING 13
PREHISTORIC SETTING 13
ETHNOGRAPHY 14
HISTORICAL SETTING 15

METHODS **20**

CULTURAL RESOURCES LITERATURE REVIEW 20
NATIVE AMERICAN OUTREACH AND BACKGROUND RESEARCH 20
FIELD SURVEY 20

RESULTS **21**

CULTURAL RESOURCES RECORDS SEARCH 21
OTHER SOURCES 22
NATIVE AMERICAN OUTREACH AND BACKGROUND RESEARCH 26
PEDESTRIAN SURVEY 26

CONCLUSIONS AND RECOMMENDATIONS **29**

CULTURAL RESOURCES 29

REFERENCES CITED **30**

LIST OF FIGURES

Figure 1. Pepper Avenue Rialto Project Vicinity (1:500,000) 6
Figure 2. 5175 Airport Road Project Location (as depicted on Paso Robles 7
Figure 3. 5175 Airport Road Project Area (as depicted on aerial photography, 1:2,500) 8
Figure 4. Estrella Post Office (Paso Robles Historical Society) 16
Figure 5. Pleasant Valley School (Paso Robles Historical Society) 17
Figure 6. Estrella Adobe Church, prior to restoration 17
Figure 7. Present-day Estrella Adobe (November 15, 2016) 18
Figure 8. Estrella Airfield Mechanics (Paso Robles Historical Society) 19
Figure 9. Project Area as depicted on 1937 aerial photograph. 24
Figure 10. Project Area as depicted on 1949 aerial photograph. 24
Figure 11. Project Area as depicted on 1962 aerial photograph. 25
Figure 12. Project Area as depicted on 2021 aerial photograph. 25
Figure 13. Project Area Overview towards Southeast 26
Figure 14. Project Overview view towards Northeast 27
Figure 15. Project Overview facing Southwest 27
Figure 16. Overview of existing structures on project area facing Northeast 28
Figure 17. Modern Structural Rubble against Southern border of project area, view South 28

LIST OF TABLES

Table 1. Previous Conducted Resources Investigations within 1-mile of the Project Area 21
Table 2. Previously Recorded Cultural Resources within 1-mile of the Project Area 22
Table 3. Additional Sources Consulted for the Project 22

Appendix A: Personnel Qualifications
Appendix C: Cultural Resources Records Search Results
Appendix D: NAHC Coordination and NA Correspondence

INTRODUCTION

PURPOSE OF STUDY

Material Culture Consulting was retained to conduct a cultural resources assessment of the 11.5-acre Project Area. The purpose of this study is to identify any significant impacts that could occur as a result of the project implementation. Our team conducted cultural record searches, archival research, a Native American Sacred Lands file search, coordination and information gathering with Native American tribes and individuals, and pedestrian field survey to identify visible cultural resources within the Project Area.

This assessment was conducted pursuant to all applicable State and City regulations regarding cultural. According to these regulations and guidelines, if development of a project impacts significant cultural resources, a plan must be developed to mitigate those impacts. This assessment documents the potential for encountering cultural resources during development of this project, and makes recommendations on how to mitigate impacts to those resources.

PROJECT DESCRIPTION

The Project proposes the construction of a solar array within the 11.5-acre Project Area, located at 5175 Airport Road, Paso Robles, California (Figures 1-3). Specifically, this project is located in Section 11 of the USGS 7.5-minute Paso Robles, California topographic map, Township 26 South, Range 12 East (Mt. Diablo Meridian).

PROJECT PERSONNEL

Lily Arias, M.A., Principal Investigator, served as the Project Manager for the study and authored this report. Ms. Arias has a B.A. in History and Anthropology from University of California, Los Angeles and a M.A. in Cultural Resources Management from Sonoma State University. She has over 13 years conducting cultural resources investigations throughout California, Oregon and Washington. Erin Henry, B.A. conducted a pedestrian field survey of the Project Area (See Appendix A).

Figure 1. 5175 Airport Road Project Vicinity (1:500,000)

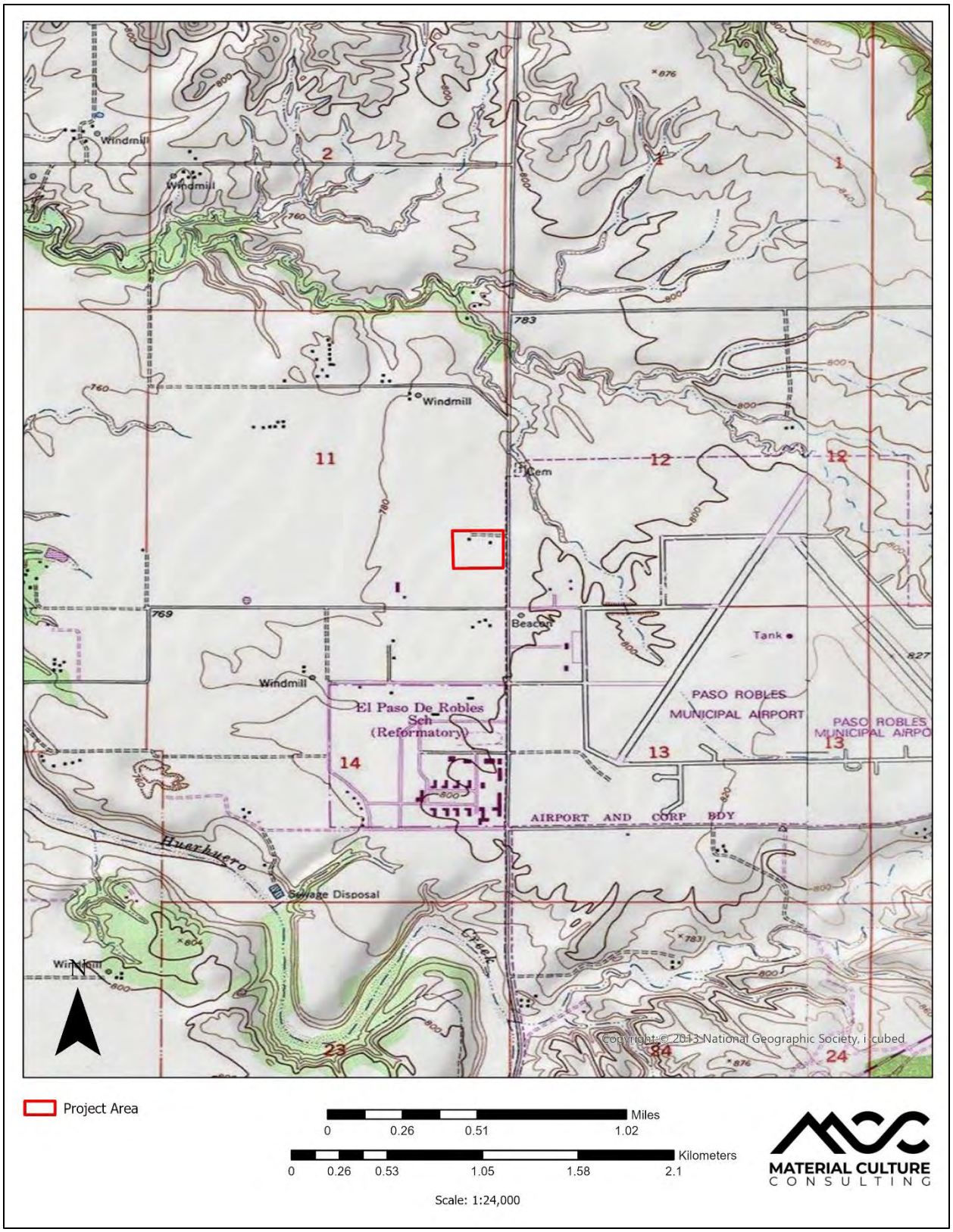


Figure 2. 5175 Airport Road Project Location (as depicted on Paso Robles USGS 7.5-minute Quadrangle, 1:24,000)

Figure 3. 5175 Airport Road Project Area (as depicted on aerial photography, 1:2,500)

REGULATORY ENVIRONMENT

Existing federal, state, and local regulations require the identification of archaeological and paleontological resources during the planning stage of new projects; include application review for projects that would potentially involve land disturbance; provide a project-level standard condition of approval that addresses unanticipated archaeological and/or paleontological discoveries; and provide requirements to develop specific mitigation measures if resources are encountered during any development activity. This project is subject to both state and local regulations, including CEQA and the City of Paso Robles General Plan Conservation Element. Specific governing legislation and regulations include the following:

ANTIQUITIES ACT OF 1906 (16 UNITED STATES CODE [USC] 431-433)

The Antiquities Act of 1906 states, in part: That any person who shall appropriate, excavate, injure or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States, without the permission of the Secretary of the Department of the Government having jurisdiction over the lands on which said antiquities are situated, shall upon conviction, be fined in a sum of not more than five hundred dollars or be imprisoned for a period of not more than ninety days, or shall suffer both fine and imprisonment, in the discretion of the court.

ARCHAEOLOGICAL AND HISTORIC PRESERVATION ACT OF 1974 (16 U.S.C. 469 ET SEQ)

This act, also called the Moss-Bennett Act, applies to most federal construction projects. It requires the federal agency to notify the Secretary of the Interior if a project threatens the loss or destruction of significant historic or archaeological data.

HISTORIC SITES ACT OF 1935 (16 U.S.C. 461 ET SEQ)

Under this act, Congress established a national policy to preserve for public use historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States. This act authorized the Historic American Building Survey (HABS), the Historic American Engineering Record (HAER), the National Survey of Historic Sites, the establishment of National Historic Sites, and the designation of National Historic Landmarks. The act also authorized interagency, intergovernmental, and interdisciplinary efforts for the preservation of cultural resources. Implementing regulations of the Act are found in 36 CFR 60 series.

NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act (NEPA) directs federal agencies to use all practicable means to "Preserve important historic, cultural, and natural aspects of our national heritage…" (42 USC 4321 Section 101(b) (4)). Regulations for implementing the procedural provisions of NEPA are found in 40 CFR 1500 1508.
If the presence of a significant environmental resource is identified during the scoping process, federal agencies and their agents must take the resource into consideration when evaluating project effects.

NATIONAL HISTORIC PRESERVATION ACT OF 1966, AS AMENDED

Enacted in 1966, the National Historic Preservation Act (NHPA) has become the foundation and framework for historic preservation in the United States. Briefly, the NHPA authorizes the Secretary of the Interior to expand and maintain a National Register of Historic Places (NRHP); it establishes an Advisory Council on Historic Preservation (ACHP) as an independent federal entity; requires federal agencies to take into account the effects of their undertakings on historic properties; and affords the ACHP a reasonable opportunity to comment on any undertaking that may affect historic properties listed, or eligible for listing, in the NRHP. In addition, the NHPA

delegates the heads of all federal agencies with the responsibility for the preservation of historic and archaeological properties owned or controlled by their agencies. As well, the NHPA authorizes funding for state programs with provisions for pass-through funding and participation by local governments. In summary, the NHPA provides the legal framework for most state and local preservation laws.

The National Park Service (NPS) has issued regulations governing the NRHP (36 CFR 60). Among the topics covered in detail in these regulations are the effects of listing under federal law, definition of key terms (e.g., building, site, structure, and district), nomination procedures, nomination appeals, and removing properties from the NRHP. Importantly, Section 60.4 of the regulations presents the criteria by which historic properties are evaluated for the NRHP.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

a. That are associated with events that have made a significant contribution to the broad patterns of our history; or
b. That are associated with the lives of persons significant in our past; or
c. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
d. That have yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

A point to be emphasized is that a historic property does not have to be nominated for, or listed in, the NRHP to be afforded protection under the NHPA. Indeed, most of the properties managed under this and other federal historic preservation authorities have never been nominated for the NRHP. The significance of a historic district, site, building, structure or object —and thus its required consideration under the law—is determined by the property's eligibility for the NRHP with respect to the criteria set forth in 36 CFR 60.4.

The NHPA established the Section 106 review procedure to protect historic and archaeological resources that are listed in or eligible for listing in the NRHP from impacts of projects by a federal agency, projects funded or permitted by a federal agency, or projects located on federally owned land or Native American land. State Historic Preservation Officers and programs in all states and U.S. territories receive federal funding to carry out the provisions of the NHPA. This funding comes from a yearly appropriation by the legislative branch of the federal government.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA declares that it is state policy to "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered. CEQA includes historic and archaeological resources as integral features of the environment. If paleontological resources are identified as being within a proposed Project Area, the sponsoring agency must take those resources into consideration when evaluating Project impacts. The level of consideration may vary with the importance of the resource.

CEQA requires a lead agency to determine whether a Project may have a significant effect on historical resources. A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5(a)(2)), or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5 (a)(3)). Public Resources Code (PRC) Section 5024.1, Section 15064.5 of the Guidelines, and Sections 21083.2 and 21084.1 of the Statutes of CEQA were used as the basic guidelines for the cultural resources study. PRC Section 5024.1 directs evaluation of historical resources to determine their eligibility for listing on the CRHR. The purpose of the register is to maintain listings of the state's historical resources and to indicate which properties are to be protected from substantial adverse change.

The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP, enumerated above, and require similar protection to what NHPA Section 106 mandates for historic properties. According to Public Resources Code (PRC) Section 5024.1(c)(1-4), a resource is considered historically significant if it meets at least one of the following criteria:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
2. Associated with the lives of persons important to local, California or national history;
3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values; or
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data. Note that California Historical Landmarks with numbers 770 or higher are automatically included in the CRHR.

Under CEQA, if an archeological site is not a significant "historical resource" but meets the definition of a "unique archaeological resource" as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined in PRC Section 21083.2(g) as follows:

An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Resources that neither meet any of these criteria for listing on the NRHP or CRHR nor qualify as a "unique archaeological resource" under CEQA PRC Section 21083.2 are viewed as not significant. Under CEQA, "A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects" [PRC Section 21083.2(h)].

Impacts to historical resources that alter the characteristics that qualify the historical resource for listing on the CRHR are considered to be a significant effect (under CEQA). The impacts to a historical resource are considered significant, if the Project activities physically destroy or damage all or part of a resource, change the character of the use of the resource or physical feature within the setting of the resource which contribute to its significance, or introduce visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource. If it can be demonstrated that a Project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2 (a), (b), and (c)).

CALIFORNIA HISTORICAL LANDMARKS AND POINTS OF HISTORICAL INTEREST

Historical landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. In order to be considered a California Historical Landmark, the landmark must meet at least one of the following criteria:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
2. Associated with the lives of persons important to local, California, or national history;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values;
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

If a site is primarily of local or countywide interest, it may meet the criteria for the California Point of Historical Interest Program. Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value.

To be eligible for designation as a Point of Historical Interest, a resource must meet at least one of the following criteria:

1. The first, last, only, or most significant of its type in the local geographic region (city or county);
2. Associated with an individual or group having a profound influence on the history of the local area;
3. A prototype of, or an outstanding example of, a period, style, architectural movement or construction; or
4. One of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the California Register. No historical resource may be designated as both a Landmark and a Point of Interest. If a Point of Interest is subsequently granted status as a Landmark, the Point of Interest designation will be retired.

BACKGROUND

ENVIRONMENTAL SETTING

The vegetation in this part of Paso Robles is primarily oak savanna and grassland interspersed with chaparral. On the project parcel, annual grasses and invasive species such as yellow star thistle (Cirsium solstitialis), bull thistle (Cirsium vulgare) and bur-clover (Medicago sp.) have taken over following the abandonment of agriculture. Animal species commonly occurring in the area (but not seen) include blacktail deer (Odocoileus hemionus), coyote (Canis latrans), ground squirrel (Spermophilus beecheyi), western gray squirrel (Sciurus griseus), pocket gopher (Thomomys sp.), California scrub jay (Aphelocoma coerulescens), red-tailed hawk (Buteo jamaicensis), turkey vulture (Cathartes aura), acorn woodpecker (Melanerpes formicuvorus).

PREHISTORIC SETTING

Most researchers agree that the earliest occupation for the Paso Robles area dates to the early Holocene (11,000 to 8,000 years ago). Archaeological evidence indicates that San Luis Obispo County was occupied as early as 9,000 years ago, as indicated by dates from excavations at Diablo Canyon (Greenwood 1972), Edna Valley (Fitzgerald 2000) and Paso Robles (Stevens et al. 2004). Because of the small amount of archaeological work that has occurred in the interior south coast ranges, a definitive cultural historical sequence has not yet been constructed for this region. Olsen and Payen (1969) constructed a cultural chronology for the eastern portion of the region based on materials from San Luis, Little Panoche, and Los Banos Reservoirs. The dating of individual cultural units was later revised by Mikkelsen and Hildebrandt (1990) based on the Olivella bead typology developed by Bennyhoff and Hughes (1987). The following discussion on culture history incorporates these changes and extends the Millingstone period back to 10,000 years before present (B.P.). Important cultural changes are discussed within the framework of four time periods based on Central Valley (e.g. Bennyhoff and Hughes 1987) and Central Coast (Jones 1993) sequences: Paleoindian Period (ca. 11,000 BP – 8,500 BP), Millingstone Period (8,500 – 5,500 BP), Early Period (5,500 – 2,600 BP), Middle Period (2,600 – 1,000 BP), Middle/Late Transition Period (1,000 - 750 BP), and Late Period (750 - historic contact). The characteristics of each of these periods are manifested primarily in changes in the material culture and elaboration of the social structure.

Evidence for Millingstone period occupations in this region is sparse, amounting to materials recovered from two widely-separated sites. The first of these sites is the Grayson site (MER-94) in the San Luis Reservoir area (Olsen and Payen 1969). In the deepest levels of this multi-component deposit was a suite of artifacts including millingstones, handstones, small shaped mortars and pestles, simple flaked stone tools, perforated stone pendants, and beads made of whole Olivella shells. The second site with a possible Millingstone period occupation in the interior south coast ranges is the Salinas River Crossing Site (SLO-1756) reported by Fitzgerald (1997). Although the association between artifacts and dates at this site is not straightforward, it also yielded an artifact assemblage similar to Millingstone Horizon sites in southern California and produced a date of 7,000 B.P. Other important Millingstone period sites are found nearer the coast in the Edna Valley south of San Luis Obispo (Fitzgerald 2000), and at Diablo Canyon (Greenwood 1972).

Along the coast and in interior areas, the Early period is marked by the appearance of mortars and pestles and contracting-stemmed projectile points (Olsen and Payen 1969; Jones 1993). Other artifacts found with Early period occupations are also found in Millingstone period sites including Olivella class L beads, large side-notched projectile points, and milling slabs and hand stones. Greater numbers of sites are known from the Early period, possibly signaling a population increase.

The Middle period is well represented at sites along the central coast and increasingly in interior regions as well. The types of artifacts found in Middle period occupations are similar to those from the Early period although a

larger number of bone implements and bead types are known (Olsen and Payen 1969; Jones and Waugh 1995). Projectile points tend to be contracting-stemmed types with large side-notched and square-stemmed points apparently no longer used. Excavations at Fort Hunter Liggett have shown that Middle period occupations in that area resemble those found along the coast (Jones and Haney 1997).

Late period assemblages from the interior south coast ranges are distinguished by a suite of new bead types, small side-notched and triangular arrow points, and hopper mortars as well as many artifact types found in earlier periods (Olsen and Payen 1969). At Fort Hunter Liggett, Late period occupations also included small arrow points, new bead types, as well as bedrock mortars and unshaped pestles (Jones 2000; Haney et al. 2002). On the whole, the Late period assemblages from a wide area of the central coast and interior regions appear superficially similar, but this was probably a time of continued cultural differentiation due to higher population densities.

There is clearly still a great deal to learn about the prehistory of the interior south coast ranges, but comparisons between findings in coastal areas and the relatively smaller amount of work conducted locally show that a similar set of cultural changes probably occurred in both areas. What is not well understood at this point is how people living in the interior interacted with those living along the coast. Also, it is not known how the development of complex societies further south in the Santa Barbara Channel area may have affected groups living to the north. The presence of marine shell beads in interior areas and obsidian obtained from the desert east in coastal areas is testimony to the wide-ranging trade and social networks that existed from an early date. Future work may yet uncover archaeological evidence necessary to understand these and other important issues that have only recently begun to be explored in this region.

ETHNOGRAPHY

At the time of European contact, the surrounding region was probably occupied by the Salinan people, although some confusion still exists among experts as to the dividing line between the Chumash and the Salinan in this area. The Salinan were bordered by the Esselen and Costanoan to the north and the Chumash to the south (Kroeber 1925). Unfortunately, very little of substance is known about Salinan culture because of the early influence of the missions and the remoteness of their territory, meaning their traditional lifeways were altered early on and few people outside of the mission system were present to record what remained after secularization (Mason 1912). The Salinan, like nearly all of California's original inhabitants, practiced a hunting and gathering economy. Major plant foods included acorns and a variety of small seeds while major animal foods included a diverse assortment of terrestrial mammals, marine and freshwater fish, shellfish, birds, as well as reptiles and insects. It is unclear to what extent people living inland ventured to the coast and vice versa, but it is likely that people were mobile enough to take advantage of plant and animal foods when and where they occurred. If this were the case, then diets probably varied from season to season, and from year to year, depending on what was available at any one time.

Records of the mission fathers suggest there were two, or possibly three different Salinan groups occupying different core territories and speaking slightly different versions of the same language (Mason 1912). The most well documented division was between northern and southern peoples, the Antoniño and Migueliño respectively. The third Playano (or "beach people") division is mentioned in mission registers but has not been substantiated by linguistic or other evidence. Individuals recorded as Playano speakers may have in fact been northern Chumash. Given the rugged nature of the southern Big Sur coast, it is possible that contiguous groups (e.g. Chumash, Esselen) shared the coastal area with the Salinan on a seasonal basis, although possibly not always amicably (Mason 1912).

HISTORICAL SETTING

European contact in the San Luis Obispo County region may have begun as early as 1587 with the visit of Pedro de Unamuno to Morro Bay, although some scholars have questioned this based on the ambiguity of Unamano's descriptions (Mathes 1968). A visit in 1595 by Sebastian Rodriguez Cermeño is better documented (Jones et al. 1994:11). The earliest well-documented descriptions come from accounts by members of Gaspar de Portola's land expedition, which passed through the region in 1769 (Squibb 1984). No large villages, such as those seen along the Santa Barbara channel, were reported by early travelers in the San Luis Obispo region. Permanent Spanish settlement of the region began with the founding of Mission San Antonia de Padua (near King City) in 1771 and San Luis Obispo de Tolosa (in San Luis Obispo) in 1772. Twenty-five years later, Mission San Miguel Archangel was founded in the heart of southern Salinan territory. The mission properties were extensive and included an outlying rancho station near present day Paso Robles. As elsewhere, induction into the missions had a devastating effect on the local inhabitants, requiring them to live and work at the mission and abandon their former lifeways. Under the guidance of the mission fathers, the natives were instructed in farming methods, including the production of wheat, beans and various kinds of fruit. The earliest farming was intended to foster independence; thus making the import of supplies up from Mexico unnecessary.

The inauguration of Spanish colonization brought about major and devastating changes in the aboriginal society, due primarily to the introduction of European diseases. The consequent high mortality rate, and the pressure of overwhelming social change, decimated the population. By 1805, most native villages had been abandoned, and the populace had either fled or moved into the mission system (Gibson 1983). The natives who had survived the Spanish colonization period, went on to build and staff the ranchos of the Mexican and American periods which followed. By the beginning of the 20 Century, the Chumash and Salinan had been integrated into American society (Gibson 1983 and 1991).

In 1822, Mexico attained independence from Spain and California became a Mexican territory. The Secularization Act, passed by the Mexican congress in 1833, provided for the immediate break-up of the missions and the transfer of mission lands to settlers and Indians. Work toward this end began in 1834 under Governor Figueroa. Grants were made to individuals by the governor on the recommendation of the local alcalde of the Mission. During the years from 1840 to 1846, a series of land grants were made from the lands of Mission San Miguel by the governors of Mexican California.

The project area was a portion of the Rancho 17,774+ acre Rancho Santa Ysabel, granted on May 12, 1844 by Mexican Governor Manuel Micheltorena to Francisco Arce (Ohles 1997: 104-110). In 1848 at the end of the Mexican war, California was ceded to the United States, and admitted to the Union in 1850. All grants were then subject to validation under United States laws. Based on the quality of the soil and general accessibility, a Board of Equalization in San Luis Obispo considered the parcel to be a Third Class Mexican Land Grant Ranchero. The United States Land Commission issued a patent on the parcel on May 21, 1866.

In 1878, a San Miguel Mission administrator, Don Innocenti Garcia, related to one Thomas Savage that Arce had sold the land to Don Francisco Rico (Temple 1974); however, no other record of this transaction has been located (Ohles 1997:110). Ownership had passed to W. V. Huntington by 1886. The West Coast Land Company was incorporated on March 27, 1886. Their immediate objective was to purchase and develop 64,000 acres of land for resale. The land comprised the ranchos Santa Ysabel, El Paso de Robles, Eureka, and the unsold portion of Huer Huero. The purchase was based upon the expectation that the Southern Pacific Railroad would build a coastal rail line between San Francisco and Los Angeles through San Luis Obispo County (Nicholson 1980).

The 26,000-acre rancho El Paso de Los Robles, granted May 12, 1844, to Pedro Navarez by Mexican Governor Manuel Micheltorena was located on the western side of the Salinas River. A patent was obtained July 20, 1866, by

Petronillo Rios, but prior to the patent, the parcel was sold in two separate transactions, first to Daniel and James Blackburn on September 21, 1858. The second portion was sold July 9, 1861, to Lazarus Godchaux. They immediately began making improvements to the hot sulfur springs which had been used by local inhabitants for generations. By the 1870s, the Paso Robles Hot Springs was a well-known destination for people seeking the famous curative powers of the springs. With the coming of the Southern Pacific Railroad in 1886, a town plan for Paso Robles, on the western side of the Salinas River, was commissioned and was completed by 1887. Throughout the later part of the nineteenth and most of the twentieth century, the economy of the Paso Robles region was largely agricultural. Cattle ranches, dairies, almond and other fruit orchards, and large tracts devoted to dry land grain production comprised the rural landscape.

Estrella

Estrella was the name given to a Mexican Land Grant held by Mission San Miguel in 1844. Fed by the Salinas and Estrella Rivers, it remained wide open and unsettled until the 1870s when farmers began to homestead on the government owned lands. They raised sheep and cattle and grew barley and wheat. In 1880, forty families supported a school, church, butcher shop, grocery, candy store, two blacksmiths, and a mercantile in Estrella town, surveyed by Joseph Moody. The town nearly vanished after a prolonged drought in the 1880s and 1890s and when the railroad between San Miguel and the San Joaquin Valley never materialized. The first post office in Estrella was established on July 8, 1886, across the street from the Fortney General Store. The first postmaster was Wilbur J. Sherman and would later be operated by Mr. and Mrs. Simpson (Figure 5).

Figure 4. Estrella Post Office (Paso Robles Historical Society)

Children who lived in the Estrella area attended the Pleasant Valley School, which was ¼ mile north of the townsite (Figure 6). Founded in 1884, the schoolhouse itself was not constructed until 1908. It is known as the longest running one-room schoolhouse in the county. A new structure was constructed in 1994 to serve grades kindergarten through eighth grade. Pleasant Valley Community Foundation maintains the historic schoolhouse today.

Figure 5. Pleasant Valley School (Paso Robles Historical Society)

The Project Area is located 850 feet southwest of the Estrella Adobe Church. By 1877, a few Methodist families were meeting at the schoolhouse pastored by circuit-riding preachers of the 300-mile Cambria Circuit. Led by John Fortney who settled there in 1862, Francis Stovall, John Marden, William Guffey, Joseph Moody and Dwight Reynolds began making bricks and hauling lumber from San Luis Obispo. Built free of debt, the church building was dedicated in 1882 and completed in 1885. Estrella Adobe Church was the first Protestant church in North San Luis Obispo County, seating 100 people. When the Methodists moved from Estrella to Paso Robles, a group of Mennonites held services at the adobe from 1898 to 1903. After that, the building was left to deteriorate (Figure 7).

Figure 6. Estrella Adobe Church, prior to restoration
(Paso Robles Historical Society)

Figure 7. Present-day Estrella Adobe (November 15, 2016)

The cemetery associated with the church holds 43 known and marked graves, as well as many unmarked graves. Many of the graves are those of children lost in the devastating diphtheria epidemic of 1884-1885. A list of 20 individuals buried in unmarked graves was located at the historical archives of the Paso Robles Historical Society, although it is noted that some individuals (at least three) were initially buried at Estrella cemetery and were later moved to Paso Robles Cemetery due to poor road conditions, presumably at the time of death. At least three burials are noted as being located outside of the cemetery to the northwest.

With the onset of World War II, Paso Robles became home to a Marine Corps Air Station. An article in the Paso Robles Press on August 27, 1942, announced the plan to build what would be known as the Naval Auxiliary Air Station, Paso Robles, just six miles northeast of the City. Doudell Construction Company, San Jose, broke ground on September 3, 1942, with the arrival of 2000 construction workers. Two new 4700' runways, along with 43 buildings that included housing, administration, and storage facilities were completed by April 8, 1943. On that day, the Navy handed over control of the Air Station to the Army Air Forces, deciding that stations in the San Joaquin Valley were more favorable. The Air Station became the Estrella Army Airfield, and would be used for night flight training. By December 1943, over 1500 military personnel were stationed both at Estrella, and at Sherwood Field, the Navy's auxiliary airfield southeast of Paso Robles (Figure 9). On October 15, 1944, the airfield was deactivated, and in August 1947 the 966.8 acres was transferred to the County of San Luis Obispo, with the stipulation that it be used as a public airport. An additional 90 acres was transferred to the State of California in August 1948, with buildings on that parcel to be used for a boys' school. In 1973, the County sold the property to the City of Paso Robles for $1, and the air base officially became the Paso Robles Municipal Airport.

Figure 8. Estrella Airfield Mechanics (Paso Robles Historical Society)

Agriculture has continued to be the mainstay of the region up to the present, with increasing emphasis on viticulture and winemaking. The proliferation of wineries in the last 25 years has led to tourism once again becoming a major component of the local economy.

METHODS

CULTURAL RESOURCES LITERATURE REVIEW

A records search was completed by staff of the Central Coast Information Center (CCIC) of the California Historical Resources Inventory System (CHRIS), located at Santa Barbara Natural History Museum, Santa Barbara, on May 2, 2022. The records search included the Project Area, as well as a 1-mile search radius. The search reviewed all previously recorded cultural investigations and resources within 1-mile of the Project Area. The records search also included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Inventory of Historic Resources. MCC also reviewed the California State Historic Resources Inventory (HRI) and Built Environment Resources Directory (BERD) for San Luis Obispo County to determine if any local historical properties which have been previously evaluated for historic significance are located in the records search buffer. In addition, archival maps were inspected for indications of historical structures in the area.

NATIVE AMERICAN OUTREACH AND BACKGROUND RESEARCH

A Sacred Lands File (SLF) search was requested by Material Culture Consulting from the Native American Heritage Commission (NAHC) on April 29, 2022. The NAHC responded on May 31, 2022, stating that a review of their SLF failed to identify sacred lands within the Project Area and provided contact information for 12 Native American groups and representatives who may have additional information regarding the potential sensitivity of the Project Area MCC subsequently sent letters to the 12 Native American contacts on June 2, 2022, requesting any information related to cultural resources or heritage sites within or adjacent to the Project Area. Additional attempts at contact by email were made on June 15 2022. MCC did not conduct formal consultation as per AB52 or SB18 with the Native American representatives.

FIELD SURVEY

On June 13, 2022, MCC archaeologist, Erin Henry, conducted a pedestrian survey of the Project Area. Special attention was paid to any graded areas and to rodent burrows that offered a better view of the underlying sediment and potential unearthed cultural or paleontological resources. All undeveloped ground surface areas within the ground disturbance portion of the Project Area were examined for fossils and artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.) were visually inspected. Representative photographs were taken of the entire project area and a photographic log was maintained.

RESULTS

CULTURAL RESOURCES RECORDS SEARCH

The CHRIS records search identified a total of 11 previously conducted cultural resource investigations within a 1-mile radius of the Project Area (see Table 1), none of which are within or intersect the Project Area.

Table 1. Previous Conducted Resources Investigations within 1-mile of the Project Area

CHRIS Report Number	Year	Author	Title of Study	Affiliation	Relation to Project Area
SL-00031	1977	Spanne, L.W.	Archaeological Component for the Facilities Plan Project Report, California Youth Authority and Paso Robles Municipal Airport Wastewater Facilities	None given	Within 1-mile
SL-00484	1985	Robert L. Hoover	Cultural Resources Evaluation, El Paso de Robles School	California Polytechnic State University, San Luis Obispo	Within 1-mile
SL-02838	1995	Ben Parker	Los Robles Camp Dozer Storage Building	Department of Forestry and Fire Protection	Within 1-mile
SL-03394	1998	C.A. Singer	Cultural resources survey and impact assessment for a 66 Acre property on Dry Creek Road in the City of El Paso De Robles	C.A. Singer & Associates, Inc.	Within 1-mile
SL-04016	2000	Parker, Ben	CDF Project Review Report For Archaeological and Historical Resources, Alamo CMP	Department of Forestry and Fire Protection	Within 1-mile
SL-04026	2000	Martin, Thomas	Cultural Resources Study for the Proposed California Department of Forestry and Fire Protection Air Attack Base Facility Replacement, Paso Robles, San Luis Obispo County	LSA Associates, Inc.	Within 1-mile
SL-05555	2005	Singer, Clay A.	Cultural Resources Survey and Impact Assessment for a 39.1 Acre Property on Airport Road in the City of Paso Robles, San Luis Obispo County, California (APN 025-431-031).	C.A. SINGER & ASSOCIATES, Inc.	Within 1-mile
SL-06170	2008	Conway, Thor.	An Archaeological Surface Survey at the Paso Robles Airport, San Luis Obispo County, California	Heritage Discovery Inc.	Within 1-mile
SL-06498	2010	Robert O. Gibson	Results of An Archival Records Search and a Phase One Archaeological Surface survey on tentative tract 3020 along Buena Vista Road, San Luis Obispo County, California	Gibson's Archaeological Consulting	Within 1-mile

CHRIS Report Number	Year	Author	Title of Study	Affiliation	Relation to Project Area
SL-06567	2010	Gross, Charlane and Bowen, Mark	Cultural Resources Inventory and Assessment, California Department of Corrections and Rehabilitation Paso Robles Facility, San Luis Obispo County, California.	AECOM Design + Planning	Within 1-mile
SL-07308	2018	Rachael J. Letter and Cristopher J. Letter	Phase I Archaeological Study, Paso Robles Phase I Airport Area Infrastructure Improvement and Dry Creek Road Realignment Projects San Luis Obispo County, California	Padre associates, inc.	Within 1-mile

Additionally, no previously recorded cultural resources were identified withi the Project Area as a result of the records search. Three previously recorded resources were identified within 1-mile of the Project Area and are detailed in Table 2.

Table 2. Previously Recorded Cultural Resources within 1-mile of the Project Area

Primary Number	Trinomial	Age	Type	Attributes	NRHP/CRHR	Distance from Project Area
P-40-000491	CA-SLO-000491	Historic	Site			Within 1-mile
P-40-002879	N/A	Prehistoric	Site	AP2. Lithic Scatter; AP. 15. Habitation Debris; AH4. Privies/dumps/trash scatters	Not evaluated	Within 1-mile
P-40-041390	N/A	Historic	Site	HP39. Other (Prison complex)	Not eligible	Within 1-mile

The full results of the CHRIS record search can be found in Confidential Appendix B.

OTHER SOURCES

In addition to the records at the CCIC, Several additional sources were consulted to supplement the CHRIS records search to obtain information regarding the cultural context of the Project Area (Table 3).

Table 3. Additional Sources Consulted for the Project

Source	Results
National Register of Historic Places (1979-2002 & supplements)	Negative
Historical United States Geological Survey topographic maps (USGS 2012)	Positive; one residence depicted within the Project Area on the 1948 1:24,000 USGS Quadrangle.
Historical United States Department of Agriculture aerial photos	Positive; Residence and orchard depicted on aerial photographs as early as 1937.
California Register of Historical Resources (1992-2010)	Positive; the Estrella Adobe Church is located 850 feet northeast of the Project Area.
California Inventory of Historic Resources (1976-2010)	Negative
California Historical Landmarks (1995 & supplements to 2010)	Positive; the Estrella Adobe Church (Landmark No. 542) is located 850 feet northeast of the Project Area.

Source	Results
California Points of Historical Interest (1992 to 2010)	Negative
Local Historical Register Listings	Negative
Bureau of Land Management General Land Office Records	Positive; Mary Louisa Rude April 24, 1820 Sale-Cash Entry (CACAAA 106083)

A review of the Bureau of Land Management General Land Office Records (BLM GLO) identified cash-sale issued within the Project Area: CACAAA 106083 was issued to Ms. Mary Louisa Rude for 160 acres (a quarter section) under the authority of the Land Act of 1820 (03 Stat. 566). This act was established to end the purchase of public lands on credit or payment installments. The act continued the sale of United Sates public lands in in section, half sections, quarter sections, and half quarter sections but only upon receipt of full payment in cash (1820, April 24, 03 Stat. 566).

The Estrella Adobe Church is located approximately 850 feet northeast of the Project Area and is a California Historical Landmark (No. 542) and is also listed on the CRHR. The church was designated California Historical Landmark no. 542 in 1955. The church was evaluated for individual listing in the NRHP in 2020, with the evaluation informed by the established eligibility considerations for religious properties (Criteria Consideration A) established by the National Register Bulletin 15. Construction of the church began in 1878, completed in 1885, and restored (rebuilt) in 1952. The church is not significant under any of the four NRHP Criteria and is therefore recommended as Not Eligible for inclusion in the NRHP as an individual resource (Belcourt 2016). However, the presence of the church and the associated cemetery does suggest both European and local Native American use of the general area. There is the possibility for as-yet undocumented archaeological resources may exist in the vicinity of the Estrella Adobe, including within the Project Area itself.

A review of historical aerial photographs and topographic maps indicate that the property has been occupied since as early as 1937 (Figure 9). A structure and outbuildings are visible in the northeast quadrant of the Project Area with the surrounding area utilized for agricultural fields. The same structures are visible in a 1949 aerial photograph however the surrounding area appears to fallow (Figure 10). Aerial photographs show little change, although there is evidence of flooding (Figure 11). Current aerial images indicate that the structures still stand within the Project Area today (Figure 12).

Figure 9. Project Area as depicted on 1937 aerial photograph.

Figure 10. Project Area as depicted on 1949 aerial photograph.

Figure 11. Project Area as depicted on 1962 aerial photograph.

Figure 12. Project Area as depicted on 2021 aerial photograph.

NATIVE AMERICAN OUTREACH AND BACKGROUND RESEARCH

As a result of outreach efforts, MCC received one response from Native American Tribes and representatives and is described below:

- On June 6, 2022 Julie Tumamait-Stenslie, the Chairperson of the Barbareno/Ventureno Band of Mission Indians, responded to the initial outreach letter via email. She stated that she defers to Mona Tucker of the Northern Chumash.

No additional groups or individuals have responded with information about sensitive areas within the Project Area as of June 15, 2022. The outreach was conducted for informational purposes only. The Lead Agency will conduct formal consultation. All written NAHC and Native American correspondence materials and our communication log are provided as Appendix C.

PEDESTRIAN SURVEY

MCC archaeologist Erin Henry conducted a pedestrian survey of the Project Area on June 13, 2022. Ground visibility varied throughout the Project Area, ranging from 0-50% depending on the vegetation density and height. The ground surface was not visible directly behind the corrugated metal barn due to the height and density of the vegetation in that area. The entire parcel is somewhat disturbed, due to use of the parcel for agriculture in the past (Figures 11-14). Recent vehicle or equipment tread marks were noted along the eastern perimeter of the survey area, suggesting disturbances due to vehicle or equipment usage. Structural debris and rubble of modern origin was also observed and noted along the southern perimeter and southeastern corner of the project area. A seasonal wash/creek traverses the landscape to the northwest of the project area, which is also visible in aerial photos (Figure 3). No cultural materials were identified or collected during the survey. The visual observation of the exposed surficial sediments is consistent with the Paso Robles Formation, fine-grained sands and some gravels, with areas of well-indurated, gray to light brown sands. Inclusions of pebble to cobble-sized inclusions of sub angular granite and quartzite were also observed. In areas directly adjacent to structural rubble, brick fragments were also observed in the soils.

Figure 13. Project Area Overview towards Southeast

Figure 14. Project Overview view towards Northeast

Figure 15. Project Overview facing Southwest

Figure 16. Overview of existing structures on project area facing Northeast

Figure 17. Modern Structural Rubble against Southern border of project area, view South

CONCLUSIONS AND RECOMMENDATIONS

CULTURAL RESOURCES

The Project Area is considered to have a moderate sensitivity for the presence of prehistoric or historical archaeological deposits or features. Although no resources were observed during the course of survey of the Project Area, the historic occupation of the Project Area and the close proximity of the Estrella Adobe church and cemetery indicate that the Project Area holds the potential to contain as-yet undocumented archaeological resources. In order to mitigate potential adverse effects/significant impacts to nonrenewable cultural resources, as required by State and City regulations, we recommend the following procedures:

- A trained and qualified archaeological monitor should perform cultural resources monitoring of any ground disturbing activities associated with the Project that have the potential to impact cultural resources (i.e. grading, trenching). Monitoring is not effective during activities where the soil matrix is not visually exposed (i.e. pile-driving for installation of solar pylons). The monitor will have the ability to redirect construction activities to ensure avoidance of significant impacts to cultural resources.
- During the initial vegetation removal and grading up to five feet below current ground surface of the site, we recommend full time cultural resources monitoring. The project archaeologist, in coordination with the City of Paso Robles, may re-evaluate the necessity for monitoring after the initial five feet of excavations have been completed.
- In the event that these resources are inadvertently discovered during ground-disturbing activities, work must be halted within 50 feet of the find until it can be evaluated by a qualified archaeologist. Construction activities could continue in other areas. If the discovery proves to be significant, additional work, such as data recovery excavation or fossil recovery, may be warranted and would be discussed in consultation with the appropriate regulatory agency(ies). Any potentially significant artifacts, sites or features observed shall be collected and recorded in conjunction with best management practices and professional standards. Any cultural items recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.
- A report documenting the results of the monitoring efforts, including any data recovery activities and the significance of any cultural resources will be prepared and submitted to the appropriate City and County personnel.
- Procedures of conduct following the discovery of human remains on non-federal lands have been mandated by California Health and Safety Code §7050.5, PRC §5097.98 and the California Code of Regulations (CCR) §15064.5(e). According to the provisions in CEQA, should human remains be encountered, all work in the immediate vicinity of the burial must cease, and any necessary steps to insure the integrity of the immediate area must be taken. The Orange County Coroner will be immediately notified. The Coroner must then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner has 24 hours to notify the NAHC, who will, in turn, notify the person they identify as the most likely descendent (MLD) of any human remains. Further actions will be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.

REFERENCES CITED

"1820, April 24, 03 Stat. 566, Act Making Further Provision for Sale of Public Land"
2016 US Government Legislation and Statutes. 1.

Bennyhoff, J. A., and R. E. Hughes
1987 *Shell Beads and Ornament Exchange Networks Between California and the Western Great Basin.* American Museum of Natural History Anthropological Papers 64(2).

Dibblee, T.W., Jr.,
(1971) *Geologic Map of the Paso Robles Quadrangle*, scale 1:24,000.

Fitzgerald, R. T.
2000 *Cross Creek: An Early Holocene/Millingstone Site*. California State Water Project, Coastal Branch Series Paper No. 12. San Luis Obispo County Archaeological Society.

Gibson, R. O.
1983 *Ethnogeography of the Salinan People: A Systems Approach*. Master's Thesis, California State University, Hayward.
1991 *The Chumash*. Chelsea House Publishers, New York.

Greenwood, R.S.
1972 *9000 Years of Prehistory at Diablo Canyon, San Luis Obispo County, California.* San Luis Obispo County Archaeological Society Occasional Paper 2, San Luis Obispo.

Haney, J. W, T. L. Jones, and J. M. Farqhuar
2002 *Phase II Archaeological Investigation of CA-MNT-879 Fort Hunter Liggett, Monterey County, California.* Report submitted to U.S. Army Corps of Engineers, Sacramento District.

Jefferson, G.T.
1991 *A Catalogue of late Quaternary vertebrates from California: Part Two, Mammals*. Natural History Museum of Los Angeles County, Technical Reports, No. 7.

Jones, T. L.
1993 "Big Sur: A Keystone in Central California Cultural History". *Pacific Coast Archaeological Society Quarterly* 29(1):1-78.

Jones, T. L., K. Davis, G. Farris, S. D. Grantham, T. W. Fung, and B. Rivers
1994 *Toward a Prehistory of Morro Bay: Phase II Archaeological Investigations for the Highway 41 Widening Project, San Luis Obispo County, California*. Report prepared for Caltrans District 5, San Luis Obispo, California.

Jones, T. L., and J. W. Haney
1997 *Archaeological Evaluation of CA-MNT-521, Fort Hunter Liggett, Monterey County, California*. Report submitted to U.S. Army Corps of Engineers, Sacramento District.

Jones, T. L. and G. Waugh
1995 Central California Prehistory: A View from Little Pico Creek. *Perspectives in California Archaeology, Vol. 3*. Institute of Archaeology, University of California, Los Angeles.

Kroeber, A.
1925 *Handbook of the Indians of California*. Facsimile edition, California Book Company, 1953.

Mason, J.A.

1912 The Ethnology of the Salinan Indians. *University of California Publications in American Archaeology and Ethnology,* Vol. 10, No.4, pp.97-240, pls. 21-37. Berkeley, The University Press.

Mathes, W. M.
1968 *Sebastián Vizcaino and Spanish Expansion in the Pacific Ocean, 1580-1630.* California Historical Society, San Francisco

McLeod, S. (LACM)
2016 Paleontological resources museum locality search for the proposed Paso Robles Airport Solar Project, in the City of Paso Robles, San Luis Obispo County.

Mikkelsen, P.J., and W. R. Hildebrandt
1990 *Archaeological Inventory and Evaluation for the Proposed Los Banos Grandes Reservoir, Merced County, California*. Report on file, U.S. Bureau of Reclamation, Sacramento.

Nicholson, L.
1980 *Rails Across the Ranchos*. Valley Publishers, Fresno, California.

Norris, R.M., and R.W. Webb
1976 *Geology of California*. New York: John Wiley and Sons, Inc. 379 pp.

Ohles, W. V.
1997 The Lands of Mission San Miguel. Word Dancer Press, Fresno, California.

Olsen, W. H., and L. A. Payen
1969 *Archaeology of the Grayson Site*. California Department of Parks and Recreation Archaeological Report No. 12. Sacramento.

Squibb, P.
1984 *Captain Portola in San Luis Obispo County in 1769.* Tabula Rasa Press. Morro Bay, California.

Society of Vertebrate Paleontology (SVP)
1991 Standard Measures for assessment and mitigation of adverse impacts to nonrenewable paleontological resources: Society of Vertebrate Paleontology News Bulletin, v. 152, p. 2-5.
1996 Conditions of receivership for paleontologic salvage collections: Society of Vertebrate Paleontology News Bulletin, v. 166, p. 31-32
2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. 11 p. Available at; http://vertpaleo.org/PDFS/68/68c554bb-86f1-442f-a0dc-25299762d36c.pdf

Stevens, N., R. T. Fitzgerald, N. Farrell, M. A. Giambastiani, J.M. Farquar, and D. Tinsley
2004 *Archaeological Test Excavations at Santa Ysabel Ranch, Paso Robles, San Luis Obispo County, California*. Report submitted to Weyrich Development Company, LLC. Cultural Resource Management Services, Paso Robles.

Attachment 10

Appendix A:
Qualifications

Attachment 10

MATERIAL CULTURE CONSULTING

LILY ARIAS, M.A.

PRINCIPAL ARCHAEOLOGIST

PROFILE

Ms. Arias earned her master's degree in cultural resources management from Sonoma State University in 2016 and her bachelor's degree in history with a minor in anthropology from the University of California, Los Angeles, in 2009. Ms. Arias exceeds the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and has over 13 years of experience conducting archaeological investigations and monitoring in California, Oregon, Washington, Montana, Wyoming, and British Columbia. She has experience monitoring, salvaging, fieldwork, preparing project proposals and managing projects, Native American Heritage Commission (NAHC) correspondence and Tribal outreach and consultation, record searches, and report writing. She has successfully managed several large-scale and multi-year archaeological projects, including Phase I surveys, Phase II test excavations, background research, and California Register of Historical Resources/National Register of Historic Places evaluation of historic and prehistoric resources.

PROJECT EXPERIENCE

Prado Dam Inundation Project
Southern California Edison ∞ Riverside County, CA
Principal Archaeologist. Ms. Arias authored a Cultural Resources Constraints Report that assessed potential effects to cultural resources. The report included the results of a records search performed using SCE's ArcGIS Online (AGOL) database and a project map that included an Environmental Sensitivity Area.

ROUES Battery Storage Cathode (Hinson) Project
Southern California Edison ∞ Los Angeles County, CA
Principal Archaeologist. Ms. Arias authored a Cultural Resources Constraints Report that assessed potential effects to cultural resources. The report included the results of a records search performed using SCE's ArcGIS Online (AGOL) database.

ROUES Battery Storage Anode (Springville) Project
Southern California Edison ∞ Tulare County, CA
Principal Archaeologist. Ms. Arias authored a Cultural Resources Constraints Report that assessed potential effects to cultural resources. The report included the results of a records search performed using SCE's ArcGIS Online (AGOL) database.

ROUES Battery Storage Separator (Etiwanda) Project
Southern California Edison ∞ San Bernardino County, CA
Principal Archaeologist. Ms. Arias authored a Cultural Resources Constraints Report that assessed potential effects to cultural resources. The report included the results of a records search performed using SCE's ArcGIS Online (AGOL) database.

Operations and Maintenance Project: TD1440499-CR147226 & TD1508998-CR173057 on the Vicasa 16kV Circuit
Southern California Edison ∞ Topanga State Park, Los Angeles County, CA
Principal Investigator. Ms. Arias oversaw a pre-construction survey, cultural resources monitoring, and performed quality control and quality assurance of the Cultural Resources Monitoring Report. The pre-construction intensive-level survey of the Area of Potential Impact and overland travel route, and construction monitoring, was performed along with a Native American monitor from the Gabrielino Tongva Indians of California. SCE removed and replaced two deteriorated poles located on state lands administered by the California Department of Parks and Recreation Topanga State Park. All ground-disturbing activities were monitored in compliance with CEQA and the California Public Resources Code.

EXPERIENCE

13 years

EDUCATION

M.A. Cultural Resource Management
Sonoma State University, 2016

B.A. History *minor* Anthropology
University of California, Los Angeles, 2009

PROFESSIONAL MEMBERSHIPS

- Society for California Archaeology
- Society for American Archaeology

VACA DIXON 110540092 PH 1.9 Project
Pacific Gas & Electric ∞ Solano County, CA
Principal Archaeologist. Ms. Arias was the primary author of a Cultural Resources Letter Report that presented the results of an archaeological survey to assess the potential for project activities to impact a previously recorded archaeological resource in proximity to 11 poles. PG&E proposes to harden the electrical distribution power lines and circuits to reduce the risk of wildfire on the VACA DIXON electric distribution line by replacing and/or repairing 66 wood poles.

Placerville 2106 Phase I Project
Pacific Gas & Electric ∞ El Dorado County, CA
Principal Archaeologist. Ms. Arias was the primary author of a Cultural Resources Letter Report that presented the results of an archival and records search and an archaeological survey to assess the potential for project activities to resources within the Area of Potential Impact (API). Ms. Arias performed the intensive survey of the approximately 1-acre API while walking in parallel transects spaced at approximately 5-meter intervals over the Area of Potential Effect. Three potential historic-era resources were identified. PG&E proposes to harden the electrical distribution power lines and circuits and reduce the risk of wildfire on the Placerville 2106 electric distribution line.

L-114 PG&E Vintage Pipeline Replacement Project-East Contra Costa County Habitation Conservancy
Pacific Gas & Electric ∞ Contra Costa County, CA
Principal Archaeologist. Ms. Arias conducted a preliminary review, Native American outreach, prepared an Archaeological Testing Plan, oversaw the plan's implementation, analyzed results, and prepared an Archaeological Testing Result Report and the associated Initial Study sections. This project is part of the implementation of the larger East Contra Costa Habitat Conservation Plan Implementation.

PG&E 70Y Wood Pole Replacement Program
Pacific Gas & Electric ∞ Throughout California
Lead Archaeologist. Ms. Arias performed CHRIS records and literature searches, preliminary investigations, Native American Heritage Commission and tribal consultation, and PG&E database work. The program annually checks, replaces, and updates wood poles throughout California.

Altamont Corridor Express Ceres-Merced Extension Project
San Joaquin Regional Rail Commission (SJRRC) ∞ San Joaquin County, CA
Principal Investigator. Ms. Arias authored an Archaeological Inventory Report to document the presence of archaeological resources within the study area, provided oversight of a pedestrian survey, and conducted Native American consultation outreach. The archaeological resources inventory was completed in compliance with the requirements of Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). The project extends 34 linear miles from Ceres to Merced, with new stations along the extension alignment and a layover and maintenance facility in the Merced Area. SJRRC proposes to extend the Altamont Corridor Express passenger rail service from Ceres to Merced by constructing and upgrading tracks within the existing Union Pacific Railroad (UPRR) Fresno Subdivision ROW a distance of approximately 34 miles.

Better Market Street Project Environmental Impact Report
San Francisco Department of Publics Works ∞ San Francisco County, CA
Lead Archaeologist. Ms. Arias co-authored several reports, including an Archaeological Sensitivity Assessment, and Caltrans suite of documents, including a Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR), Finding of Adverse Effect (FAE), Project-level Programmatic Agreement, and Archaeological Treatment and Data Recovery Plan, and performed consultation with local tribal groups to ensure tribal monitoring pursuant to Section 106 of the National Historic Preservation Act (NHPA) and Assembly Bill (AB) 52. The project sponsor, San Francisco Public Works, in coordination with project partners (the Citywide Planning Division of the San Francisco Planning Department and the San Francisco Municipal Transportation Agency (SFMTA), proposes to resident and provide of a program of transportation and streetscape improvements to a 2.2-mile-long corridor.

Appendix B (Confidential):
CHRIS Record Search Results and Maps

California Historical Resources Information System

CHRIS Data Request Form

ACCESS AND USE AGREEMENT NO.:_____ **IC FILE NO.:**_____

To: Central Coast Information Center

Print Name: Lily Arias Date: 04/29/2022

Affiliation: Material Culture Consulting, Inc

Address: 2701-B North Towne Avenue

City: Pomona State: CA Zip: 91767

Phone: (510) 589-0467 Fax: _____ Email: lily@materialcultureconsulting.com

Billing Address (if different than above): _____

Billing Email: accounting@materialcultureconsulting.com Billing Phone: _____

Project Name / Reference: 5175 Airport Road

Project Street Address: 5175 Airport Road, Paso Robles, California

County or Counties: San Luis Obispo

Township/Range/UTMs: T26S, R12E, Section 11

USGS 7.5' Quad(s): Paso Robles

PRIORITY RESPONSE (Additional Fee): yes ☐ / no ☐

TOTAL FEE NOT TO EXCEED: $650.00
(If blank, the Information Center will contact you if the fee is expected to exceed $1,000.00)

Special Instructions:

Please include accounting@materialcultureconsulting.com on all invoice submissions.

Information Center Use Only

Date of CHRIS Data Provided for this Request: _____

Confidential Data Included in Response: yes ☐ / no ☐

Notes: _____

California Historical Resources Information System

CHRIS Data Request Form

Mark the request form as needed. Attach a PDF of your project area (with the radius if applicable) mapped on a 7.5' USGS topographic quadrangle to scale 1:24000 ratio 1:1 neither enlarged nor reduced and include a shapefile of your project area, if available. Shapefiles are the current CHRIS standard for submitting digital spatial data for your project area or radius. **Check with the appropriate IC for current availability of digital data products.**

- Documents will be provided in PDF format. Paper copies will only be provided if PDFs are not available at the time of the request or under specially arranged circumstances.
- Location information will be provided as a digital map product (Custom Maps or GIS data) unless the area has not yet been digitized. In such circumstances, the IC may provide hand drawn maps.
- In addition to the $150/hr. staff time fee, client will be charged the Custom Map fee when GIS is required to complete the request [e.g., a map printout or map image/PDF is requested and no GIS Data is requested, or an electronic product is requested (derived from GIS data) but no mapping is requested].

For product fees, see the CHRIS IC Fee Structure on the OHP website.

1. Map Format Choice:

Select One: Custom GIS Maps ☐ GIS Data ☒ Custom GIS Maps **and** GIS Data ☐ No Maps ☐

Any selection below left unmarked will be considered a "no. "

Location Information:

	Within project area	Within 1 mi. radius
ARCHAEOLOGICAL Resource Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Locations	yes ☒ / no ☐	yes ☒ / no ☐
Report Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
"Other" Report Locations[2]	yes ☐ / no ☒	yes ☐ / no ☒

3. Database Information:
(contact the IC for product examples, or visit the SSJVIC website for examples)

	Within project area	Within 1 mi. radius
ARCHAEOLOGICAL Resource Database[1]		
List (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Database		
List (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☒ / no ☐	yes ☒ / no ☐
Report Database[1]		
List (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☒ / no ☐	yes ☒ / no ☐
Include "Other" Reports [2]	yes ☐ / no ☒	yes ☐ / no ☒

4. Document PDFs (paper copy only upon request)**:**

	Within project area	Within 1 mi. radius
ARCHAEOLOGICAL Resource Records[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Records	yes ☒ / no ☐	yes ☒ / no ☐
Reports[1]	yes ☒ / no ☐	yes ☐ / no ☒
"Other" Reports[2]	yes ☐ / no ☒	yes ☐ / no ☒

California Historical Resources Information System

CHRIS Data Request Form

5. Eligibility Listings and Documentation:

	Within project area	Within 1 mi. radius
OHP Built Environment Resources Directory[3]:		
Directory listing only (Excel format)	yes ☐ / no ☐	yes ☐ / no ☐
Associated documentation[4]	yes ☐ / no ☐	yes ☐ / no ☐
OHP Archaeological Resources Directory[1,5]:		
Directory listing only (Excel format)	yes ☐ / no ☐	yes ☐ / no ☐
Associated documentation[4]	yes ☐ / no ☐	yes ☐ / no ☐
***California Inventory of Historic Resources* (1976):**		
Directory listing only (PDF format)	yes ☐ / no ☐	yes ☐ / no ☐
Associated documentation[4]	yes ☐ / no ☐	yes ☐ / no ☐

6. Additional Information:

The following sources of information may be available through the Information Center. However, several of these sources are now available on the OHP website and can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through these sources. Indicate below if the Information Center should review and provide documentation (if available) of any of the following sources as part of this request.

Caltrans Bridge Survey	yes ☐ / no ☐
Ethnographic Information	yes ☐ / no ☐
Historical Literature	yes ☐ / no ☐
Historical Maps	yes ☐ / no ☐
Local Inventories	yes ☐ / no ☐
GLO and/or Rancho Plat Maps	yes ☐ / no ☐
Shipwreck Inventory	yes ☐ / no ☐
Soil Survey Maps	yes ☐ / no ☐

---

[1] In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User or Conditional User under an active CHRIS Access and Use Agreement.

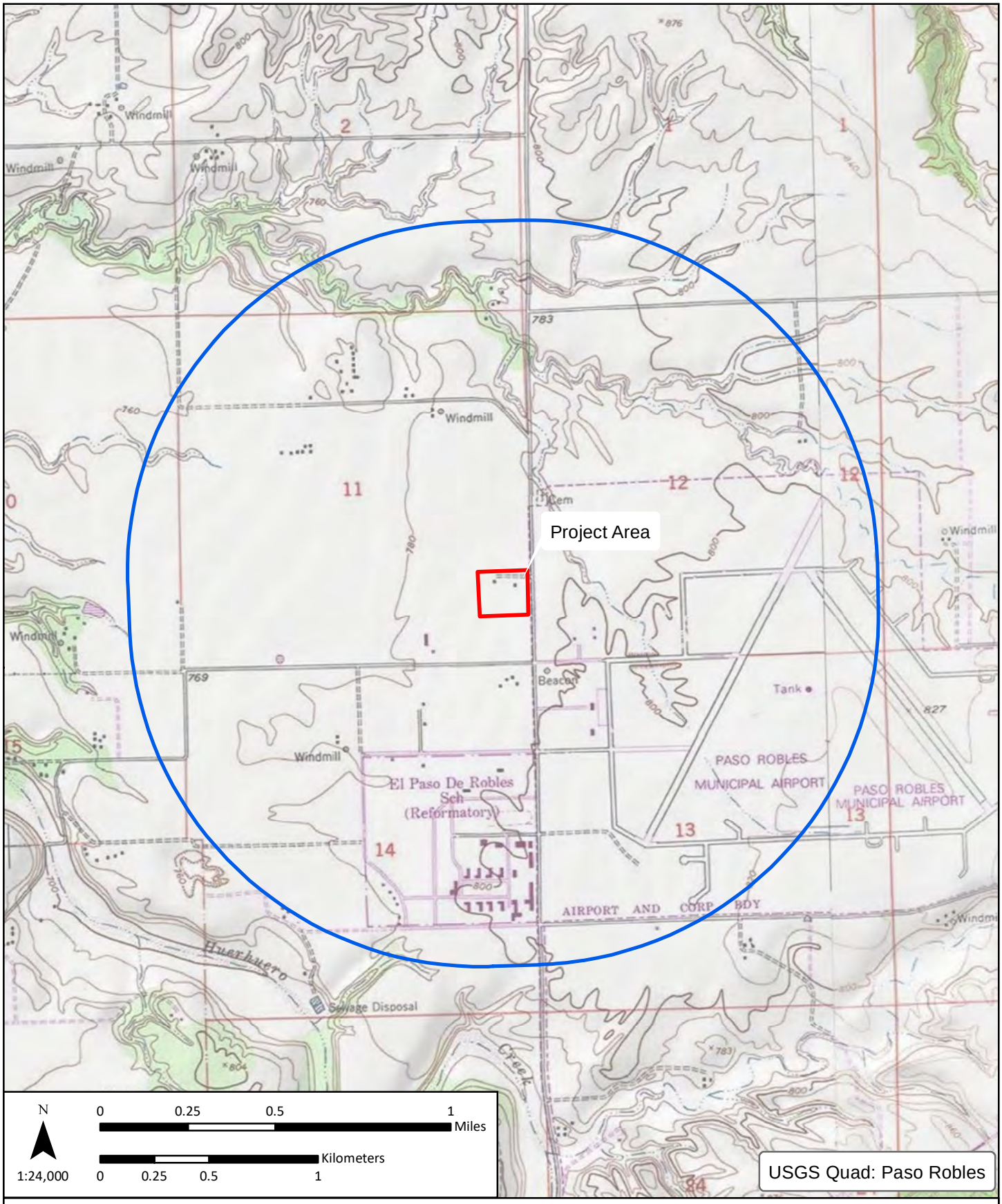
[2] "Other" Reports GIS layer consists of report study areas for which the report content is almost entirely non-fieldwork related (e.g., local/regional history, or overview) and/or for which the presentation of the study area boundary may or may not add value to a record search.

[3] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Previously known as the HRI and then as the HPD, it is now known as the Built Environment Resources Directory (BERD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

[4] Associated documentation will vary by resource. Contact the IC for further details.

[5] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Previously known as the Archaeological Determinations of Eligibility, now it is known as the Archaeological Resources Directory (ARD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

Attachment 10



Project Area

1-mile Buffer

MATERIAL CULTURE CONSULTING

Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
FAX (805) 682-3170
EMAIL ccic@sbnature2.org

5/2/2022 Records Search # 22-102

Lily Arias
Material Culture Consulting, Inc
2701-B North Towne Avenue
Pomona, CA 91767

Re: 5175 Airport Road

The Central Coast Information Center received your record search request for the project area referenced above, located on the Paso Robles USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a one mile radius:

As indicated on the data request form, the locations of reports and resources are provided in the following format: ☐ custom GIS maps ■ shapefiles ☐ hand-drawn maps ☐ none

Resources within project area:	0
Resources within 1 mile radius:	CA-SLO-491; CA-SLO-2879, P-40-41390
Reports within project area:	0
Reports within 1 mile radius:	11; see spreadsheet

Resource Database Printout (list):	☐ enclosed	■ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	■ not requested	☐ nothing listed
Resource Digital Database Records:	■ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):	☐ enclosed	■ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	■ not requested	☐ nothing listed
Report Digital Database Records:	■ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	■ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☐ enclosed	☐ not requested	■ nothing listed
OHP Historic Properties Directory:	☐ enclosed	■ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	■ not requested	☐ nothing listed

The following sources of information are available at **http://ohp.parks.ca.gov/?page_id=28065**. Some of these resources used to be available through the CHRIS but because they are now online, they can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through the sources listed below.

California State Lands Commission Shipwreck Database	*Caltrans Historic Bridge Inventory*
U.S. Geological Survey Historic Topographic Maps	*Rancho Plat Maps*
National Park Service National Register of Historic Places Nominations	*Natural Resource Conservation Service Soil Survey Maps*
US Bureau of Land Management General Land Office Records	*California Historical Landmarks Listing (by county)*
Five Views: An Ethnic Historic Site Survey for California (1988)	*Historical Soil Survey Maps*

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of California Historical Resources Information System (CHRIS) data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the CHRIS.

Sincerely,

Anthony Cowell

Anthony Cowell
Assistant Coordinator

Attachment 10

ReportNum	Authors	CitYear	CitMonth	CitTitle	CitPublisher
SL-00031	Spanne, L.W.	1977	Oct	Archaeological Component for the Facilities Plan Project Report, California Youth Authority and Paso Robles Municipal Airport Wastewater Facilities	None given
SL-00484	Robert L. Hoover	1985	Sep	Cultural Resources Evaluation, El Paso de Robles School	California Polytechnic State University, San Luis Obispo
SL-02838	Ben Parker	1995	Aug	Los Robles Camp Dozer Storage Building	Department of Forestry and Fire Protection
SL-03394	C.A. Singer	1998	Jan	Cultural resources survey and impact assessment for a 66 Acre property on Dry Creek Road in the City of El Paso De Robles	C.A. Singer & Associates, Inc.
SL-04016	Parker, Ben	2000	Feb	CDF Project Review Report For Archaeological and Historical Resources, Alamo CMP	Department of Forestry and Fire Protection
SL-04026	Martin, Thomas	2000	Mar	Cultural Resources Study for the Proposed California Department of Forestry and Fire Protection Air Attack Base Facility Replacement, Paso Robles, San Luis Obispo County	LSA Associates, Inc.
SL-05555	Singer, Clay A.	2005	Apr	Cultural Resources Survey and Impact Assessment for a 39.1 Acre Property on Airport Road in the City of Paso Robles, San Luis Obispo County, California (APN 025-431-031).	C.A. SINGER & ASSOCIATES, Inc.
SL-06170	Conway, Thor.	2008	Mar	An Archaeological Surface Survey at the Paso Robles Airport, San Luis Obispo County, California	Heritage Discovery Inc.
SL-06498	Robert O. Gibson	2010	Jan	Results of An Archival Records Search and a Phase One Archaeological Surface survey on tentative tract 3020 along Buena Vista Road, San Luis Obispo County, California	Gibson's Archaeological Consulting
SL-06567	Gross, Charlane and Bowen, Mark	2010	Nov	Cultural Resources Inventory and Assessment, California Department of Corrections and Rehabilitation Paso Robles Facility, San Luis Obispo County, California.	AECOM Design + Planning
SL-07308	Rachael J. Letter and Cristopher J. Letter	2018	Jan	Phase I Archaeological Study, Paso Robles Phase I Airport Area Infrastructure Improvement and Dry Creek Road Realignment Projects San Luis Obispo County, California	Padre associates, inc.

San Luis Obispo County
Archaeological Society

SITE SURVEY
RECORD

P-40-000491

Attachment 10

Occ BRM CEM TC T Q Pc Pt FD M C

LOCATION DESCRIPTION:

Estrella Adobe Church; south east corner of the cemetary is the site, along the west bank of creek. Historic church and cemetery is on a low knoll; site 491 is on east

SITE DESCRIPTION: Probably a temporary campsite; shell fragments, mainly of Pismo or Washington clam; a few spalls of chert,

ARTIFACTS: spalls; thermal fractured stones

MAP DATA:

USGS QUADRANGLE Paso Robles (1948) 7½' ~~15'~~

LATITUDE 35°40'47' N; LONGITUDE 120°38'28" W

CALIF. COORDINATES

R/T ___, ___: ___ ¼ OF ___ ¼ OF SECTION ___

CONTOUR AREA 50' x 75'

VEGETATION Quercus lobata; thistle; grass

FRESH WATER creek at site; small spring

SITE SOIL pebbly; dark grey midden

SURROUNDING SOIL pebbly to rocky; reddish clay

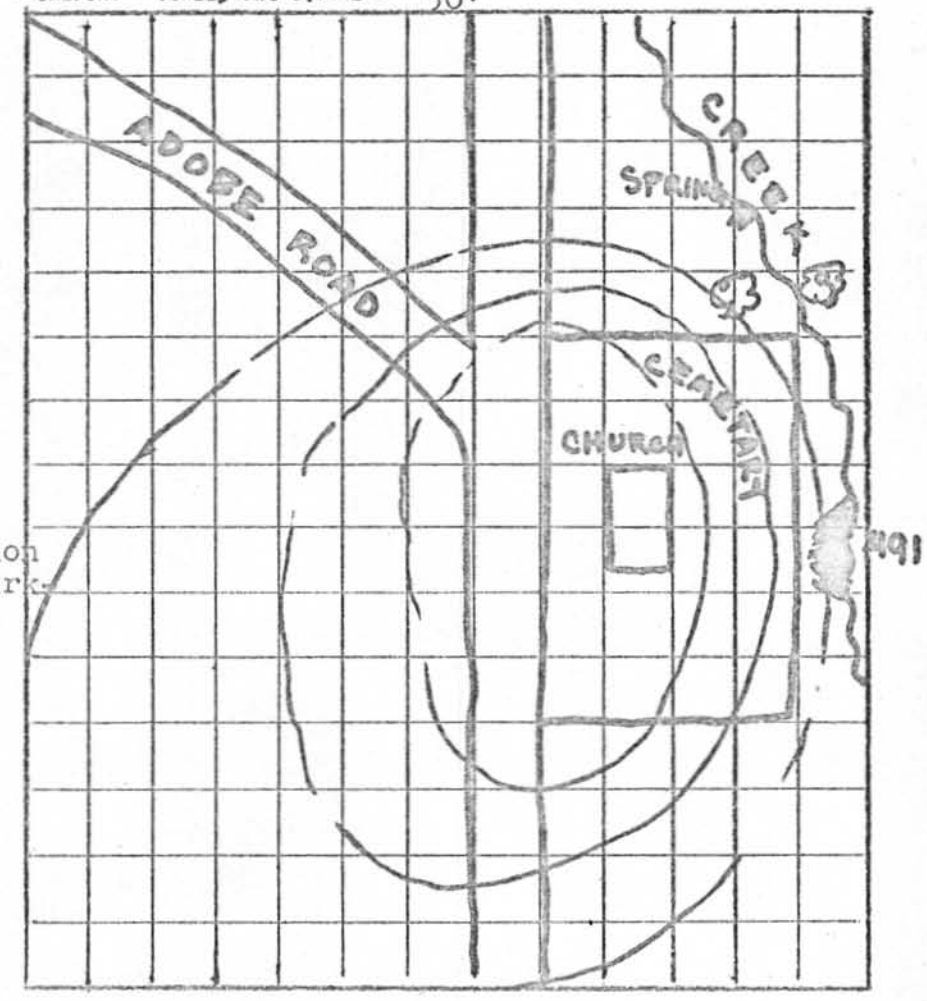
EROSION AND CULTIVATION rain

DESTRUCTION POSSIBILITY slight to none

FEATURES none to report

N

SKETCH: SCALE; ONE SQUARE = 50'



REMARKS: Site is on edge of a mid-nineteenth century mission church, now an historical marked site.

REPORTED TO:

SLO-AS-491 ON 4-15-69

ON

ON

ON

BY ~~von Werlhof~~

DATE 7-18-69

Attachment 10

San Luis Obispo County
Archaeological Society

SITE SURVEY
RECORD

4-SLO-AS- 491

LOCATION DESCRIPTION:

Estrella Adobe Church; south east corner of the cemetary is the site, along the west bank of creek. Historic church and cemetary is on a low knoll; site 491 is on east

SITE DESCRIPTION: Probably a temporary campsite; shell fragments, mainly of Pismo or Washington clam; a few spalls of chert.

ARTIFACTS: spalls; thermal fractured stones

Occ BFM Cem TC T Q Pc Pr FD H C

MAP DATA:

USGS QUADRANGLE Paso Robles (1948) (269B) ~~N.~~

LATITUDE 35°40'47" N; LONGITUDE 120°38'28" W

CALIF. COORDINATES

R/T ___, ___, ___ ¼ of ___ ¼ of SECTION _____

CONTOUR AREA 50' x 75'

VEGETATION Quercus lobata; thistle; grass

FRESH WATER creek at site; small spring

SITE SOIL pebbly; dark grey midden

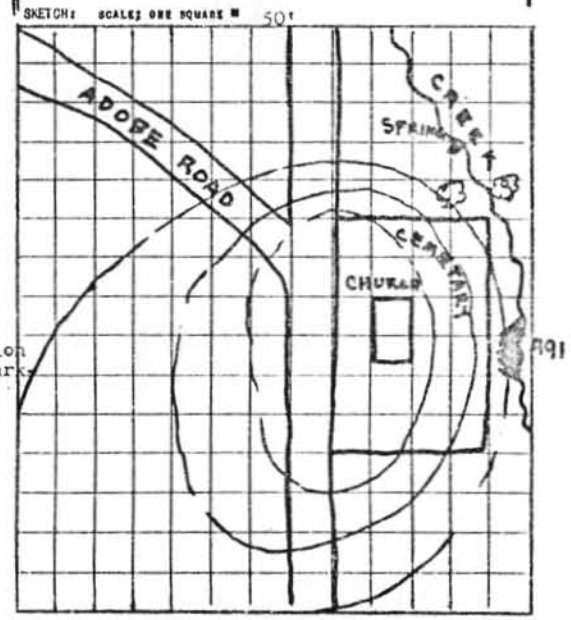
SURROUNDING SOIL pebbly to rocky; reddish clay

EROSION AND CULTIVATION rain

DESTRUCTION POSSIBILITY slight to none

FEATURES none to report

SKETCH: SCALE; ONE SQUARE = 50'



REMARKS: Site is on edge of a mid-nineteenth century mission church, now an historical marked site.

REPORTED TO:

SLO-AS-491 ON 4-15-69

ON

ON

ON

BY ~~von Werlhof~~

DATE 7-18-69

Ref: mentioned + mapped in E 31 SLO

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

Attachment 10

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-002879**
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 **of** 6 ***Resource Name or #:** LRCC-1

P1. Other Identifier:
***P2. Location:** ☑ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** 1948 PR 1979 **T** 26S; **R** 12E; SE ¼ **of** NE ¼ **of Sec** 14; M.D.**B.M.**
c. Address 4735 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone 10, 713480 mE/ 3949830 mN; 713480 mE/ 3949725 mN; 713230 mE/ 3949715 mN; 713160 mE/ 3949780 mN (NAD83)
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
From CA-46 (east of US-101) in Paso Robles, turn north onto Airport Road and go 1.8 miles to a narrow access road (Paso Robles Municipal Airport) on the left. Turn down this road and the former Los Robles Conservation Camp will be on the left.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This site consists of a very diffuse scatter of lithic flakes, clam shell, and historic debris located in a field behind a CAL FIRE repair facility. The site may extend to the south, on the other side of an access road, but that area was not checked as it is on a different property.

***P3b. Resource Attributes:** AP2. Lithic scatter; AP15. Habitation debris; AH4. Privies/dumps/trash scatters
***P4. Resources Present:** ☐Building ☐Structure ☐Object ☑Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: (view, date, accession #) Overview of site on LRCC property; facing east, taken 31 January 2018; P1310004

***P6. Date Constructed/Age and Source:** ☐Historic ☐ Prehistoric ☑ Both

***P7. Owner and Address:**
CAL FIRE
PO Box 944246
Sacramento, CA 94244-2460

***P8. Recorded by:**
Denise Ruzicka
CAL FIRE
1234 E. Shaw Ave
Fresno, CA 93710

***P9. Date Recorded:** January 31, 2018; December 4, 2018
***P10. Survey Type:** Reconnaissance
***P11. Report Citation**: None

***Attachments:** ☐NONE ☑Location Map ☑Continuation Sheet ☐Building, Structure, and Object Record ☑Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☑Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary #
Trinomial

 *Resource Name or # LRCC-1

*A1. Dimensions: a. Length 320 meters (E/W) × b. Width 105 meters (N/S)

Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☑ Other: GPS Coordinates

Method of Determination (Check any that apply.): ☑ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow ☐ Excavation ☑ Property boundary ☐ Other (Explain):

Reliability of Determination: ☐ High ☑ Low Explain: Site heavily disturbed; property boundary/fence/road to south

Limitations (Check any that apply): ☑ Restricted access ☐ Paved/built over ☑ Site limits incompletely defined ☑ Disturbances ☑ Vegetation ☐ Other (Explain):

A2. Depth: _____ ☐ None ☑ Unknown Method of Determination:

*A3. Human Remains: ☐ Present ☐ Absent ☐ Possible ☑ Unknown (Explain): No subsurface investigation

*A4. Features: (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.)
N/A

*A5. Cultural Constituents: (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.)
Lithic scatter including chert scraper, chert core (collected), chert retouched flake/core fragment (collected), chert flakes, and chalcedony flakes and shatter. Clam shell fragments dispersed throughout site. A possible mano was also observed. Historic artifacts also present including milk glass fragments, aqua glass fragment (possible Coke bottle), earthenware sherds, terra cotta/ceramic pipe fragment, metal pipe fitting, and metal pipe opening fragment that is potentially diagnostic ("…UCTS INC").

*A6. Were Specimens Collected? ☐ No ☑ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. Site Condition: ☐ Good ☐ Fair ☑ Poor (Describe disturbances.):
The site was found within a field behind a CAL FIRE repair facility, primarily within dozer tracts created for vegetation management. The ground surface of the field is heavily disturbed with dozer lines that have been maintained for 20 years indicating that the artifacts observed are probably not in their original location. In addition, several of the artifacts observed during the first survey were not relocated during the second survey. There are potentially other artifacts that were once present but have been buried, destroyed, or removed from the site.

*A8. Nearest Water: (Type, distance, and direction.) Unnamed intermittent creek, 770 meters to the northeast; Huerhuero Creek 1340 meters to the southwest

*A9. Elevation: 795 feet

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.) Site located on the Estrella Plain

A11. Historical Information:

*A12. Age: ☑ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945 ☐ Post 1945 ☑ Undetermined Describe position in regional prehistoric chronology or factual historic dates if known:

A13. Interpretations: (Discuss data potential, function[s], ethnic affiliation, and other interpretations)
The site is within the ethnohistorical territory of the Salinan, specifically the Migueleño (Hester 1978). It is not far from the border with the northern Chumash, or Obispeño (Grant 1978).

A14. Remarks:
Natural chert cobbles also present suggesting nearby raw material source.

A15. References: (Documents, informants, maps, and other references)
Grant, Campbell. 1978. Chumash: Introduction. In *Handbook of North American Indians*, Vol. 8: *California*, edited by Robert F. Heizer, pp. 505-508. Smithsonian Institution, Washington.
Hester, Thomas Roy. 1978. Salinan. In *Handbook of North American Indians*, Vol. 8: *California*, edited by Robert F. Heizer, pp. 500-504. Smithsonian Institution, Washington.

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.):
Original Media/Negatives Kept at: CAL FIRE Southern Region Headquarters

*A17. Form Prepared by: D. Ruzicka Date: December 18, 2018
Affiliation and Address: California Department of Forestry and Fire Protection, 1234 E. Shaw Ave, Fresno, CA 93710

State of California — The Resources Agency **Primary #**
Department of Parks and Recreation **Trinomial**

ARTIFACT RECORD

Page 3 **of** 6 **Resource Name or #** LRCC-1
Location Where Collected Specimens are Curated: CAL FIRE Southern Region Headquarters

Artifact #	Type	Condition	Description (form, material, etc.)	Dimensions (cm) L W TH	Locational Data (distance/bearing from datum)	Sketch/ Photo	Collected?
1	Core	C	White chert core	8.2x4.8x5.0	713396 mE 3949817 mN (NAD83)	Yes	Yes
2	Core	F	Chert core fragment – possible tool (edge damaged)	3.8x3.6x2.0	713322 mE 3949822 mN (NAD83)	Yes	Yes

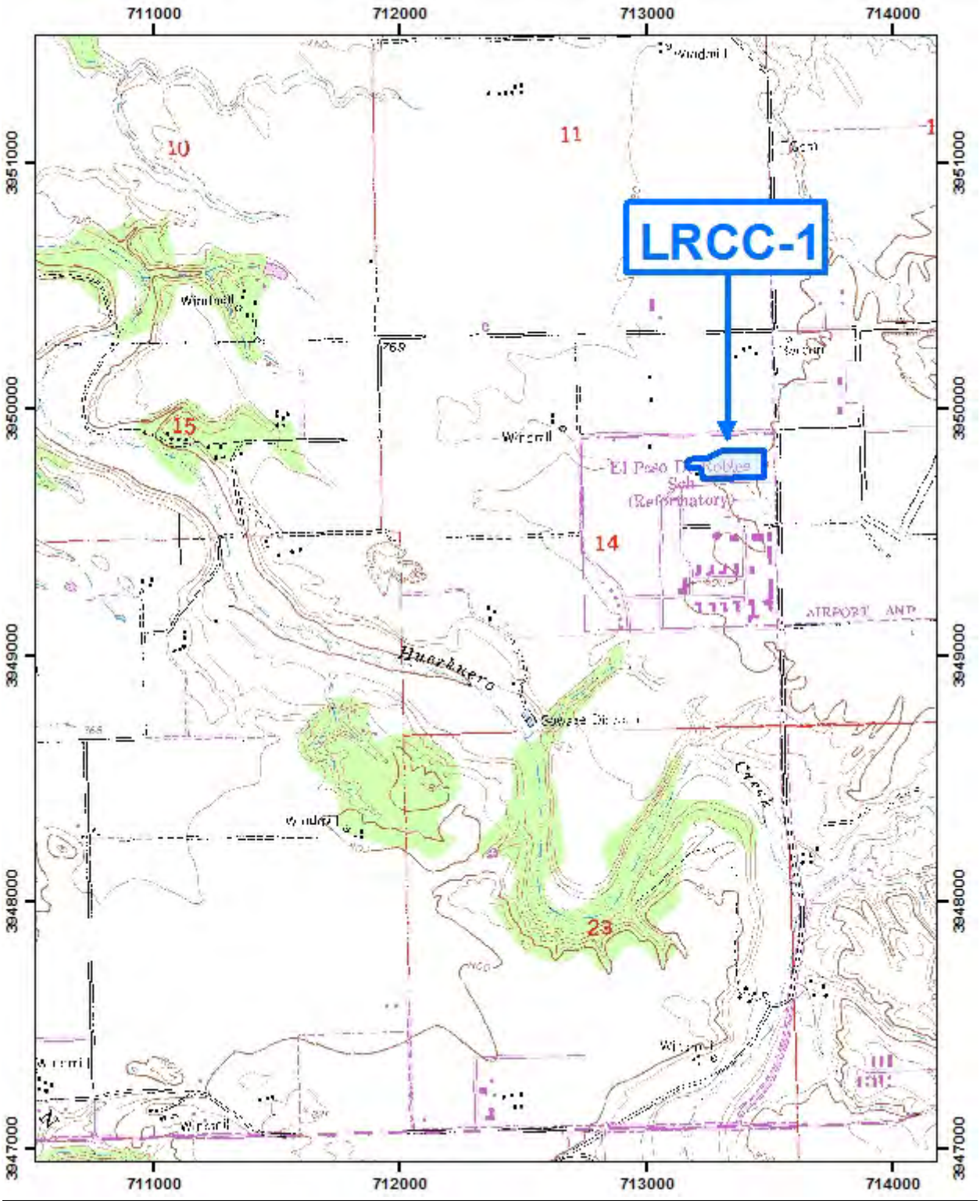
Type Key: (list abbreviations used)	Condition Key: F Fragmentary C Complete Other:

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 4 **of** 6 ***Resource Name or #** LRCC-1
***Map Name:** Paso Robles ***Scale:** 1:24,000 ***Date of map:** 1948 photorevised 1979



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial

Page 5 **of** 6 *Resource Name or # LRCC-1
***Recorded by:** D. Ruzicka ***Date** March 15, 2018 ☑ Continuation ☐ Update

Chert scraper found in dozer line, taken 31 January 2018

Metal pipe opening, taken 31 January 2018

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial

Page 6 **of** 6 ***Resource Name or #** LRCC-1
***Recorded by:** D. Ruzicka ***Date** December 18, 2018 ☑ Continuation ☐ Update

Chert retouched flake/core fragment, taken 31 January 2018

Chert core, taken 4 December 2018

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-40-041390
HRI #
Trinomial
NRHP Status Code 6Z

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 16 ***Resource Name or #:** Paso Robles
P1. Other Identifier: El Paso de Robles Youth Correctional Facility

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone __, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:**

El Paso de Robles Youth Correctional Facility (Paso Robles) comprises approximately 200 acres, approximately 5 miles east of the town of Paso Robles. Regional access to the site is provided by US 101 and State Route 46.

Originally known as the Paso Robles School for Boys, the facility was founded in 1947 by the California Youth Authority (CYA) (predecessor to the Division of Juvenile Justice [DJJ]) in response to a growing need for juvenile correctional facilities in the state. The facility was opened on part of the former World War II Estrella Army Air Base, using the existing buildings and infrastructure on-site, which included 40 barracks buildings and a sewage disposal plant. Construction of the new facility commenced in May 1951 and on Friday January 29, 1954 the new facility was dedicated.

Due to a declining number of youthful offenders committed to state facilities, El Paso de Robles Youth Correctional Facility closed permanently on July 31, 2008.

***P3b. Resource Attributes:** HP39-Other (prison complex)

***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ☐ Site ☒ District ☐ Element of District ☐ Other (Isolates, etc.)

5b. Description of Photo: View facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953-1964/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☒District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List): ____

State of California X Natural Resources Agency DEPARTMENT OF PARKS AND RECREATION **DISTRICT RECORD**	Primary HRI Trinomial	P-40-041390	# #

 ***NRHP Status Code** 6Z

***Resource Name or #** Paso Robles

D1. Historic Name: Paso Robles School for Boys D2. Common Name: El Paso de Robles Youth Correctional Facility

***D3. Detailed Description**:

The El Paso de Robles Youth Correctional Facility (Paso Robles) is comprised of a number of individual buildings, all accessed by paved roads. Paso Robles is laid out with eight residential cottages on either side of a central open grassy area. Administration buildings are to the east of the cottages while recreational facilities are to the north (see sketch map on page 4). The period of significance for this facility is 1953-1966. This represents the date construction of the first buildings was completed until 50 years prior to this evaluation. While the focus of rehabilitation and education did not end until the passage of AB 3121 in 1977, 1966 was chosen as the end date for the period of significance because according to page 42 of National Register Bulletin 16a, “Events and activities occurring within the last 50 years must be exceptionally important to be recognized as "historic" and to justify extending a period of significance beyond the limit of 50 years ago.” As explained in the following pages, the continued mission of youth rehabilitation at Paso Robles does not rise to the exceptional level of importance. Continued on page 5.

Thirty-six buildings are located inside the Paso Robles boundaries (see D4 and D5 below). Twenty-six of these buildings contribute to the potential district as they were constructed during the period of significance. These 26 buildings are described on the attached DPR-523A forms which follow the district evaluation forms. Ten buildings do not contribute to a potential district at Paso Robles (see Table 1 on page 5) because they do not meet the 45-year guideline for eligibility. Continued on page 5.

***D4. Boundary Description**: The boundary is defined by Airport Road to the east, an unnamed access road just south of Paso Robles Municipal Airport Road to the north, an unnamed access road just north of Dry Creek Road to the south, and an unnamed access road and line of trees to the east. See map on page 4.

***D5. Boundary Justification:** The boundary of Paso Robles is the area which encompasses the grounds of the youth facilities and the employee residences, all of which were constructed during the period of significance.

D6. Significance: Theme Youth Prison Development **Area** California
Period of Significance 1953-1966 **Applicable Criteria** N/A

The potential district at Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. The period of significance is 1953-1966, the date construction of the first buildings were completed until 50 years prior to this evaluation. Paso Robles was opened in response to a growing need for juvenile correctional facilities in the state, during a period of rapid expansion and is symbolic of CYA’s commitment to rehabilitation at that time; however, it does not appear to be associated with specific important events that contributed to the history of prison development in California. Continued on page 8.

***D7. References**:

Bookspan, Shelly. 1991. *A Germ of Goodness: The California State Prison System, 1851-1944*. Lincoln: University of Nebraska Press.

CDCR. 2011. CDCR to Close Southern California Facility for Juvenile Offenders. Available http://cdcrtoday.blogspot.com/2011/06/cdcr-to-close-southern-california. aAccessed 8/19/15August 19, 2015

CDCR. 2015. *Public Resource Code 5024 and 5024.5 Compliance Report for the surplus of a 15-acre parcel at the former Preston Youth Correctional Facility, Ione, Amador County*. Prepared by Garavaglia Architecture, Inc.

Holton, Karl. 1942. "Youth Correction Authority in Action: The California Experience," *Law and Contemporary Problems*. Duke University School of Law, Durham, North Carolina, Volume 9, No. 4, Autumn 1942.

Holton, Karl. 1950. “California Youth Authority: Eights Years of Action,” *Journal of Criminal Law and Criminology*. Volume 41, Issue 1. 1950-1951.

RFB Consulting. 2014 (October). *Lincoln Specific Plan Historical Resource Report*. Prepared by GPA Consulting.

Smith, Robert L. 2012. *Quest: The California Youth Authority’s Golden Years.* Bloomington: AuthorHouse.

Skonovd, Norman. 2003. “Innovation at the CYA.” In *Encyclopedia of Juvenile Justice*, ed. Marilyn D. McShane and Frank P. Williams, 42. Thousand Oaks: Sage Publications.

Tanner, C. K., & Lackney, J. A. 2005. *Educational Facilities Planning: Leadership, Architecture, and Management.* Boston: Pearson Allyn and Bacon.

West, Pearl S. 1979 (May). “The California Youth Authority: Planning for a Better Tomorrow,” *Pepperdine Law Review*. Volume 6, Issue 3.

Youth Authority. 1955. *Institutions and Camps: Paso Robles School for Boys*. Sacramento.

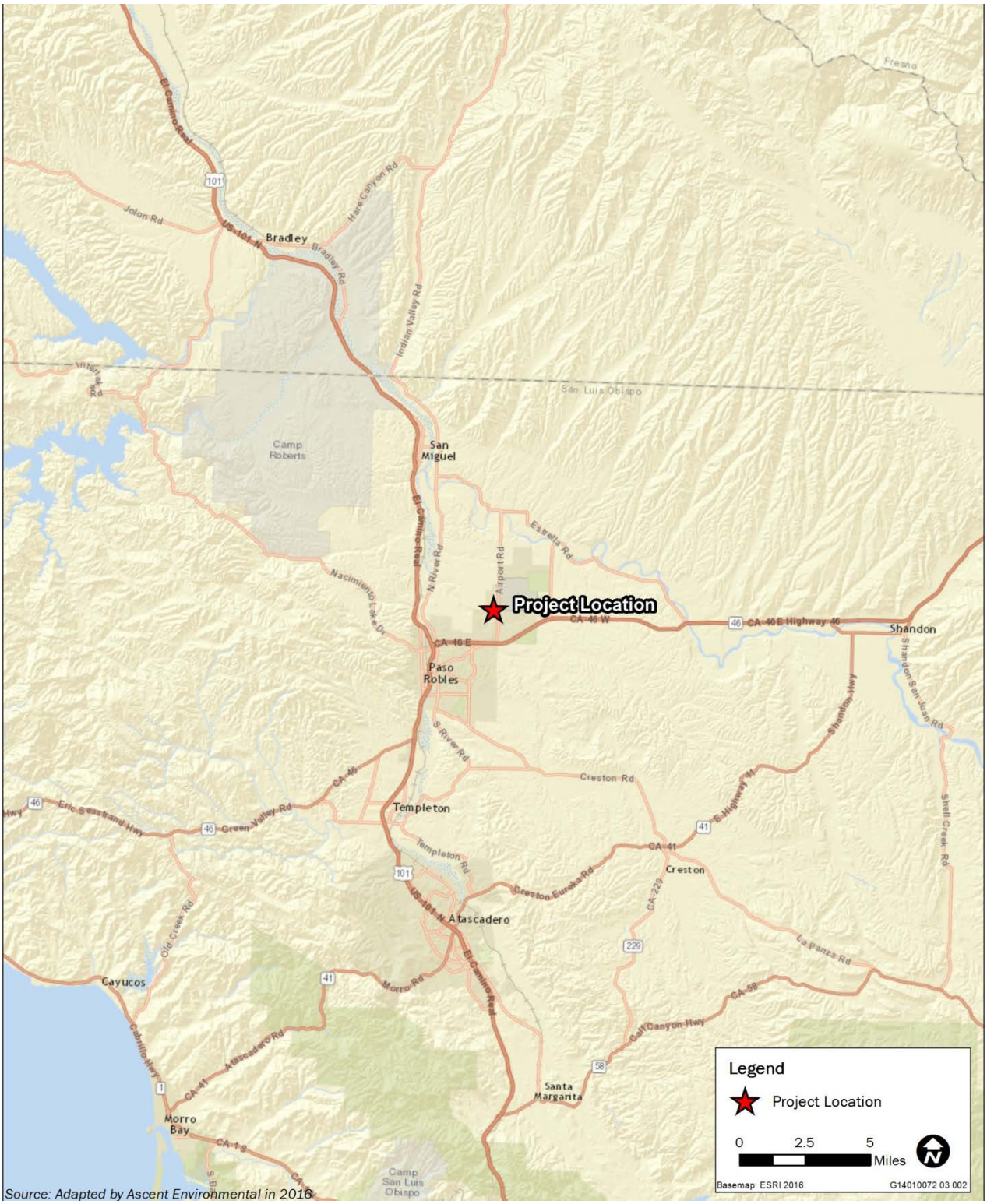
***D8. Evaluator:** Alta Cunningham **Date:** February 2, 2016

Affiliation and Address: Ascent Environmental, Inc. Sacramento, CA

State of California X Natural Resources Agency DEPARTMENT OF PARKS AND RECREATION **LOCATION MAP**	Primary # **P-40-041390** HRI# Trinomial

Page 3 **of** 16 ***Resource Name or #** Paso Robles

***Map Name:** ESRI ***Scale:** ***Date of map:** 2014



Source: Adapted by Ascent Environmental in 2016

State of California X Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

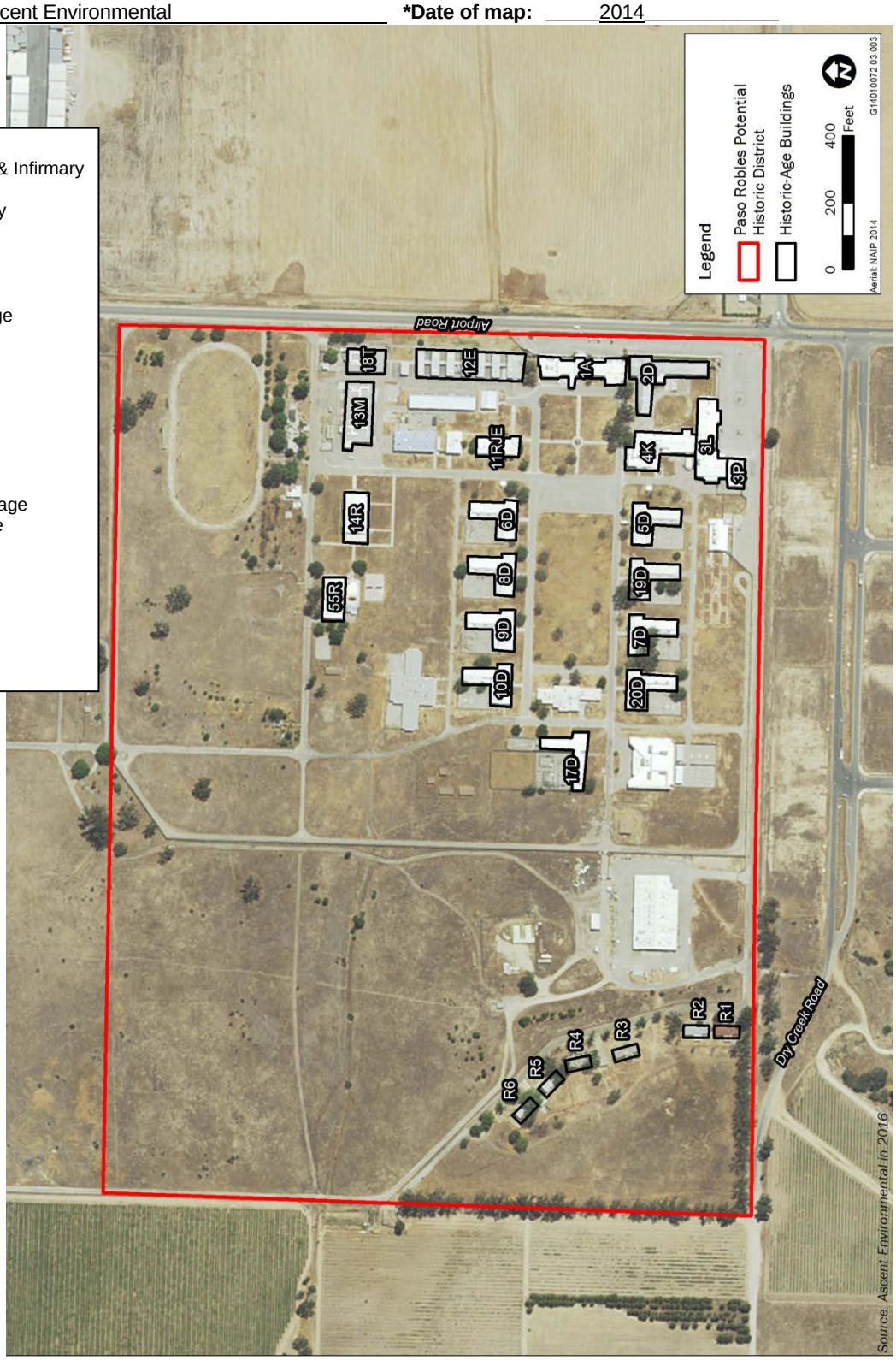
SKETCH MAP

Primary # **P-40-041390**
HRI#
Trinomial

Page 4 **of** 16 ***Resource Name or #** Paso Robles

***Drawn by:** Ascent Environmental ***Date of map:** 2014

1A – Administration
2D – Naciemento Cottage & Infirmary
3P – Boiler Plant
3LP – Laundry/Commissary
4K – Kitchen/Bakery
5D – Avenal Cottage
6D – Cholame Cottage
7D – Cayucos Cottage
8D – Los Osos East Cottage
9D – Nipomo Cottage
10D – Morro Cottage
11RJE – Auditorium
12E – Academic School
13M – Vocational Shop
14R – Old Gymnasium
17D – Cambria Cottage
18T – Vocational School
19D – Los Osos West Cottage
20D – San Simeon Cottage
55R – Gymnasium
R1 – Residence 1
R2 – Residence 2
R3 – Residence 3
R4 – Residence 4
R5 – Residence 5
R6 – Residence 6



*Recorded by: Alta Cunningham, Ascent Environmental *Date: February 2, 2016 ☒ Continuation ☐ Update

D3 Continued

Table 1 California Correctional Center

Building Number	Common Name	Year Constructed	Contributor to Potential District?
1A	Administration	1953	Yes
2D	Naciemento Cottage & Infirmary	1953	Yes
3P	Boiler Plant	1953	Yes
3LP	Laundry/Commissary	1953	Yes
4K	Kitchen/Bakery	1953	Yes
5D	Avenal Cottage	1953	Yes
6D	Cholame Cottage	1953	Yes
7D	Cayucos Cottage	1953	Yes
8D	Los Osos East Cottage	1954	Yes
9D	Nipomo Cottage	1953	Yes
10D	Morro Cottage	1953	Yes
11RJE	Auditorium	1956	Yes
12E	Academic School	1953	Yes
12E2	Educational Modular	1980	No – does not meet 45-year age guideline
13M	Vocational Shop	1953	Yes
14R	Old Gymnasium	1953	Yes
17D	Cambria Cottage	1956	Yes
18T	Vocational School	1957	Yes
19D	Los Osos West Cottage	1957	Yes
20D	San Simeon Cottage	1957	Yes
31	Visitors Building	1990	No – does not meet 45-year age guideline
55R	Gymnasium	1962	Yes
R1	Residence 1	1961	Yes
R2	Residence 2	1961	Yes
R3	Residence 3	1964	Yes
R4	Residence 4	1954	Yes
R5	Residence 5	1954	Yes
R6	Residence 6	1954	Yes
BLDG 270	Living/Education Unit	1990	No – does not meet 45-year age guideline
na	Infirmary	2000-2005	No – does not meet 45-year age guideline
na	100-man Camp	1989	No – does not meet 45-year age guideline
na	Canteen	1986	No – does not meet 45-year age guideline
na	New Education Building	1995-1999	No – does not meet 45-year age guideline
na	School Control Center	1993	No – does not meet 45-year age guideline
na	Maintenance	1988	No – does not meet 45-year age guideline
na	Animal husbandry	1990	No – does not meet 45-year age guideline; modulars

Source: Compiled by Ascent, 2016.

Layout, Character, and Landscaping of Paso Robles

The historic-age buildings at Paso Robles are mostly one-story brick, with low-pitched side-gables. Vocational buildings are a combination of brick and corrugated metal. The buldings that do not contribute to the potential district are primarily one story, but are brick, concrete, or concrete masonry unit; some are a combination of these materials (Exhibits 1 and 2). Only the 270 building is two-stories.

Paso Robles is designed as individual buildings and is laid out with eight residential cottages on either side of an open grassy area. Educational and administration buildings are to the east of the cottages while recreational and vocational facilities are to the north. In addition to the two gymnasiums, Paso Robles had a baseball field (Exhibit 3) and a track which surrounded the football field. Employee residences, at the western edge of the potential district, are separated from the youth facilities by a large maintenance shop (see map on page 4).

The landscaping at Paso Robles is not considered a contributing characteristic to the potential district, because aside from the grassy area between the residential cottages, formal landscaping appears never to have been a part of the design of the overall facility. Mature trees are located throughout Paso Robles and some shrubs mark the entrance to buildings, however much of the facility is covered with pavement or dead grass. A vocational horticulture area was located at the north end of the potential district, adjacent to the athletic fields (Exhibit 4).

*Recorded by: Alta Cunningham, Ascent Environmental *Date: February 2, 2016 ☒ Continuation ☐ Update

D3. Continued

Exhibit 1. School control building, not historic age.

Exhibit 2. Visitor's building, not historic age.

*Recorded by: Alta Cunningham, Ascent Environmental *Date: February 2, 2016 ☒ Continuation ☐ Update

D3. Continued

Exhibit 3. Baseball field at the north end of Paso Robles.

Exhibit 4. Vocational horticulture area at the north end of Paso Robles.

D6. Continued

HISTORICAL CONTEXT

Five important themes represent the historical context within which the potential district at Paso Robles is best understood: (1) early juvenile incarceration; (2) establishment of CYA; (3) innovations at CYA; (4) changes to the juvenile court system; and (5) prison planning and design. Discussion of these themes follows.

Early Juvenile Incarceration

Before the establishment of a formal institution for the discipline of juveniles in the state of California, it was common practice to send juvenile cases to San Quentin and Folsom state prisons to be incarcerated alongside adult prisoners. The California legislature attempted to confront this issue and in 1860 the State Reform School at Marysville was established as California's first state-run institution for the reform of juvenile offenders. It operated for eight years, until 1868, when the 28 remaining wards were transferred to the Industrial School at San Francisco, a city and county institution that was established in 1858 and operated until 1892 (RFB Consulting 2014). The purpose of this school was to provide troubled boys (under the age of 18) with detention, reform, and an education. Another institution, the Boys and Girls Aid Society of California was established in 1874 to provide for homeless, abused, and delinquent children and was funded entirely by the private sector, working with public agencies throughout California (CDCR 2015).

By the end of the 1880s, these small-scale institutions could no longer meet the needs of the growing number of juvenile offenders. Further, despite the Juvenile Probation Law (1883), which permitted judges to refer youths to the care of charitable organizations such as the Boys and Girls Aid Society, some judges still continued to refer juveniles to State prisons for felonies and local jails for misdemeanors. By 1888, the State Board of Prison Directors began to revive previous calls for creation of a state-run reform institution for young offenders (CDCR 2015).

In 1889 an act of the California Legislature established two state reform schools, the Reform School for Juvenile Offenders in Whittier (later known as the Whittier School and then the Fred C. Nelles School for Boys) which opened in 1891 and the Preston School of Industry in Ione which opened in 1892. These schools were managed under the Division of Institutions.

The Reform School for Juvenile Offenders differed somewhat from Preston in its approach to reform. The Preston Act provided for academic instruction as well as military training for boys aged eight to 18 and the cadets could be kept at Preston until the age of 21. In contrast, the Whittier act "did not discuss education or military training, and provided for the custody of boys and girls between the ages of ten and sixteen, who were to be committed for a definite term of one to five years" (CDCR 2015). The Preston School was governed by the State Board of Prison Directors until 1893, when the Governor appointed a board of trustees to supersede the board. The Whittier School was operated by a board of trustees from inception. Female wards were housed at the Whittier School until 1913, when a separate California School for Girls was established. The three reform schools operated independently until 1921, when they were placed under the jurisdiction of the Department of Institutions (RFB Consulting 2014).

Establishment of California Youth Authority

In 1941, the California Youth Correction Authority Act (Act) established a state juvenile corrections agency, the California Youth Authority (CYA). This legislation made California the first state to implement the American Law Institute's model Youth Correction Authority Act, which was developed and promoted by the Institute in response to reports of injustice and brutality in the existing juvenile justice system throughout the United States. For some months prior to the introduction of the Act, there had been a great deal of criticism relative to the management of the Whittier State School. There had also been some adverse criticism of the parole system and the management of at least one of the state penitentiaries. As a result of these months of criticism, women's clubs, service clubs, bar associations, and civic groups over the state generally were receptive to the basic principles set forth in the Youth Correction Authority Act (RFB Consulting 2014; Holton 1942).

The Act set forth the purpose of the CYA "to protect society by substituting training and treatment for retributive punishment of young persons found guilty of public offenses," and represents the first time an elected legislative body declared the purpose of juvenile corrections was rehabilitation rather than punishment (RFB Consulting 2014; Holton 1942). Although the California Youth Correction Authority Act remained fairly close to the American Law Institute's model act, the California legislature added amendments that had a strong imprint on the mission of the CYA. Probation powers were left with the courts, creating a two-tiered system, and the CYA was given responsibility for developing and coordinating delinquency prevention programs (RFB Consulting 2014; Skonovd 2003).

D6. Continued

In 1942, the state's three reform schools were moved from the Department of Institutions and placed under the CYA's jurisdiction. The first boy placed under care of the CYA was received on August 17, 1942. The arrival of another boy in September and one in October of that year, made a total of three youths received from the courts in the first eight months of CYA operation. At the completion of its eighth year, which occurred in January of 1950, CYA had received some 13,000 youths who had been committed to it or to its schools and camps (Holton 1950). Table 2 shows the development of CYA's schools (not including camps).

Table 2 Development of Youth Facilities in California

State Reform School at Marysville	1860
Reform School for Juvenile Offenders (later renamed Whittier State School, then Fred C. Nelles Youth Correctional Facility)	1891
Preston Youth Correctional Facility	1892
Ventura School for Girls	1913
Los Guillicos School for Girls	1943
Fricot Ranch School	1945
California Vocational Institution (later renamed Deuel Vocational Institution)	1946
El Paso de Robles Youth Correctional Facility	1947/ reconstructed in 1953
Southern Youth Correctional Reception Center-Clinic	1954
Northern Youth Correctional Reception Center-Clinic	1954
Youth Training School (later renamed Heman G. Stark Youth Correctional Facility)	1960

Source: Compiled by Ascent, 2016.

The shifting of the responsibility for the operation of the correctional schools to the CYA came as the result of an intensive analysis of the state's youth correctional facilities during the latter part of 1942 and the early part of 1943 made by a legislative committee and a number of professional persons. That investigation was a continuation of the criticism that had led to the Act. The investigation revealed critical need for additional training facilities. Hundreds of boys and girls were found to be confined in county jails and detention homes, in many instances under unfavorable or deplorable conditions, awaiting delivery to state schools (Holton 1950).

In 1944, the Prison Reorganization Act placed the CYA under the California Department of Corrections (CDC), where it remained until 1953, when it became an independent department once again. Also in 1944 a new law reduced the upper age limit for criminal court commitments from twenty-three to twenty-one. In 1945, the law was revised so that commitment of persons under twenty-one by the criminal court was made permissive rather than mandatory. In effect, this meant that the criminal court would determine which young criminals, between eighteen and twenty-one years of age, were to be handled as youthful offenders, and which were to be treated as adults. In this way, the CYA, which started out as a department to handle the older, youthful offender, quickly became an agency with broadened responsibilities for both juvenile and youthful offenders (West 1979).

Innovation at the CYA

Following the model developed at the Whittier State School by Superintendent Fred C. Nelles during his tenure from 1912-1927, the CYA developed a treatment model that focused on clinical diagnosis and the development of individual treatment plans. This model was patterned on the traditional medical treatment model; the young person developed a "social illness," the symptoms of which were indicated by delinquent acts. The offender was placed in a reception diagnostic center where the symptoms were studied, a diagnosis made, and a treatment plan developed. The "patient" was then transferred to the training school, where he or she underwent the prescribed treatment. The length of the stay was typically indeterminate, depending in part on the seriousness of the offending behavior and the "patient's" response to the institutional program. When treatment was considered complete, the "patient" enjoyed a period of "convalescence" on parole under the supervision of a parole agent (RFB Consulting 2014; Skonovd 2003; West 1979).

D6. Continued

Problems were quick to emerge for the newly formed CYA. The most pressing problem was the effect of a rapidly growing correctional program for young and juvenile offenders on local law enforcement agencies. The CDC's reputation for developing comprehensive programs, along with the availability of bed space, proved a tremendous attraction to local jurisdictions, which committed increasing numbers of offenders to the CYA. This practice produced a spiral in the construction of new institutions, which, in turn, encouraged further commitments by counties anxious to get troublesome offenders off the streets. The CYA's population increased from about 1,000 in 1943 to about 6,500 by 1965 (West 1979).

In the meantime, the medical model itself began to come under growing criticism. It was felt that the approach was idealistic rather than realistic. The ward would eventually have to return to the community where he would find that his experience while under the discipline of incarceration would not be wholly transferrable. Moreover, the counties themselves were ill-prepared to provide for young offenders in the community. Juvenile halls were overcrowded and inadequately staffed and county probation officers frequently had to preside over more than 200 cases each (West 1979 and Skonovd 2003).

In the 1950s through early-1970s, the CYA experimented with new diagnostic and treatment approaches, including guided-group interaction, forestry camps, therapeutic communities, group therapy, behavior modification, differential treatment, and transactional analysis. The CYA also experimented with treating juvenile delinquents in the community rather than in its institutions through the Community Treatment Project. Within 20 years the CYA had developed a national reputation for innovative juvenile correctional treatment and training and for experimental research. However, as time progressed, though some of the CYA's experimental research projects produced promising results, they were modest and fell far short of the hoped-for breakthroughs. Ward populations continued to grow (RFB Consulting 2014 and Skonovd 2003).

<u>The Community Treatment Project</u>

In 1961, the CYA launched a program that was designed to correct some of the shortcomings of the traditional medical model and provide for rehabilitation of offenders in a more normal setting than that allowed in the institutions. The experiment was called the Community Treatment Project (CTP). Instead of being assigned to an institution, after careful screening of "non-dangerous" offenders, the CTP participants were referred immediately to parole and were placed under intensive supervision. The program continued for thirteen years, during which it was periodically monitored and revised. It was found that certain classifications of offenders did, indeed, do better under the CTP than a control group of similar offenders who went through the traditional medical model cycle. But other classifications did not do as well. The project did not produce the hoped-for breakthrough which could reverse the tide of crime and delinquency and was terminated in 1974 (West 1979).

While the CTP was active, however, it gave strong impetus to other local agencies for the development of community programs for young offenders. This idea was further enhanced by the economic condition of state institutions. By the early 1960's, the cost was approximately $5,000 to keep a ward in an institution for a full year and construction of new institutions involved capital outlay costs per facility of upwards of $10 million. As the 1960's began, it appeared as though it might be necessary to build one institution every year into the foreseeable future. The potential tax burden, along with questions concerning the effectiveness of incarceration, became matters of increasing public and political concern (West 1979).

<u>Probation Subsidy Act</u>

The result of the CTP was the passage of the Probation Subsidy Act (PSA) by the state legislature in 1965. The probation subsidy program provided participating counties with assistance in proportion to the amount by which they reduced commitments based on past performance. The more that counties reduced their commitments, the more they were reimbursed. This afforded a built-in incentive for counties to keep a high number of offenders in the community rather than send them to state institutions. The PSA required that earnings be used in their entirety for probation supervision programs. The PSA did achieve its objective of reducing commitments. The juvenile court commitment rate to the CYA declined from 168.6 commitments per 100,000 youths in the ten to seventeen age bracket in 1965 to 46.7 in 1973 (West 1979).

D6. Continued

During the years that the probation subsidy was in existence, it brought profound changes in the number and nature of the CYA wards. From a high of 6,500 in 1965, CYA's population dropped to 4,000 by 1972. Three institutions were closed during the early 1970's, including Fricot Ranch and Paso Robles. As the number of wards declined, the average age and the criminal sophistication of the CYA wards showed a substantial increase. Approximately forty-two percent of wards in the mid-1970's were committed for crimes of violence, a proportion that is three times greater than it was in the mid-1960's. The number of females in the total ward population dropped well below 200 and as a result, Los Guillicos and Ventura School for Girls became co-educational. All of these factors are considered to be effects of probation subsidy, which encouraged counties to keep the less dangerous and less serious offenders at home and therefore tended to keep the younger, the less sophisticated and the female out of state institutions (West 1979).

Changes to the Juvenile Court System

In addition to the growing disillusionment with the effectiveness of rehabilitation methods, considerable new case law affected the CYA and the way it carried out its programs. Changes to the juvenile court system began with four Supreme Court rulings in early 1960s through the early 1970s. In 1961, a new law limited the use of detention as a deterrent, modified police discretion in the handling of juveniles, and most notably, provided a right to appointed counsel. These changes had the effect of significantly formalizing juvenile hearings. Perhaps the greatest change in institutional philosophy occurred in 1977. In response to federal mandates on status offenders, AB 3121 substantially removed status offenders from juvenile court jurisdiction and stiffened the penalty structure for juvenile criminal offenders. A status offender is someone charged with an offense that would not be a crime if committed by an adult. Common examples are running away from home, being truant from school, and being beyond parental control. This act significantly altered the course of the CYA by placing greater emphasis on public protection as opposed to rehabilitation. There were also changes in fiscal policy. In 1978 the Legislature approved the County Justice System Subvention Program to replace the 1965 PSA. This provided funding for a wider variety of programs, including law enforcement. Greater emphasis was placed on public protection, but there was still a performance factor, whereby counties could not increase commitments to the Youth Authority.

In making their arguments, the Justices questioned if juvenile courts had the resources, personnel, and facilities to fulfill their original intent of protection and reformation. They expressed concern that juveniles got the "worst of both worlds" with neither "the protections accorded to adults nor the solicitous care and regenerative treatment postulated for children." The cumulative effect of these four decisions made juvenile court proceedings more similar to those of the criminal court by incorporating some of the rigid safeguards of "due process of law" and stepping away from the flexibility earlier juvenile courts employed in dealing with delinquency (RFB Consulting 2014 and West 1979).

In the 1980s and 1990s, the CYA, like the CDC, suffered from budgetary cutbacks and public disillusionment. During this time, the CYA also became increasingly focused on heavy security as opposed to its traditional emphasis on training and treatment. However, the agency did continue to operate its juvenile forestry camps and introduced the Free Venture Program, which partnered with the private sector to provide employment experience, and the Leadership, Esteem, Ability, and Discipline (LEAD) program, an intensive boot camp program based on the California National Guard's officer training program. At its peak in 1996, the CYA's population was approximately 10,000 youth committed for a wide range of offenses. Financial incentives to counties, based on the belief that most juvenile offenders benefit from being housed closer to their families and communities, increased the number of offenders housed locally. Subsequently, legislation (Senate Bill 81) adopted in 2007 reserved CYA's (which became the DJJ in 2005) population to only those youths committed for the most serious and violent crimes. As a result of these changes, DJJ's population in 2011 was about 1,200, or less than 1 percent of all youthful offender arrests in California each year (CDCR 2011).

D6. Continued

Prison Planning and Design

In the 19th century, prison design was largely based upon two design systems – the outside cell design and the inside cell of the Auburn-type (named for a prison in New York). The outside cell design system was a rectangular structure with outside cells arranged on three levels, each with a balcony and/or window facing the outside. The cells were arranged around a large center hall that was utilized as a chapel, dining room, and workroom. The Auburn-type system consisted of interior, individual cells stacked on multiple levels and surrounded by interior hallways. They were completely enclosed within a building and were arranged around communal dining halls and workhouses. The Auburn-type system remained influential, though prison design in the 20th century continued to evolve in response to changing ideas about the rehabilitation and incarceration of prisoners. An increased emphasis on vocational training and education resulted in less restricted movement for prisoners.

In the early-20th century, a plan called the open campus evolved, derived from 18th century hospitals and 19th century prisons in Europe. The plan was influenced by the idea that the existing standards of vocational and academic training were failing and new standards for training were necessary. Facility planners began to focus on the inmate, his contacts with fellow inmates and how these contacts might be properly structured through new architectural devices. The result was the open campus plan, which placed less of an emphasis on security. In this plan, “cottages or dormitories along with school, dining and other service facilities might be grouped formally along a central mall […] and rectangular-shaped cottages or cell buildings were most commonly used.” In California, the plan began to be used in the late 1920s and early 1930s, especially for juvenile and women’s facilities.

Early youth facilities, such as the Reform School for Juvenile Offenders (later called the Nelles Youth Correctional Facility) in Whittier (1891) and the Preston School of Industry in Ione (1892), had more of an organic plan, but as the facilities expanded new construction took the form of the open campus plan with dormitories and cottages. From 1915 to 1934, the campus at Nelles Youth Correctional Facility was redesigned and facilities were improved and expanded. The Division of Architecture and Department of Public Works were responsible for the design and construction of the campus improvements, which included administration buildings, recreational facilities, staff residences, and several dormitory buildings. The primary buildings were situated around a central core that was accessed by two circular drives and surrounded by a park-like landscape setting (Exhibit 5). Preston Youth Correctional Facility was similarly expanded in the early 1950s and an example of the dormitories can be seen in Exhibit 6. Ventura Youth Correctional Facility (1942) was the first youth facility to have been initially designed with the open campus plan (Exhibit 7). El Paso de Robles Youth Correctional Facility followed soon after, with facilities designed in 1948 and construction beginning in early 1951 (Exhibit 8).

Paso Robles Development History

The El Paso de Robles Youth Correctional Facility, originally known as the Paso Robles School for Boys, was founded in 1947 by the CYA in response to a growing need for juvenile correctional facilities in the state. Preliminary studies conducted in 1943 recognized the need for three additional schools, one of which would be an intermediate school for boys between the ages of 15 and 17. As part of the former World War II Estrella Army Air Base, originally the school used the existing buildings and infrastructure on-site, which included 40 barracks buildings and a sewage disposal plant. The school staff included a superintendent, business manager, and a chief engineer (Paso Robles Journal 1954).

The first wards of the school were received on transfer from the Fred C. Nelles Youth Correctional Facility (previously known as the Whittier State School) on September 30, 1947. With the desire to develop an atmosphere of a "therapeutic community," the emphasis at Paso Robles was placed on exploratory skills and remedial classroom work for what was considered a “rather difficult age group who are too immature to benefit from the specialized pre-vocational program which is offered at Preston, and too mature to adjust at either Nelles or Fricot” (Youth Authority 1955 and Holton 1950).

Over the next few years, the facility was expanded from the original capacity of 60 to 140 boys. The planning and development of a new facility was soon under way. The expansion of bed capacity at Paso Robles was to relieve Nelles Youth Correctional Facility of some of its older boys. Construction of the new facility commenced in May 1951 and contracts were staggered for various phases of work (Paso Robles Journal 1954). None of the original 1947 buildings from the Estrella Army Base were left.

***Recorded by:** Alta Cunningham, Ascent Environmental ***Date:** February 2, 2016 ☒ Continuation ☐ Update

D3. Continued

Exhibit 5. Nelles Youth Facility; older, more organic layout to the north; newer open campus with cottages to the south.

Exhibit 6. Greenbrier Dormitory, Preston Youth Correctional Facility.

*Recorded by: Alta Cunningham, Ascent Environmental *Date: February 2, 2016 ☒ Continuation ☐ Update

D6. Continued

Exhibit 7. Open campus design, Ventura Youth Correctional Facility.

Exhibit 8. Avenal Cottage, El Paso de Robles Youth Correctional Facility.

D6. Continued

During the years that the previously discussed probation subsidy was in existence, the CYA's population dropped from a high of 6,500 in 1965 to 4,000 by 1972. Three institutions were closed during the early 1970's, including Paso Robles in 1971. As the number of wards declined, the average age and the criminal sophistication of the CYA wards showed a substantial increase. Because Paso Robles was intended for older boys, as the average age of the CYA wards increased, Paso Robles opened once again in 1974. After the passage of Senate Bill 81, which stated that only those youths who committed the most serious crimes would be committed to state facilities, the DJJ's population fell rapidly. Paso Robles was closed permanently on July 31, 2008.

APPLICATION OF NRHP CRITERIA

The period of significance for this potential district is 1953-1966. This represents the date of construction the first buildings were completed until 50 years prior to this evaluation. While the rehabilitation and education focus of Paso Robles did not end until the passage of AB 3121 in 1977, 1966 was chosen as the end date for the period of significance because according to page 42 of National Register Bulletin 16a, "Events and activities occurring within the last 50 years must be exceptionally important to be recognized as "historic" and to justify extending a period of significance beyond the limit of 50 years ago." As explained in this document, the CYA's continued mission of rehabilitation at Paso Robles does not rise to the *exceptional* level of importance.

To be considered eligible for listing in the NRHP under Criterion A, the El Paso de Robles Youth Correctional Facility must be associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history. Paso Robles was opened in 1947 in response to a growing need for juvenile correctional facilities in the state, during a period of rapid expansion. The facility soon expanded and the original Estrella Army Air Base barracks were replaced by permanent buildings. Paso Robles was designed in a campus-style, similar to previous youth facilities, including Nelles Youth Correctional Facility (1891), Preston Youth Correctional Facility (1892), and Ventura Youth Correctional Facility (1942).

There is no evidence that Paso Robles had any specific contribution to the rehabilitation or educational goal of the CYA. The facility was designed for youths between the ages of 15 and 17, however, this was simply a continuation of the rehabilitation plan that already existed at the previous youth facilities. Therefore, within the larger context of the development of youth facilities in California, the 1953 construction of Paso Robles does not reflect a significant development, and Paso Robles does not appear to be eligible for listing in the NRHP under Criterion A.

To be considered eligible for listing in the NRHP under Criterion B, Paso Robles must be associated with the lives of persons significant in our past. Paso Robles lacks a significant direct association with any individual important in the development of prisons in California, notable directors, wardens, master architects, or other persons significant in our past. The buildings were designed by staff architects and engineers at the California Department of Public Works, Division of Architecture in Sacramento, who designed prevalent buildings throughout the state. Consequently, Paso Robles does not appear to be eligible for listing in the NRHP under Criterion B.

D6. Continued

The design of Paso Robles is characteristic of post-World War II educational facilities. New school buildings of that era "were no longer classical or colonial, Georgian or Gothic in architectural style but were truly modern in that they were one-story, flat-roofed structures enclosed in either glass and metal window wall systems or brick and concrete wall systems" (Tanner & Lackney 2005:12). These buildings are ones of many undistinguished, reinforced brick buildings constructed throughout the state post-World War II, including educational and youth correctional facilities discussed previously, and lack association with the work of an important architect or builder. Therefore, Paso Robles does not appear to possess sufficient design or construction value to warrant inclusion in the NRHP under Criterion C.

Criterion D generally applies to archaeological resources or other resources that through study of construction details can provide information that cannot be obtained in other ways. Construction details about the existing buildings have been documented. The El Paso de Robles Youth Correctional Facility does not appear to be eligible for NRHP inclusion under Criterion D because the facility is not likely to yield any additional important information about our history.

APPLICATION OF CALIFORNIA HISTORICAL LANDMARK CRITERIA

In regard to Paso Robles's eligibility for California Historical Landmark status, neither the facility nor any of the individual buildings appear to meet any of the criteria for landmark designation. It is not the first, last, only, or most significant example of a correctional facility in the state of California, or within a large geographic region of the state. Nor does Paso Robles have an association with an individual or group having a profound influence on the history of California. The buildings at Paso Robles do not appear to be a prototype of, or an outstanding example of, a period, style, architectural movement or construction. Nor do sources indicate it is one of the more notable works, or the best surviving work in a region of a pioneer architect, designer or master builder.

INTEGRITY

For a property to retain and convey historic integrity it must possess most of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. The El Paso de Robles Youth Correctional Facility appears to retain the majority of its integrity to the 1953-1966 period of significance, as it continues to convey its original purpose primarily through form and orientation. The addition of 10 non-historic age buildings has slightly lessened the original setting, design, and feeling, but not to a significant degree. The largest of these non-historic age buildings are located along the perimeter of the youth facilities and therefore do not detract from the feeling. Paso Robles retains high integrity for its location and association as none of the original buildings have been moved since construction. It also retains high integrity for materials and workmanship as very few changes aside from maintenance (paint, roof) have been made to the exterior of the 1953-1966 buildings.

CONCLUSION

For all of the above reasons, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. The period of significance is 1953 to 1966, the date of construction of the first buildings was completed until 50 years prior to this evaluation. The district was one of many facilities constructed to accommodate the rapid CYA population growth after World War II through the 1950s. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California.

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 1A – Administration
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The administration building is located along the east border of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to Naciemento Cottage & Infirmary and the academic school. This single-story brick building has an irregular rectangular floor plan of 14,406 square feet. The building roughly measures 250 feet by 60 feet, though some portions are as wide as 80 feet and others only 45 feet. The roof is a low-pitched cross-gabled tar and gravel. One gabled end extends over the main entrance and is supported by metal poles towards the front and on one either side by half-length walls clad in decorative stone. The main entrance is a glass wall with a double personnel door.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison administration)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 2D – Naciemento Cottage & Infirmary
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** Naciemento Cottage and Infirmary is located at the southeast border of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to the administration building and the laundry/kitchen/boiler building. This single-story brick building has a primarily "L" shaped floor plan of approximately 15,089 square feet. There are shallow extensions measuring approximately 10 feet on the east side and 20 feet on the north side of the apex of the "L". The building has a low-pitched side-gabled roof of tar paper and gravel. Windows are metal casement. Decorative brick cladding accents the corners of the east extension.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison infirmary)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 3LP – Laundry/Commissary
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The laundry/commissary (3L) is located along the southern border of the El Paso de Robles Youth Correctional Facility (Paso Robles), and is adjacent to the Naciemento Cottage & Infirmary. This single-story brick building is the middle portion of the kitchen (4K) and boiler plant (3P) building. This portion of the buildings is approximately 10,000 square feet and has a low-pitched side-gabled roof of tar paper and gravel. The building is accessed by single personnel doors on the west side. Fenestration is metal-frame picture windows.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison laundry)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2015. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 3P – Boiler Plant
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The boiler plant (3P) is located along the southern border of the El Paso de Robles Youth Correctional Facility (Paso Robles), and is adjacent to the Naciemento Cottage & Infirmary. This single-story brick building is connected to the southern portion of the kitchen (4K) and laundry (3L) building. The boiler plant is approximately 3,500 square feet and has a low-pitched side-gabled roof of tar paper and gravel. The building is accessed by single personnel doors on the north and west sides. Windows have been covered by protective screens.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison boiler)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing southeast, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-40-041390
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 4K – Kitchen/Bakery
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The kitchen/bakery (4K) is located along the southern border of the El Paso de Robles Youth Correctional Facility (Paso Robles), and is adjacent to the Naciemento Cottage & Infirmary. This single-story brick building is connected to the northern portion of the boiler plant (3P) and laundry (3L) building. The kitchen/bakery portion of the buildings is approximately 20,500 square feet and has a low-pitched side-gabled roof of tar paper and gravel. The building is accessed by single personnel doors on the north and west sides. A visor roof extends from the west façade to create a cover to the porch.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison kitchen)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing east, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2015. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-40-041390
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 55R – Gymnasium
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The gymnasium is located in the north-central portion of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to the 100-man camp and the old gymnasium. This single-story brick building has a rectangular floor plan measuring approximately 120 feet by 50 feet. The building has a low-pitched side-gabled roof of tar paper and gravel. The building is accessed by single personnel doors on the north and east sides. A drained pool is located on the south side, enclosed by a chain link fence.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison gymnasium)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing southwest, 10/1/2014

***P6. Date Constructed/Age and Source:** 1962/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-40-041390
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 5D – Avenal Cottage
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** Avenal Cottage is located towards the southeast corner of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to Los Osos West Cottage and the kitchen/bakery building. Avenal Cottage was constructed in 1953 and has the same floor plan, design, and materials as Cayucos, Morro, Nipomo, Cholame, and Los Osos East cottages. These single-story brick buildings have an "L" shaped floor plan of approximately 8,110 square feet. The buildings have a low-pitched side-gabled roof of tar paper and gravel. A stone chimney is located along the primary façade, to the right of the double entrance doors. Windows are metal casement, typically in groups of five. The interior portion of the "L" is fenced and contains a basketball court.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison dormitory)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing south, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-40-041390
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 6D – Cholame Cottage
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** Cholame Cottage is located towards the center of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to Los Osos East Cottage and the auditorium. Cholame Dormitory was constructed in 1953 and has the same floor plan, design, and materials as Avenal, Nipomo, Cayucos, Morro, and Los Osos East cottages. These single-story brick buildings have an "L" shaped floor plan of approximately 8,110 square feet. The buildings have a low-pitched side-gabled roof of tar paper and gravel, a small portion of which extends to form an entry porch. The porch is supported on one side by a wall clad in decorative stone. Windows are metal casement, typically in groups of five. The interior portion of the "L" is fenced and contains a basketball court.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison dormitory)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing north, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 7D – Cayucos Cottage
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** Cayucos Cottage is located towards the southern border of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to San Simeon and Los Osos West cottages. Cayucos Cottage was constructed in 1953 and has the same floor plan, design, and materials as Avenal, Morro, Nipomo, Cholame, and Los Osos East cottages. These single-story brick buildings have an "L" shaped floor plan of approximately 8,110 square feet. The buildings have a low-pitched side-gabled roof of tar paper and gravel, a small portion of which extends to form an entry porch. The porch is supported on one side by a wall clad in decorative stone. Windows are metal casement, typically in groups of five. The interior portion of the "L" is fenced and contains a basketball court.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison dormitory)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing south, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 8D – Los Osos East Cottage
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** Los Osos East Cottage is located towards the center of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to Nipomo and Cholame cottages. Los Osos East Cottage was constructed in 1954 and has the same floor plan, design, and materials as Avenal, Nipomo, Cayucos, Morro, and Cholame cottages. These single-story brick buildings have an "L" shaped floor plan of approximately 8,110 square feet. The buildings have a low-pitched side-gabled roof of tar paper and gravel, a small portion of which extends to form an entry porch. The porch is supported on one side by a wall clad in decorative stone. Windows are metal casement, typically in groups of five. The interior portion of the "L" is fenced and contains a basketball court.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison dormitory)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing north, 10/1/2014

***P6. Date Constructed/Age and Source:** 1954/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 9D – Nipomo Cottage
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Nipomo Cottage is located towards the center of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to Morro and Los Osos East cottages. Nipomo Cottage was constructed in 1953 and has the same floor plan, design, and materials as Avenal, Morro, Cayucos, Cholame, and Los Osos East cottages. These single-story brick buildings have an "L" shaped floor plan of approximately 8,110 square feet. The buildings have a low-pitched side-gabled roof of tar paper and gravel. A stone chimney is located along the primary façade, to the left of the double entrance doors. Windows are metal casement, typically in groups of five. The interior portion of the "L" is fenced and contains a basketball court.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison dormitory)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing north, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 10D – Morro Cottage
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Morro Cottage is located towards the center of the El Paso de Robles Youth Correctional Facility (Paso Robles), west of Nipomo Cottage. Morro Cottage was constructed in 1953 and has the same floor plan, design, and materials as Avenal, Nipomo, Cayucos, Cholame, and Los Osos East cottages. These single-story brick buildings have an "L" shaped floor plan of approximately 8,110 square feet. The buildings have a low-pitched side-gabled roof of tar paper and gravel. A stone chimney is located along the primary façade, to the left of the double entrance doors. Windows are metal casement, typically in groups of five. The interior portion of the "L" is fenced and contains a basketball court.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison dormitory)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing north, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 11RJE – Auditorium
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The old gymnasium is located in the central-eastern portion of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to the school control center and the canteen. This single-story building has a rectangular floor plan of 7,115 square feet. The main portion of the building, measuring approximately 100 feet by 55 feet, is poured concrete and has a low-pitched side-gabled roof. A half-height brick extension, measuring approximately 55 feet by 30 feet, with a flat roof is located on the south side. The building is accessed on the eastern façade by a double personnel door on the brick extension, and a single personnel door on the main portion of the building.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison multipurpose building)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1956/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **CONTINUATION SHEET**	Primary # P-40-041390 HRI# Trinomial

Page 2 **of** 2 ***Resource Name or #** 12E – Academic School

***Recorded by:** Alta Cunningham, Ascent Environmental ***Date:** October 1, 2014 ☒ Continuation ☐ Update

Looking east to central hallway.

Looking southeast towards main building.

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 12E – Academic School
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone , mE/ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The academic school is located along the eastern boundary of the El Paso de Robles Youth Correctional Facility (Paso Robles), between the administration building and the vocational school. The academic school is a series of six classrooms connected by a central glass corridor. The brick buildings are single-story with a rectangular floor plan and a shed design. Windows are metal-frame picture windows, some of which have been painted to help control heat.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison classrooms)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Facing northeast, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2015. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 13M – Vocational Shop
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The vocational shop is located in the central-eastern portion of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to the vocational school and the old gymnasium. This single-story building has a rectangular floor plan of 15,144 square feet, clad in brick on the lower half and corrugated metal on the upper half. It has a flat roof of tar paper and gravel. Fenestration is metal-frame picture windows. The building is accessed by double personnel doors on the north side.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison shops)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing southwest, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-40-041390
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 14R – Old Gymnasium
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The old gymnasium is located in the north-central portion of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to the vocational shop and the new gymnasium. This single-story brick building has a rectangular floor plan of 10,968 square feet. The building has a central mass with a low-pitched side-gabled roof measuring approximately 100 feet by 60 feet. Half-height extensions with flat roofs are located on the east (20 feet wide) and west sides (25 feet wide). The building is accessed by single personnel doors on the east and west sides. Metal-framed hopper windows are located on the extensions while multi-light windows are location on the central portion.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison gymnasium)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing southwest, 10/1/2014

***P6. Date Constructed/Age and Source:** 1953/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **CONTINUATION SHEET**	Primary # P-40-041390 HRI# Trinomial

Page 2 **of** 2 ***Resource Name or #** 17D – Cambria Cottage

***Recorded by:** Alta Cunningham, Ascent Environmental ***Date:** October 1, 2014 ☒ Continuation ☐ Update

Looking northwest.

An addition measuring approximately 30 feet by 30 feet was constructed at the west end after 1994.

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 17D – Cambria Cottage
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)
***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Cambria Cottage is located towards the center of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to the Living/Education Unit (Bldg 270) and the infirmary. This single-story brick building has an "L" shaped floor plan of approximately 7,900 square feet. The building has a low-pitched side-gabled roof of tar paper and gravel. A shallow, square extension is located at the apex of the "L". Windows are metal casement, with a soldier course underneath angled outward. An addition measuring approximately 30 feet by 30 feet was constructed at the west end after 1994. While named "cottage," this building functioned as an isolation unit instead of standard housing cottage.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison housing)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1956/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-40-041390
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 18T – Vocational School
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone __, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The vocational school is located along the north-east boundary of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to the vocational shop and the academic school. This single-story building has a rectangular floor plan of 8,436 square feet, clad in brick on the lower half and corrugated metal on the upper half. It has a flat roof of tar paper and gravel. Windows are ribbons of metal-frame picture windows, some of which have been painted to help control heat. The building is accessed by single personnel doors on the north, east, and west sides.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison shops)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing southeast, 10/1/2014

***P6. Date Constructed/Age and Source:** 1957/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 19D – Los Osos West Cottage
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Los Osos West Cottage is located towards the southern border of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to Cayucos and Avenal cottages. Los Osos West Cottage was constructed in 1957 and has the same floor plan, design, and materials as San Simeon Cottage. These single-story brick buildings have an "L" shaped floor plan of approximately 8,060 square feet. The buildings have a low-pitched side-gabled roof of tar paper and gravel. A stone chimney is located along the primary façade, to the right of the double entrance doors. Windows are metal casement, typically in groups of five. The interior portion of the "L" is fenced and contains a basketball court.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison dormitory)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing south, 10/1/2014

***P6. Date Constructed/Age and Source:** 1957/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) 20D – San Simeon Cottage
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
San Simeon Cottage is located towards the southern border of the El Paso de Robles Youth Correctional Facility (Paso Robles), adjacent to Cayucos Cottage. San Simeon Dormitory was constructed in 1957 and has the same floor plan, design, and materials as Los Osos West Cottage. These single-story brick buildings have an "L" shaped floor plan of approximately 8,060 square feet. The buildings have a low-pitched side-gabled roof of tar paper and gravel, a small portion of which extends to form an entry porch. The porch is supported on one side by a wall clad in decorative stone. Windows are metal casement, typically in groups of five. The interior portion of the "L" is fenced and contains a basketball court.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP39-Other (prison dormitory)

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing south, 10/1/2014

***P6. Date Constructed/Age and Source:** 1957/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014
***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-40-041390
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) R1 – Residence 1
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ____ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone ___, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Residence 1 (R1) is the southern-most staff residence, located at the western boundary of the El Paso de Robles Youth Correctional Facility (Paso Robles). The single-story, 1,350 square foot building, is primarily clad in stucco with wood siding on the left side. A section of the metal-singled, complex-hipped roof extends to form an entry porch. The left side was originally a garage, but has been converted to living space. Windows are metal-framed; a 3-lite slider is located on the converted garage portion, and two 2-lite sliders are located behind the over-grown hedge. A third 2-lite slider is located at the far right of the primary façade. R1 is identical to the neighboring R2 and R3, aside from the converted garage.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP2. Single Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1961/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) R2 – Residence 2
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone __, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Residence 2 (R2) is north of R1, located at the western boundary of the El Paso de Robles Youth Correctional Facility (Paso Robles). The single-story, 1,350 square foot building, is clad in stucco and has a roof of composite shingles. A section of the complex-hipped roof extends to form an entry porch. An attached two-car garage with roll-up door is located on the left. Windows are metal-framed; two 2-lite sliders are located between the garage and the front door and a third 2-lite slider is located at the far right of the primary façade. R2 is identical to the neighboring R1 and R3, aside from the converted garage on R1.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP2. Single Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1961/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) R3 – Residence 3
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone __, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Residence 3 (R3) is located between R2 and R4, at the western boundary of the El Paso de Robles Youth Correctional Facility (Paso Robles). The single-story, 1,350 square foot building, is clad in stucco and has a roof of composite shingles. A section of the complex-hipped roof extends to form an entry porch. An attached two-car garage with two lift-up doors is located on the left. Windows are metal-framed; two 2-lite sliders are located between the garage and the front door and a third 2-lite slider is located at the far right of the primary façade. R2 is identical to the neighboring R1 and R3, aside from the converted garage on R1.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP2. Single Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1964/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) R4 – Residence 4
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone __, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Residence 4 (R4) is located between R5 and R3, at the western boundary of the El Paso de Robles Youth Correctional Facility (Paso Robles). The single-story, 1,510 square foot building, is clad in stucco. The composition-shingled roof is end-gabled with a hipped projection at the north end. The front door is located just right of center on the primary facade. Windows are wood-framed single-hung. A detached, 400 square foot, front-gabled garage is set-back on the left side of the residence.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP2. Single Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing west, 10/1/2014

***P6. Date Constructed/Age and Source:** 1954/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) R5 – Residence 5
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone __, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
Residence 5 (R5) is south of R6, located at the western boundary of the El Paso de Robles Youth Correctional Facility (Paso Robles). The single-story, 1,132 square foot building, is a "Cape Cod" style with a side-gabled roof and a center gabled entry. The building is clad in stucco and wood siding with a metal-singled roof. A recessed door is located on the right side of the entranceway. Windows are wood-framed single-hung, with two located left of the front door, two left of the projecting entrance way, and three right of the front door. R5 is identical to the neighboring R6, with a 400 square foot, front-gabled, shared garage between the two.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP2. Single Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing southwest, 10/1/2014

***P6. Date Constructed/Age and Source:** 1954/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California X The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **P-40-041390**
HRI #
Trinomial
NRHP Status Code

Other Review Code | Reviewer | Date | Listings

Page 1 **of** 1 ***Resource Name or #:** (Assigned by recorder) R6 – Residence 6
P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**
***a. County** San Luis Obispo **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Paso Robles **Date** ____ **T** 26S; **R** 12E; NE 1/4 ☐ **of** SE 1/4 ☐ **of Sec** 14; ___ **B.M.**
c. Address 4545 Airport Road City Paso Robles Zip 93446
d. UTM: (Give more than one for large and/or linear resources) Zone __, ____ mE/ ____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Residence 6 (R6) is the northern-most staff residence, located at the western boundary of the El Paso de Robles Youth Correctional Facility (Paso Robles). The single-story, 1,132 square foot building, is a "Cape Cod" style with a side-gabled roof and a center gabled entry. The building is clad in stucco and wood siding with a metal-singled roof. A recessed door is located on the right side of the entranceway. Windows are wood-framed single-hung, with two located left of the front door, two left of the projecting entrance way, and three right of the front door. R6 is identical to the neighboring R5, with a 400 square foot, front-gabled, shared garage between the two.

This building is not associated with events that have made a significant contribution to the broad patterns of our nation's, California's, or local history; historical research did not reveal any individual importance in the development of prisons in California, notable wardens, master architects, or other persons significant in our past, that have direct important association with the building; it lacks architectural distinction, does not have artistic qualities, is not the work of a master; and the building does not appear to be eligible for NRHP inclusion under Criterion D because it is not likely to yield any additional important information about our history. The building also does not appear to be eligible for listing as a California Historical Landmark. In addition, Paso Robles does not appear to meet any of the criteria necessary for listing in the NRHP or as a California Historical Landmark. While Paso Robles was focused on the rehabilitation and education of boys between the ages of 15 and 17, it does not appear to be associated with specific events important to the history of prison development in California (see Paso Robles district evaluation forms).

***P3b. Resource Attributes:** HP2. Single Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
5b. Description of Photo: Primary façade, facing southwest, 10/1/2014

***P6. Date Constructed/Age and Source:** 1954/CDCR El Paso de Robles Records
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
State of California
Dept. of Corrections and Rehabilitation
P.O. Box 942883
Sacramento, CA 94283

***P8. Recorded by:**
Alta Cunningham, Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

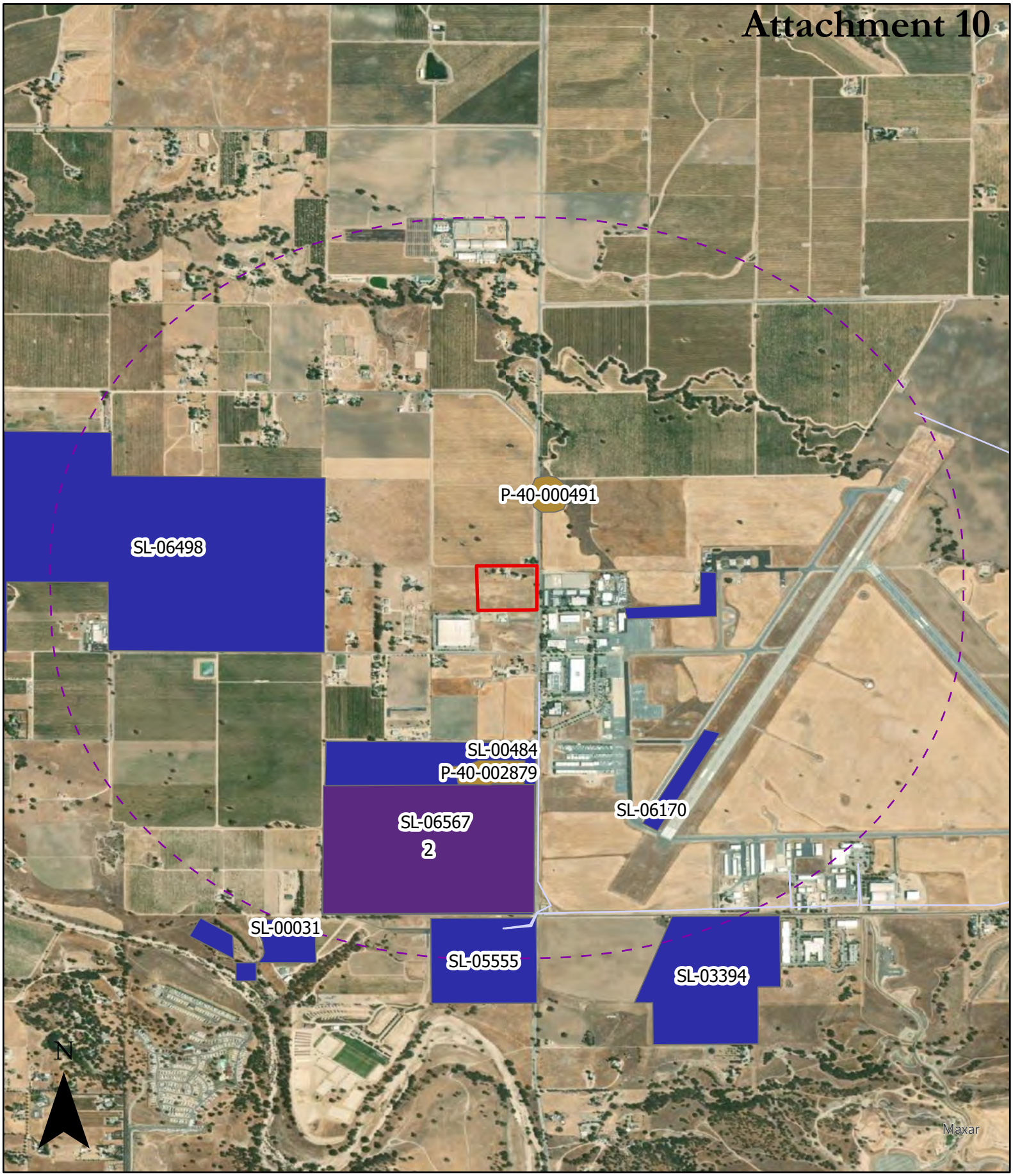
***P9. Date Recorded:** 10/1/2014

***P10. Survey Type:** Intensive

***P11. Report Citation**: Ascent Environmental. 2016. *Public Resource Code 5024 and 5024.5 Compliance Report for El Paso de Robles Youth Correctional Facility.* Sacramento, CA.

***Attachments:** ☒NONE ☐Location Map ☐Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

Attachment 10



Project Area

1-mile Buffer

Miles: 0 0.24 0.48 0.96

Kilometers: 0 0.24 0.49 0.98 1.47 1.96

Scale: 1:22,448

MATERIAL CULTURE CONSULTING

Attachment 10

Appendix C: NAHC Results
and Native American
Correspondence

Attachment 10

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: 5175 Airport Road Project

County: San Luis Obispo

USGS Quadrangle Name: Paso Robles

Township: 26S **Range:** 12E **Section(s):** 11

Company/Firm/Agency: Material Culture Consulting, Inc.

Street Address: 2701-B North Towne Avenue

City: Pomona **Zip:** 91767

Phone: 510.589.0467

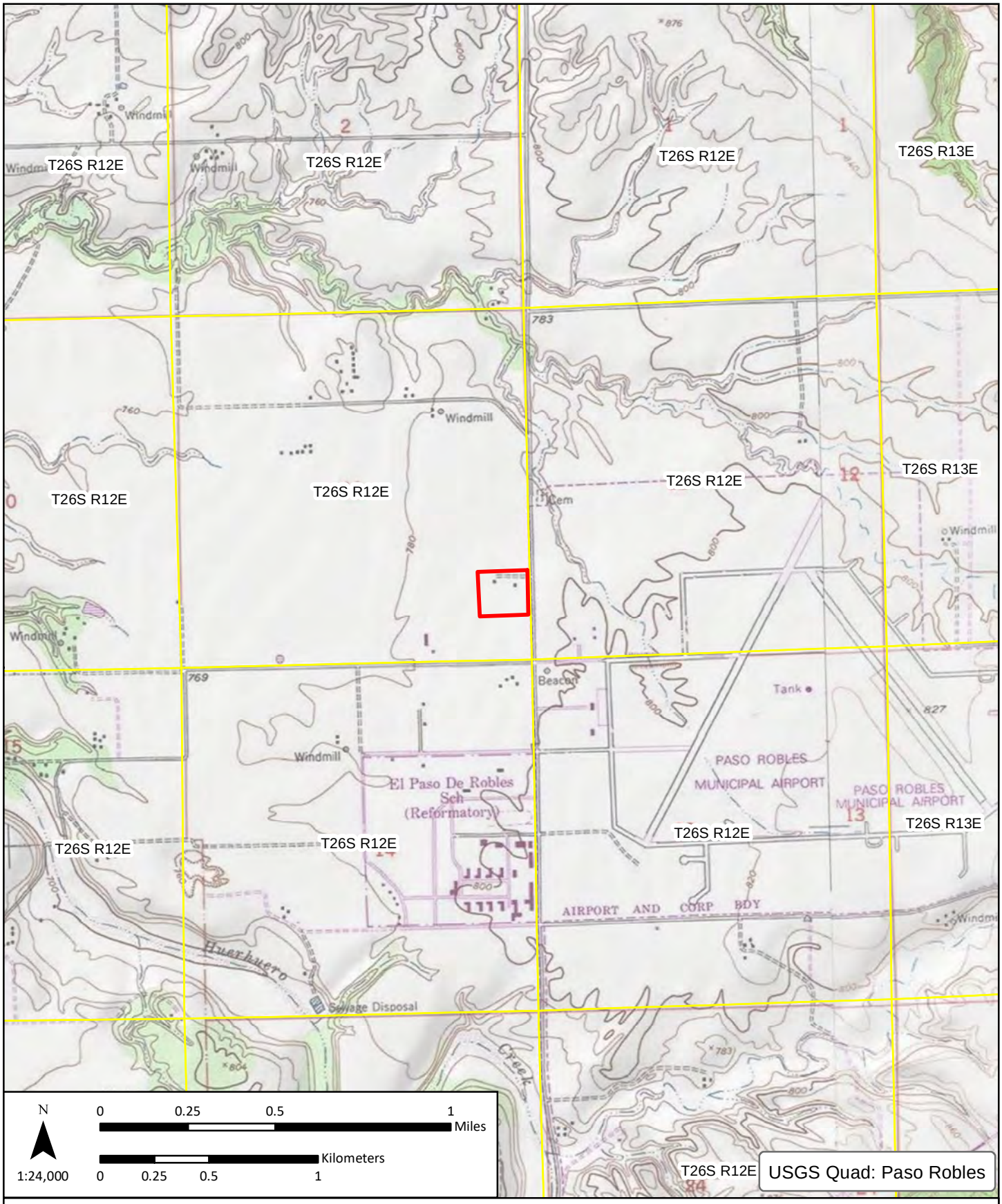
Fax: 626.249.0479

Email: lily@materialcultureconsulting.com

Project Description:

This project includes the construction of a small solar installation associated with nearby wine distribution center.

Attachment 10



Project Area

PLSS

MATERIAL CULTURE CONSULTING

STATE OF CALIFORNIA Gavin Newsom, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
Russell Attebery
Karuk

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 31, 2022

Lily Arias
Material Culture Consulting, Inc.

Via Email to: lily@materialcultureconsulting.com

Re: 5175 Airport Road Project, San Luis Obispo County

Dear Ms. Arias:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Luis Obispo County
5/31/2022

Barbareno/ Ventureno Band of Mission Indians
Patrick Tumamait,
992 El Camino Corto — Chumash
Ojai, CA, 93023
Phone: (805) 216 - 1253

Barbareno/Ventureno Band of Mission Indians
Julie Tumamait-Stenslie, Chairperson
365 North Poli Ave — Chumash
Ojai, CA, 93023
Phone: (805) 646 - 6214
jtumamait@hotmail.com

Barbareno/ Ventureno Band of Mission Indians
Annette Ayala,
188 S. Santa Rosa Street — Chumash
Ventura, CA, 93001
Phone: (805) 515 - 9844
annetteayala78@yahoo.com

Barbareno/ Ventureno Band of Mission Indians
Brenda Guzman,
58 N. Ann Street, #8 — Chumash
Ventura, CA, 93001
Phone: (209) 601 - 4676
brendamguzman@gmail.com

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street — Chumash
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net

Northern Chumash Tribal Council
Violet Walker, Chairperson
P.O. Box 6533 — Chumash
Los Osos, CA, 93412
Phone: (760) 549 - 3532
violetsagewalker@gmail.com

Salinan Tribe of Monterey, San Luis Obispo Counties
Patti Dunton, Tribal Administrator
7070 Morro Road, Suite A — Salinan
Atascadero, CA, 93422
Phone: (805) 464 - 2650
info@salinantribe.com

San Luis Obispo County Chumash Council
1030 Ritchie Road — Chumash
Grover Beach, CA, 93433

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8 — Southern Valley Yokut
Lemoore, CA, 93245
Phone: (559) 924 - 1278
Fax: (559) 924-3583

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517 — Chumash
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
kkahn@santaynezchumash.org

Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
P. O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
joey.garfield@tulerivertribe-nsn.gov

Tule River Indian Tribe
Kerri Vera, Environmental Department
P. O. Box 589 — Yokut
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
kerri.vera@tulerivertribe-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 5175 Airport Road Project, San Luis Obispo County.

Native American Heritage Commission
Native American Contact List
San Luis Obispo County
5/31/2022

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589 Yokut
Porterville, CA, 93258
Phone: (559) 781 - 4271
Fax: (559) 781-4610
neil.peyron@tulerivertribe-nsn.gov

Xolon-Salinan Tribe
Karen White, Chairperson
P. O. Box 7045 Salinan
Spreckels, CA, 93962
Phone: (831) 238 - 1488
xolon.salinan.heritage@gmail.com

Xolon-Salinan Tribe
Donna Haro, Tribal Headwoman
P. O. Box 7045 Salinan
Spreckels, CA, 93962
Phone: (925) 470 - 5019
dhxolonaakletse@gmail.com

yak tityu tityu yak tiłhini – Northern Chumash Tribe
Mona Tucker, Chairperson
660 Camino Del Rey Chumash
Arroyo Grande, CA, 93420
Phone: (805) 748 - 2121
olivas.mona@gmail.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 5175 Airport Road Project, San Luis Obispo County.

June 2, 2022

Mr. Patrick Tumamait
Barbareno/ Ventureno Band of Mission Indians
992 El Camino Corto
Ojai, CA 93023

RE: Proposed 5175 Airport Road Project, San Luis Obispo County; Paso Robles USGS Quadrangle

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Ms. Julie Tumamait-Stenslie, Chairperson
Barbareno/ Ventureno Band of Mission Indians
365 North poli Avenue
Ojai, CA 93023

RE: Proposed 5175 Airport Road Project, **San Luis Obispo County; Paso Robles USGS Quadrangle**

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Ms. Annette Ayala
Barbareno/ Ventureno Band of Mission Indians
188 S. Santa Rosa Street
Ventura, CA 93001

RE: Proposed 5175 Airport Road Project, **San Luis Obispo County; Paso Robles USGS Quadrangle**

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Ms. Brenda Guzman
Barbareno/ Ventureno Band of Mission Indians
58 N. Ann Street, #8
Ventura, CA 93001

RE: Proposed 5175 Airport Road Project, San Luis Obispo County; Paso Robles USGS Quadrangle

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Mr. Julio Quair, Chairperson
Chumash Council of Bakersfield
729 Texas Street
Bakersfield, CA 93307

RE: Proposed 5175 Airport Road Project, San Luis Obispo County; Paso Robles USGS Quadrangle

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Ms. Violet Walker, Chairperson
Northern Chumash Tribal Council
PO Box 6533
Los Osos, CA 93412

RE: Proposed 5175 Airport Road Project, San Luis Obispo County; Paso Robles USGS Quadrangle

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Ms. Patti Dunton, Tribal Administrator
Salinan Tribe of Monterey, San Luis Obispo Counties
7070 Morro Road, Suite A
Atascadero, CA 93422

RE: Proposed 5175 Airport Road Project, **San Luis Obispo County; Paso Robles USGS Quadrangle**

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

MATERIAL CULTURE
CONSULTING

San Luis Obispo County Chumash Council
1030 Ritchie Road
Grover Beach, CA 93433

RE: Proposed 5175 Airport Road Project, San Luis Obispo County; Paso Robles USGS Quadrangle

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Mr. Leo Sisco, Chairperson
Santa Rosa Rancheria Tachi Yokut Tribe
PO Box 8
Lemoore, CA 93245

RE: Proposed 5175 Airport Road Project, San Luis Obispo County; Paso Robles USGS Quadrangle

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Mr. Kenneth Kahn, Chairperson
Santa Ynez Band of Chumash Indians
PO Box 517
Santa Ynez, CA 93460

RE: Proposed 5175 Airport Road Project, San Luis Obispo County; Paso Robles USGS Quadrangle

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Mr. Joey Garfield, Tribal Archaeologist
Tule River Indian Tribe
PO Box 589
Porterville, CA 93258

RE: Proposed 5175 Airport Road Project, San Luis Obispo County; Paso Robles USGS Quadrangle

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

June 2, 2022

Ms. Kerri Vera, Environmental Department
Tule River Indian Tribe
PO Box 589
Porterville, CA 93258

RE: Proposed 5175 Airport Road Project, San Luis Obispo County; Paso Robles USGS Quadrangle

Greetings,

The project proposes the development of a 11.4-acre site in the City of Paso Robles, CA (see attached map). Material Culture Consulting, Inc (MCC) is conducting the cultural resources review of the project to support preparation of the environmental documents. As part of our background research and forthcoming survey, we would like to invite you to share any knowledge of potential cultural resources within the project area. Please note - this request is **not** part of any formal local, state, or federal consultation process, and all requests for consultation should be directed to the appropriate Lead CEQA Agency, the City of Paso Robles.

MCC contacted the Native American Heritage Commission (NAHC) on April 29, 2022, to request review of the Sacred Lands File and for a list of tribes with traditional lands and/or cultural places within the area. The NAHC responded on June 1, 2022, stating that the Sacred Lands File review resulted in **NEGATIVE** results. The NAHC provided your contact information as part of the outreach list.

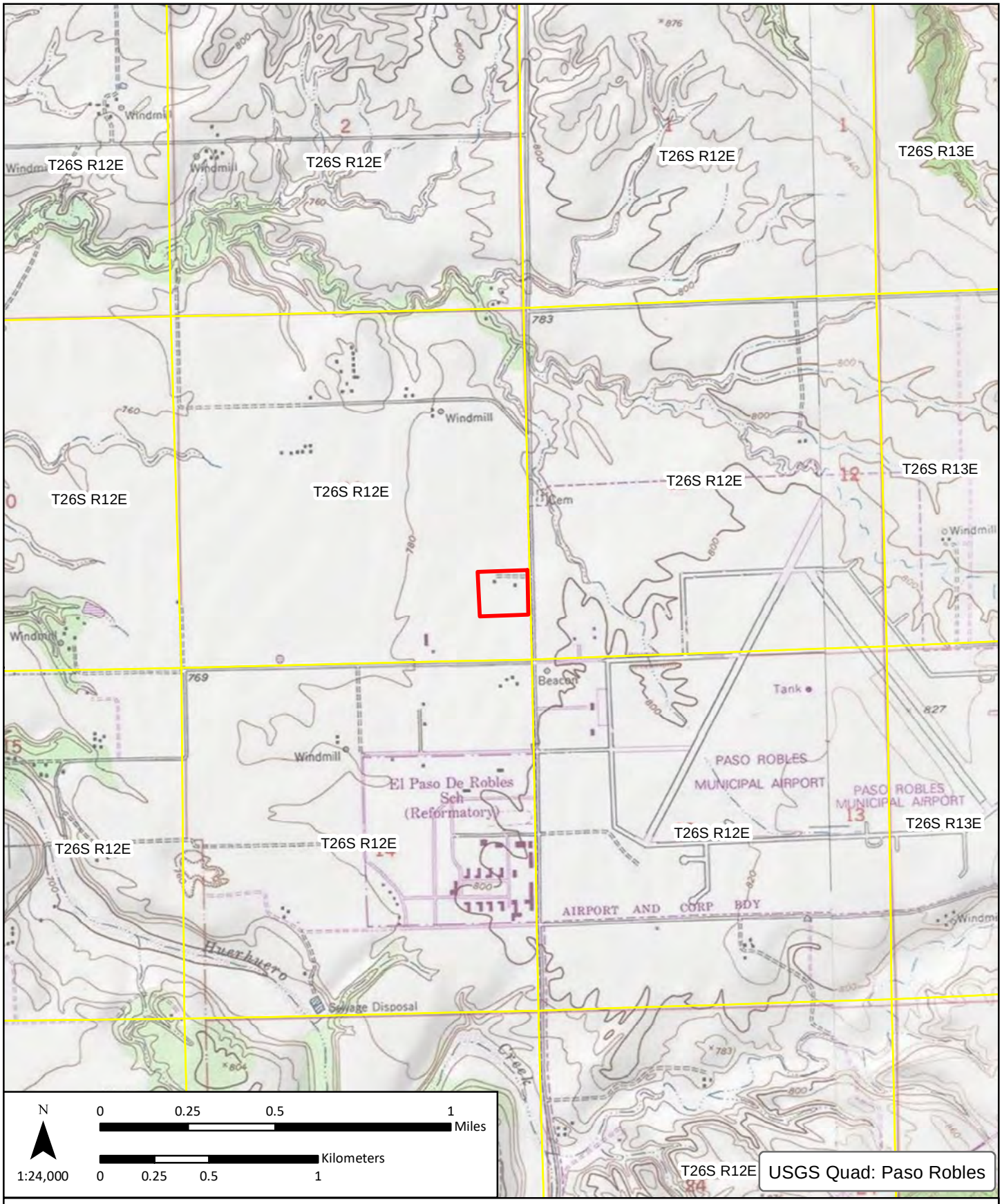
Project Location and Description
The 5175 Airport Road Project proposes the development of a small solar installation on a 11.4-acre site in the City of Paso Robles, San Luis Obispo County. The proposed Project is bounded by Airport Road the east and surrounded by agricultural fields. Specifically, the proposed Project is located within Section 11 of Township 26 South and Range 12 East on the USGS 7.5-minute Paso Robles quadrangle (San Bernardino Base Meridian).

Please respond at your earliest convenience if you wish to share any knowledge of cultural resources within or adjacent to the Project Area. Any information, concerns, or recommendations regarding cultural resources within the Project Area can be shared with me via telephone, email, or via standard mail. Thank you very much for your assistance.

Kindest regards,

Julia Carvajal, M.A.
Senior Archaeologist
Julia@materialcultureconsulting.com

Attachment 10



Project Area

PLSS

MATERIAL CULTURE CONSULTING

Attachment 10

Gmail

Lily Arias <lily@materialcultureconsulting.com>

Fwd: 5175 Airport Rd. Paso Robles

2 messages

Julia Carvajal <julia@materialcultureconsulting.com> Mon, Jun 6, 2022 at 3:08 PM
To: Lily Arias <lily@materialcultureconsulting.com>

---------- Forwarded message ----------
From: **Julie Tumamait-Stenslie** <jtumamait@hotmail.com>
Date: Monday, June 6, 2022
Subject: 5175 Airport Rd. Paso Robles
To: "julia@materialcultureconsulting.com" <julia@materialcultureconsulting.com>

Hi Julia, I defer to Mona Tucker of the Northern Chumash. Thank you,
Julie Tumamait Stenslie

Sent via the Samsung Galaxy S8, an AT&T 5G Evolution capable smartphone

--
Julia Carvajal, M.A.
Cultural Resources Project Manager and GIS Specialist
Material Culture Consulting
2701-B North Towne Avenue
Pomona CA, 91767
Cell: 909-224-7420

Lily Arias <lily@materialcultureconsulting.com> Mon, Jun 6, 2022 at 3:08 PM
To: Julia Carvajal <julia@materialcultureconsulting.com>

Thank you!

Lily Arias, M.A.
Cultural Resources Project Manager

Attachment 10

510.589.0467

Material Culture Consulting, Inc.
Certified DBE/WBE/SBE

[Quoted text hidden]

5175 Airport Road
CEQA Due Diligence Native American Contact Log
June 2022

Name/Affiliation	Date and Method of 1st Contact	Date of 1st Follow Up Attempt	Date of 2nd Follow-Up Attempt	Results	MCC Response
Patrick Tumamait Barbareno/Ventureno Band of Mission Indians 992 El Camino Corto Ojai, CA, 93023	USPS Letter sent June 2, 2022 by L.Arias.	n/a	n/a	n/a	n/a
Julie Tumamait-Stenslie, Chairperson Barbareno/Ventureno Band of Mission Indians 365 North Poli Ave Ojai, CA, 93023	USPS Letter sent June 2, 2022 by L.Arias.	n/a	n/a	Ms. Tumamait-Stenslie stated that she defers to Mona Tucker of the Northern Chumash.	
Annette Ayala Barbareno/ Ventureno Band of Mission Indians 188 S. Santa Rosa Street Ventura, CA, 93001	USPS Letter sent June 2, 2022 by L.Arias.	n/a	n/a	n/a	n/a
Brenda Guzman Barbareno/ Ventureno Band of Mission Indians 58 N. Ann Street, #8 Ventura, CA, 93001	USPS Letter sent June 2, 2022 by L.Arias.	n/a	n/a	n/a	n/a
Julio Quair, Chairperson Chumash Council of Bakersfield 729 Texas Street Bakersfield, CA, 93307	USPS Letter sent June 2, 2022 by L.Arias.	June 15, 2022 via email by E. McMullin			
Violet Walker, Chairperson Northern Chumash Tribal Council P.O. Box 6533 Los Osos, CA, 93412	USPS Letter sent June 2, 2022 by L.Arias.	June 15, 2022 via email by E. McMullin			

5175 Airport Road
CEQA Due Diligence Native American Contact Log
June 2022

Name/Affiliation	Date and Method of 1st Contact	Date of 1st Follow Up Attempt	Date of 2nd Follow-Up Attempt	Results	MCC Response
Patti Dunton, Tribal Administrator Salinan Tribe of Monterey, San Luis Obispo Counties 7070 Morro Road, Suite A Atascadero, CA, 93422	USPS Letter sent June 2, 2022 by L.Arias.	June 15, 2022 via email by E. McMullin	.		
San Luis Obispo County Chumash Council 1030 Ritchie Road Grover Beach, CA, 93433	USPS Letter sent June 2, 2022 by L.Arias.	June 15, 2022 via email by E. McMullin			
Leo Sisco, Chairperson Santa Rosa Rancheria Tachi Yokut Tribe P.O. Box 8 Lemoore, CA, 93245	USPS Letter sent June 2, 2022 by L.Arias.	June 15, 2022 via email by E. McMullin			
Kenneth Kahn, Chairperson Santa Ynez Band of Chumash Indians P.O. Box 517 Santa Ynez, CA, 93460	USPS Letter sent June 2, 2022 by L.Arias.	June 15, 2022 via email by E. McMullin			
Joey Garfield, Tribal Archaeologist Tule River Indian Tribe P. O. Box 589 Porterville, CA, 93258	USPS Letter sent June 2, 2022 by L.Arias.	June 15, 2022 via email by E. McMullin			
Kerri Vera, Environmental Department Tule River Indian Tribe P. O. Box 589 Porterville, CA, 93258	USPS Letter sent June 2, 2022 by L.Arias.	June 15, 2022 via email by E. McMullin			

Attachment 11

MID-COAST GEOTECHNICAL, INC.

Geotechnical Engineering Services

GEOTECHNICAL ENGINEERING REPORT

Proposed Distribution Warehouse

5175 Airport Road

Paso Robles

for:

ICC, LP/SDG Paso Robles 413, LLC.

413 W. Yosemite Avenue, Suite 405

Madera, CA 93637

Date: April 6, 2022

File No. 19-8362

Report No. 20647

P.O. Box 2220 • 3124 El Camino Real • Atascadero, CA 93423-2220
Bus. (805)461-0965 • FAX (805)461-0161 • www.midcoastgeotech.com

TABLE OF CONTENTS

TITLE PAGE I
TABLE OF CONTENTS ii

1 INTRODUCTION 1

2 SCOPE OF THE GEOTECHNICAL INVESTIGATION 1

3 SUMMARY OF FINDINGS 1
3.1 SITE DESCRIPTION 1
3.2 EXPANSIVE NATURE OF THE SOIL 2
3.3 EXISTING SOIL CONDITIONS 2
3.4 GROUND WATER CONDITION 2
3.5 SEISMIC PARAMETERS 2
3.6 LIQUEFACTION POTENTIAL 3
3.7 INFILTRATION TESTING 3

4 GRADING RECOMMENDATIONS 4
4.1 GENERAL GRADING RECOMMENDATIONS 4
4.2 BUILDING AREA REMOVAL DEPTH 5
4.4 TENTATIVE STRUCTURAL SECTION 6
4.5 BOTTOM CHECK AND PROCESSING OF REMOVAL AREA 6
4.6 PLACEMENT OF FILL 7
4.7 IMPORT MATERIAL 7
4.8 SITE DRAINAGE 7

5 FOUNDATION DESIGN RECOMMENDATIONS 8
5.1 SOIL EXPANSION POTENTIAL 8
5.2 SUB-SLAB MOISTURE BARRIER 8
5.3 BEARING CAPACITY: CONTINUOUS FOOTINGS 8
5.4 BEARING CAPACITY: INDEPENDENT FOOTINGS 9
5.5 FOUNDATIONS NEAR SLOPES 9
5.6 WIND AND SEISMIC LOADS 9
5.7 PASSIVE AND FRICTIONAL RESISTANCE 9
5.8 RETAINING WALLS: ACTIVE EARTH PRESSURE 10
5.9 RETAINING WALL - AT-REST EARTH PRESSURE 11
5.10 ESTIMATED SETTLEMENT 11

6 ADDITIONAL RECOMMENDATIONS 11
6.1 PERIMETER SLABS AND GARDEN WALLS 11
6.2 COMPACTION OF EXCESS SOIL 11
6.3 ROOF GUTTERS AND DOWN SPOUTS 12

7 OBSERVATIONS AND TESTING 12

8 LIMITS AND LIABILITY 12

9 WARRANTY 14

APPENDIX
(Laboratory results, maps, and logs) 15

10 LABORATORY TEST RESULTS 16
10.1 MOISTURE-DENSITY DETERMINATIONS 16
10.2 FIELD DENSITY SUMMARY 16
10.3 EXPANSION INDEX TEST 17

1 INTRODUCTION

This report presents the results of our geotechnical investigation performed at the site of the proposed distribution warehouse located on Airport Road in the City of Paso Robles. The principal purpose of this investigation was to determine the geotechnical properties of the surface and subsurface soils in order to provide recommendations for general site grading and to design a suitable foundation for the proposed structure. From a geotechnical stand point the site appears to be suitable to support the proposed development when prepared as recommended herein. Research and exploratory work was conducted in accordance with presently accepted procedures consistent with the scope of work you have requested for this development. No warranty regarding the uniformity of subsurface conditions is implied.

2 SCOPE OF THE GEOTECHNICAL INVESTIGATION

The scope of our geotechnical investigation consisted of the following:

a. 7 truck mounted auger borings extended to depths of 4 to 15 feet. The location and identification of the excavations are shown on the attached drawings.
b. Observing existing man-made and natural field conditions.
c. Obtaining and testing representative bulk and undisturbed soil samples and logging the formations encountered.
d. Analysis of the field observations and laboratory testing.

3 SUMMARY OF FINDINGS

3.1 SITE DESCRIPTION

The proposed warehouse structure will be located near the center of the parcel which slopes very gently to the west at less than 1 percent slope. An existing residence is located north of the site, an existing commercial building is located south of the site and Airport Road borders the parcel on the east.

3.2 EXPANSIVE NATURE OF THE SOIL

The surface soils are a very low expansive sandy material that are underlain with low to medium expansive clayey soils.

3.3 EXISTING SOIL CONDITIONS

The loose sandy surface soils were encountered to 1 to 2.5 feet below grade and are underlain with firm clayey material. Hard sandy material underlies the site at 3 to 6 feet below grade.

3.4 GROUND WATER CONDITION

At the time of our investigation no ground water was encountered in the excavations to a depth of 15 feet below existing grade. Fluctuation in the level of the ground water may occur due to variation in rainfall, temperature, or other factors.

3.5 SEISMIC PARAMETERS

We have reviewed the available information regarding the site locations and soil type. The purpose of our review was to determine the appropriate seismic parameters for the 2019 CBC Section 1613 requirements. The site is underlain with hard sandy material according to the logs available from the area. Density of the soil with respect to blow counts, shear strength, or shear wave velocities to a depth of 100 feet, has not been determined. However, due to the sandy nature of the near-surface material and the high blow counts in the upper 15 feet of material, we recommend that a site class D be used for the project. Based on information provided in IBC Figures 1613.2.1 (1) and (2) and Tables 1613.2.3, the maximum considered earthquake spectral response acceleration values, adjusted for site class effects, are as follows:

short periods: $S_{DS} = 0.827g$

1-second periods: $S_{D1} = 0.523g$

(Confirmed with the USGS website www.hazards.atcouncil.org)

3.6 LIQUEFACTION POTENTIAL

We have reviewed the subsurface data to provide an opinion regarding the liquefaction potential of the site. Exploratory borings were extended 15 feet deep in the building area. In both excavations, hard sandy material was noted within about 5 feet of the existing grade. In addition, no groundwater was observed in either test boring.

Liquefaction is generally considered a result from development of pore pressure in loose saturated sandy soil during a seismic event. The potential of liquefaction is based on the seismicity of the site, the presence and depth of groundwater, the presence of sandy soil, and density of the soil. We have not extended an exploratory boring more than 15 feet deep in the building area. Based on the presence of hard sandy material at a depth of about 5 feet and no groundwater in the area, it is our opinion that the likelihood of liquefaction of the site is very low.

3.7 INFILTRATION TESTING

We have performed shallow quick infiltration testing at the subject site, in the area of the proposed stormwater control measures (SCM). The testing was performed in two locations, at depths of 3 and 5 feet below existing grade, the assumed bottom of the SCM. The test pits were excavated using a 6" solid flight auger and were cased with a 4" diameter perforated pipe and fine gravel. In addition to the test pits, one 10' deep profile boring was excavated in the area of the test pits. A site plan showing the location of the infiltration test pits and the profile boring is attached to this report. The test pits were pre-saturated the day before the testing was performed. The infiltration tests were performed on February 24, 2022 with the final test duration resulting in a two hour test. The results follow:

Infiltration Test Number	I1	I2
Depth (ft)	3	5
Slowest Infiltration Rate Observed (in/hr)	20	65

Based on the standards set forth in the *Post Construction Requirement Handbook (Version 1.1-March 2014 Draft),* Appendix D, infiltration of stormwater at the depths and locations of this site appears to be feasible for small to moderate volumes of water depending on the depth of the basin.

4 GRADING RECOMMENDATIONS

The following recommendations are made based on your representations that a reinforced concrete structure will be constructed on the site. It is your responsibility to notify the geotechnical engineer of any changes to the proposed development. If changes occur, the recommendations contained in this report will be reviewed and may need to be revised.

4.1 GENERAL GRADING RECOMMENDATIONS

a. All grading work should be done in a professional manner and in conformance with the current local jurisdiction's grading ordinances and per the grading recommendations stated herein. In addition, all grading work shall be observed by the geotechnical engineers representatives.

b. All removal areas and footing excavations shall be observed by the representative of the geotechnical engineer before any fill or steel reinforcement is placed. It is your responsibility to notify MID-COAST Geotechnical, Inc. when grading operations or construction begins so that the required observations can be made.

c. All surface vegetation and debris shall be removed from the work area as grading operations begin.

d. A careful search shall be made for subsurface debris and abandoned water wells, septic tanks, etc., during grading operations. If any such subsurface cavities are encountered, they shall be removed down to the firm underlying soil and properly backfilled and compacted as directed by a representative of the geotechnical engineer.

e. Special inspections should be performed in accordance with Table 1705.6 below:

TABLE 1705.6
REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. Verify materials below footings are adequate to achieve the design bearing capacity.	-----	X
2. Verify excavations are extended to proper depth and have reached proper material.	-----	X
3. Perform classification and testing of controlled filled materials.	-----	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of controlled fill.	X	-----
5. Prior to placement of controlled fill, observe subgrade and verify that the site has been prepared properly.	-----	X

*2019 California Building Code

4.2 BUILDING AREA REMOVAL DEPTH

The existing surface soils and any uncertified fill material underlying the proposed building area shall be removed to a minimum depth of 36 inches below the bottom of the proposed footings or down to firm natural material, whichever is deeper.

NOTE: Certified structural fill is required for any fill to be used for an engineering purpose. All fill beneath structures, on slopes greater than 5:1, in embankments or other earthen structures, must be certified structural fill. All other fills, deeper than 12 inches, not to be used for structural support should be compacted but in some cases may not require certification. These uncertified fill areas, such as landscape fills, must be approved by this office and the local jurisdiction prior to grading.

4.3 PREPARATION OF STREET AND PARKING AREAS

The following guidelines are to be used for grading in the streets, roadways, and parking areas:

In those areas that will be supporting pavement, the existing surface soils shall be removed to a minimum depth of 24 inches below subgrade elevation. The exposed soils at the bottom of the removal areas shall then be scarified to a depth of 8 inches, brought to near optimum moisture content, and compacted to a minimum of 90 percent of the maximum density (ASTM D-1557) before any fill is placed. The area prepared as suggested above will provide adequate support for the proposed pavement but will not be certified as structural fill.

4.4 TENTATIVE STRUCTURAL SECTION

A tentative structural section for the paved firelanes is 3"AC/14.5"AB which is based on an assumed Traffic Index of 6.0 and an R-value of <5 as determined by our firm. Tentative structural sections for the paved auto parking is 2.5"AC/9.5"AB and Airport Road is 4.0"AC/20.0"AB. All subgrade soils shall be compacted to a minimum of 95 percent of the maximum density (ASTM D1557) to a minimum depth of 12 inches below the subgrade elevation. Aggregate Base (AB) shall be defined as "Processed Miscellaneous Base" or "Class II Base" material as required by the local jurisdiction. AB shall be extended under curbs and gutters where subgrade soils exceed an expansion index of 50. The structural sections shall be confirmed or modified by R-value testing as necessary when the subgrade is prepared.

4.5 BOTTOM CHECK AND PROCESSING OF REMOVAL AREA

Field observations will be required to confirm that the removal bottom has been established in firm natural material prior to processing operations. The exposed material at the bottom of the removal areas shall then be properly prepared and brought to near optimum moisture content before any fill is placed. The removal shall extend a minimum of 5 feet beyond the

foundation perimeter or equal to the depth of removal, whichever is greater. The removed soil may be used as backfill providing all the deleterious materials, if any, are picked out.

4.6 PLACEMENT OF FILL

All fill shall be placed in layers approximately 8 inches in depth, brought to a moisture content near optimum moisture content, and compacted to a minimum of 95 percent of the maximum density (ASTM D1557) up to final pad subgrade. Fill compacted at high moisture content may be subject to yielding. Yielding or pumping grades will not be approved by this office. Material placed as certified fill shall be free of debris and rocks greater than six inches in width across the widest point.

4.7 IMPORT MATERIAL

All imported material, if any, to be used for structural fills shall be observed and approved by a representative of the geotechnical engineer prior to transport to the site. Imported fill material shall be free of debris and rocks greater than six (6) inches at the widest point. Imported soils shall be similar or less expansive than those existing on the site. The rock-to-soil ratio of the import material shall not exceed 50 percent.

4.8 SITE DRAINAGE

Small ponds of water near any structure should be eliminated. Final grading shall provide a positive drainage away from the footings. If a swale is required to collect the flow, the swale bottom should preferably be at least 10 feet from the footings or outside of the foundation wall backfill and sloped sufficiently to direct the runoff away from the building area and lot. All pad and roof drainage should be collected and transferred away from the buildings in non-erosive devices. Proper drainage shall also be provided away from the building footings and from the lot during construction. This is especially important when construction takes place during the rainy season. All drainage plans should also be in compliance with the local jurisdictions grading requirements.

5 FOUNDATION DESIGN RECOMMENDATIONS

The foundation design recommended below shall be confirmed or modified, if necessary, after grading operations are completed, depending upon the nature of the soils resulting on the surface of the graded building pad.

5.1 SOIL EXPANSION POTENTIAL

At a minimum, any foundation design should take into consideration construction on soils in the expansion index range of 51 to 90. The actual expansion index range may vary depending on the nature of the soil resulting after the completion of grading. Structural details of any foundations, such as footing thickness, concrete strength and the amount of reinforcement should be established by your structural engineer.

5.2 SUB-SLAB MOISTURE BARRIER

In order to reduce the migration of moisture through the foundation and into office areas and other areas that receive flooring that is sensitive to moisture, we recommend that 3/4" or larger clean gravel be placed in a minimum thickness of 4 inches above pad grade. A vapor retarder shall be placed over the gravel with a minimum of 2 inches of sand or gravel placed over the plastic and beneath the slab. The vapor retarder shall conform to the requirements of ASTM E1745-11 and shall be installed in conformance with ASTM E1643.

5.3 BEARING CAPACITY: CONTINUOUS FOOTINGS

Continuous footings supported on certified fill material are adequate for foundation support of the proposed structure and may be designed using a bearing pressure of 1850 psf. The footing depth should meet the minimum recommendations noted above. The recommended bearing values are based on an assumed embedment of a minimum of 24 inches into certified fill material and be a minimum of 12 inches wide. A 5 percent increase of bearing pressure values is allowable for each additional 6-inch increment of width or depth up to a maximum value of 3500 psf.

5.4 BEARING CAPACITY: INDEPENDENT FOOTINGS

Independent footings supported on certified fill material may be designed using a bearing pressure of 1950 psf. They shall be a minimum of 15 inches in width and extend a minimum of 18 inches below the lowest adjacent grade. A 5 percent increase is allowable for each additional 6 inches of width and/or depth up to a maximum value of 3500 psf.

5.5 FOUNDATIONS NEAR SLOPES

All foundations excavated on or adjacent to any existing or proposed slopes will require a minimum 10 feet horizontal distance to daylight. The horizontal distance is measured from the bottom of the footings to daylight on the slope or to the extent of the competent material on the slope, i.e., all slough or loose material on the slope will be discounted when measuring the distance to daylight.

5.6 WIND AND SEISMIC LOADS

The bearing pressures given are for the total of dead and frequently applied live loads and may be increased by one-third for short duration loading which includes the effects of wind or seismic forces.

5.7 PASSIVE AND FRICTIONAL RESISTANCE

Resistance to lateral loading may be provided by friction acting at the base of foundations and by passive earth pressure. An allowable coefficient of friction of 0.35 may be used with the dead load forces in the certified fill material.

Passive earth pressure may be computed as an equivalent fluid having a density of 350 pcf with a maximum earth pressure of 1750 psf. When combining passive and friction for lateral resistance, the passive component should be reduced by one-third.

5.8 RETAINING WALLS: ACTIVE EARTH PRESSURE

Retaining walls may be designed for an equivalent fluid pressure of 37 psf per foot of depth. Additional active pressure should be added for a surcharge condition due to sloping ground, vehicular traffic, or adjacent structures. The allowable bearing, friction, and passive earth pressure may be found in the preceding sections.

All other retaining walls may be designed for the corresponding active pressures shown on the table below:

Surface Slope of Retained Material Horizontal to Vertical	Equivalent Fluid Weight (pcf)
Level	37
5 to 1	39
4 to 1	42
3 to 1	45
2 to 1	50

All walls should be backfilled with a minimum 1-foot wide layer of free draining soil, approved by MID-COAST Geotechnical, Inc., synthetic drain product, or clean, uniform sized gravel placed against the wall up to 18 inches below finish grade. Where the cavity to be filled behind a wall is less than 18 inches at the surface, the use of gravel is allowed without testing if compacted to the satisfaction of the geotechnical engineer. In the case of walls constructed with gravel backfill in areas where subsurface water is anticipated, we recommend that a geotextile fabric be placed between the backfill and cut.

In order to reduce the migration of water behind the wall, the surface of the gravel backfill should be sealed by pavement or covered by 18 inches of compacted soil. The surface water drainage shall be directed away from the wall and shall meet the requirements of the current local jurisdiction's building code. Where weep holes are not used at the base of the retaining wall, a perforated pipe shall be placed within a bed of approved rock at the base of the retaining wall and shall be drained to discharge into an approved drainage course.

5.9 RETAINING WALL - AT-REST EARTH PRESSURE

Retaining walls which are restrained at both top and bottom, such as with basement walls, shall be designed for at-rest earth pressures. The walls should be designed for an equivalent fluid pressure of 65 pcf. Additional surcharge should be added to the lateral loading if there is sloping backfill, vehicular traffic, or structures adjacent to the wall. As with other retaining walls, adequate back drains should be provide to relieve any excess hydrostatic pressures.

5.10 ESTIMATED SETTLEMENT

Based upon test results, field observations, and compliance with these recommendations, a total settlement of less than 1.5 inch and differential settlement of less than 1/2 inch is expected in a distance of 20 feet.

6 ADDITIONAL RECOMMENDATIONS

6.1 PERIMETER SLABS AND GARDEN WALLS

Perimeter slabs (walkways, patios, etc.) and garden walls shall be designed as free-floating and independent of the adjacent structure. Subgrade materials in areas to receive slab-on-grade shall be prepared and presaturated as per the "Foundation" recommendations provided herein.

6.2 COMPACTION OF EXCESS SOIL

Soils generated during footing excavation operations should not be placed across the pads unless the materials are compacted to at least 90 percent of the maximum density (ASTM D1557). This also applies to sand, agricultural, and landscape fill exceeding 12 inches in depth. Compaction tests should be taken in additional fills placed in order to confirm that the minimum relative compaction requirements are achieved. It is your responsibility to notify MID-COAST Geotechnical, Inc. if testing is needed.

6.3 ROOF GUTTERS AND DOWN SPOUTS

We advise that gutters and down spouts be installed on all buildings as a means of improving the flow of run-off away from the foundation and building area. Gutters and down spouts are of particular importance when the structure is located on expansive soil, on sandy soil underlain with low permeability material, on structures with subterranean areas, or other conditions which may be sensitive to excess moisture. Down spouts should be connected to PVC pipe and drained to an approved drainage course such as a street or storm drain.

7 OBSERVATIONS AND TESTING

All foundation excavations should be approved by this firm prior to placing concrete or any steel reinforcement. All removal excavation bottoms shall be observed and approved by a geotechnical engineer or his representative prior to placement of backfill. Any fill placed for engineering purposes should be tested and certified.

Temporary wall excavations should be observed by a representative of this firm. It is your responsibility to notify MID-COAST Geotechnical, Inc. at each stage of the excavations so that observations can be made. If the examination reveals any hazard, appropriate treatment will be recommended. Please advise this office at least 24 hours prior to any required observations.

8 LIMITS AND LIABILITY

Please be aware that our contract fee for our services to prepare this report do not include additional work which may be required such as grading observation and testing, footing observations, presaturation observations, etc. Since the extent of grading and the amount of involvement of our services varies for each project, our services are normally billed on an hourly rate or per-test basis.

This report provides recommendations and comments in accordance with currently accepted practice applicable to the scope of your project. Further requirements may be imposed by the reviewing agency or necessary as a result of changes to your building or grading plans. Where additional services are

requested or required, you will be billed for any equipment costs and on an hourly basis for consultation or analysis.

All documents, including maps, plans, drawings, specification and test results which we prepare or furnish or which are prepared or furnished by our independent professional associates and consultants pursuant to this agreement are considered instruments of service with respect to the project, and we will retain an ownership and property interest therein, whether or not the project is completed. Without limiting the foregoing, we reserve the right to make use of all information obtained in the performance of our services in projects for other clients, including without limitation, the right to use all test results and reports in performing services for future owners of your property.

The limits of our liability for data contained in this report and our warranty are presented on the following page.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to assure that the information and recommendations contained herein are called to the attention of the designers and builders for the project.

Respectfully submitted,
MID-COAST Geotechnical, Inc.

Dane C. Jensen, RCE C60675
Expiration Date 12/31/2022

DCJ/gjr
ICC, LP/SDG Paso Robles 413, LLC. (1 + e-mail)

9 WARRANTY

This report is based on the development plans provided to our office. In the event that any significant changes in the design or location of the structure(s) as outlined in this report are planned, the conclusions and recommendations contained in this report may not be considered valid unless the changes are reviewed and the conclusions of this report are modified or approved by the geotechnical engineer.

The subsurface conditions, excavations, and characteristics described herein have been projected from individual borings or test pits placed on the subject property. The subsurface conditions, excavation, and characteristics shown should in no way be construed to reflect any variation which may occur between these borings or test pits.

It should be noted that fluctuations in the level of the groundwater may occur due to variation in rainfall, temperature, changes in drainage and grading, and other factors not evident at the time measurements were made and reported herein. MID-COAST Geotechnical, Inc. assumes no responsibility for variations which may occur across the site.

If conditions encountered during construction appear to differ from those disclosed, this office shall be notified so as to consider the need for modifications. No responsibility for construction compliance with the design concepts, specifications or recommendations is assumed unless on-site construction review is performed during the course of construction which pertains to the specific recommendations contained herein.

This report has been prepared in accordance with generally accepted practice. No warranties, either express or implied, are made as to the professional advice provided under the terms of the agreement and included in this report.

APPENDIX

(Laboratory results, maps, and logs)

10 LABORATORY TEST RESULTS

10.1 MOISTURE-DENSITY DETERMINATIONS

Maximum Density-Optimum Moisture data were determined in the laboratory from soil samples using the ASTM D-1557-12e1 Test Method.

SOIL TYPE	SOIL DESCRIPTION	MAXIMUM DRY DENSITY (lbs/cu.ft)	OPTIMUM MOISTURE (%)
S2	Light brown clayey SAND	133.2	9.0
S4	Red brown silty SAND w/ gravel	126.0	10.0

10.2 FIELD DENSITY SUMMARY (Ring Density Method)

TEST NO.	DEPTH (FT)	SOIL TYPE	FIELD MOISTURE CONTENT (%)	DRY DENSITY (lbs/cu.ft)	% OF MAX. DRY DENSITY
B1	2	C1	11.3		
B1	5	S2	11.9	115.6	87
B1	10	C2	8.8		
B2	2	S1	8.6		
B2	5	S2	12.4		
B2	10	S3	9.3		
B2	15	S3	11.1		
B3	2	S1	13.2		
B3	5	S2	11.7	114.6	86
B3	10	S2	7.8		
B4	2	C1	14.7		
B4	4	S2	6.7		
B5	2	C1	19.8		
B5	4	S2	6.4		
B6	2	C1	15.1		
B6	5	S2	11.9		
B7	2	C2	17.3		
B7	5	S4	5.1	88.2	70
B7	7	S4	4.4		

10.3 EXPANSION INDEX TEST

Each Expansion Index Test was performed on a representative bulk sample of the soil collected during our investigation. Expansion index test procedure is performed in accordance with ASTM D4289-19. The results follow:

SOIL TYPE	LOCATION	EXPANSION INDEX
C1	B1 @ 2-4'	83
C2	B2 @ 6-10'	61
C3	B3 @ 2.5-4.5'	48
C1	B4 @ 1.5-3'	86
C2	B7 @ 1-4'	70

Attachment 11

MOISTURE-DENSITY RELATIONSHIP

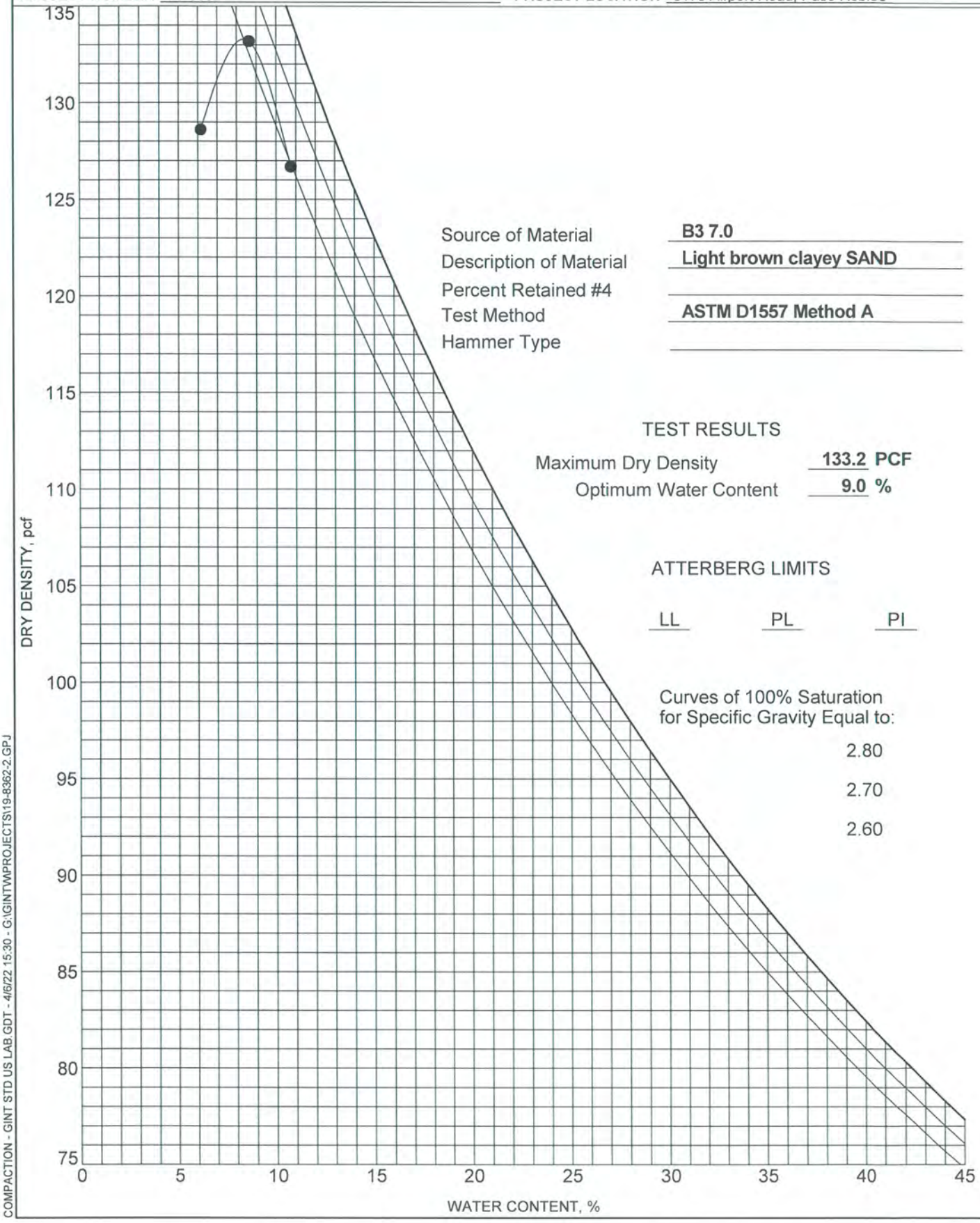
Midcoast Geotechnical, Inc
3124 El Camino Real
Atascadero CA 93422
Telephone: 805-461-0965

CLIENT ICC Stravinski

PROJECT NAME Proposed Distribution Warehouse

PROJECT NUMBER 19-8362

PROJECT LOCATION 5175 Airport Road, Paso Robles



Source of Material	B3 7.0
Description of Material	Light brown clayey SAND
Percent Retained #4	
Test Method	ASTM D1557 Method A
Hammer Type	

TEST RESULTS

Maximum Dry Density	133.2	PCF
Optimum Water Content	9.0	%

ATTERBERG LIMITS

LL	PL	PI

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

COMPACTION - GINT STD US LAB.GDT - 4/6/22 15:30 - G:\GINTW\PROJECTS\19-8362-2.GPJ

Attachment 11

Midcoast Geotechnical, Inc
3124 El Camino Real
Atascadero CA 93422
Telephone: 805-461-0965

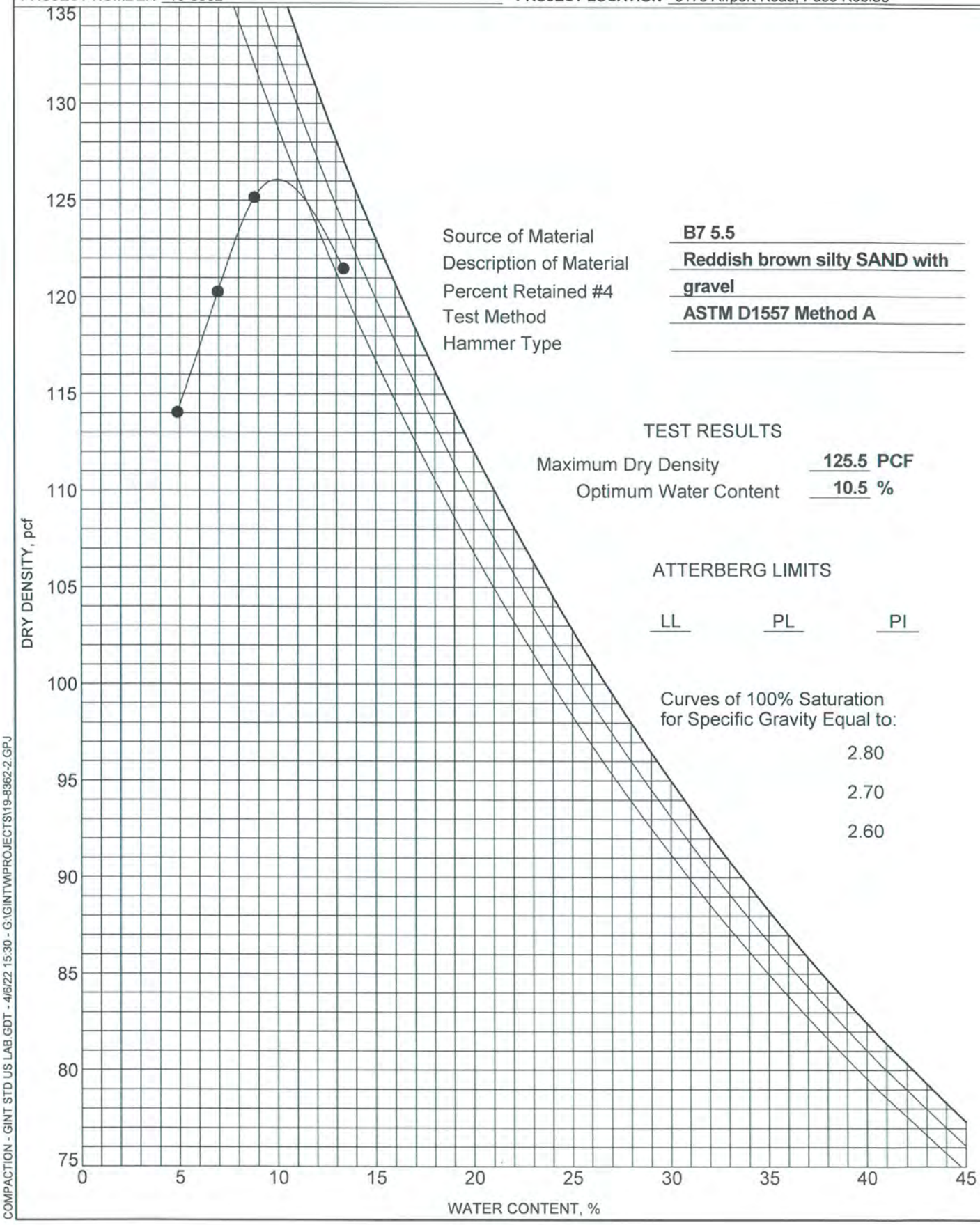
MOISTURE-DENSITY RELATIONSHIP

CLIENT ICC Stravinski

PROJECT NAME Proposed Distribution Warehouse

PROJECT NUMBER 19-8362

PROJECT LOCATION 5175 Airport Road, Paso Robles



Source of Material	B7 5.5
Description of Material	Reddish brown silty SAND with gravel
Percent Retained #4	
Test Method	ASTM D1557 Method A
Hammer Type	

TEST RESULTS

Maximum Dry Density 125.5 PCF

Optimum Water Content 10.5 %

ATTERBERG LIMITS

LL PL PI

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

Vicinity Map **N.T.S.**

*MAP PROVIDED BY BING MAPS

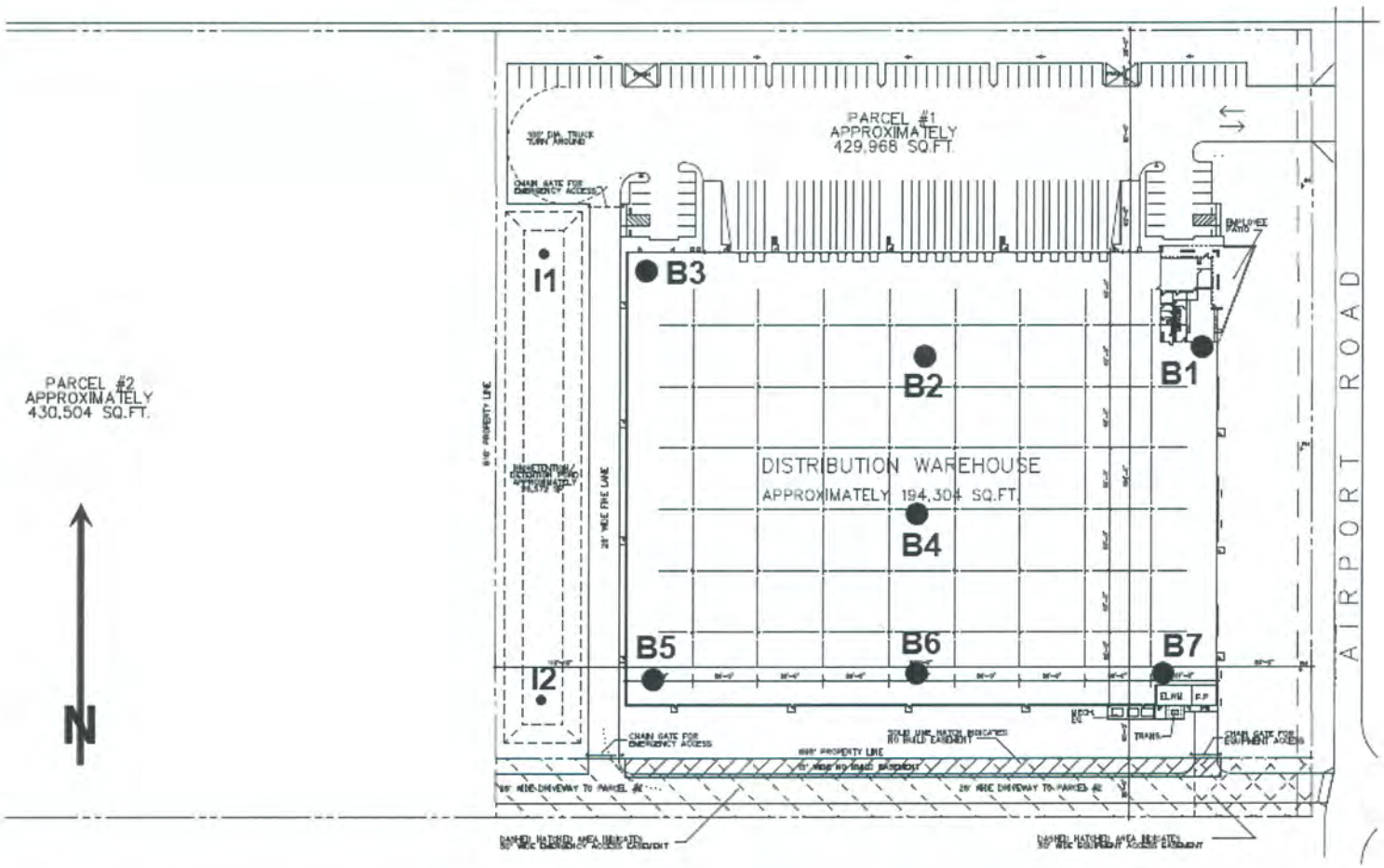
MID-COAST GEOTECHNICAL, INC.

ICC, LP/SDG Paso Robles 413, LLC.
Proposed Distribution Warehouse
5175 Airport Road
Paso Robles
California

Date: April 6, 2022

Plate 1

Attachment 11



Legend **N.T.S.**

- ● Exploratory Soils Boring
- • Infiltration Test Location

*PLAN PROVIDED BY OTHERS

MID-COAST GEOTECHNICAL, INC.

ICC, LP/SDG Paso Robles 413, LLC.
Proposed Distribution Warehouse
5175 Airport Road
Paso Robles
California

Date: April 6, 2022

Plate 2

Attachment 11

LOG OF BORING B1

MID-COAST GEOTECHNICAL, INC.
3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
1													S1	Brown silty SAND, loose to m.d., damp
2			11											
3									83				C1	Brown sandy CLAY, firm, damp
4														
5		N = 50	12	116	87								S2	Light brown clayey SAND w/ gravel, medium dense to hard, damp
6														
7														Brown sandy CLAY w/ gravel, stiff, damp
8													C2	
9			9											
10														Boring Terminated at 10 feet

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

LOG OF BORING - MIDCOAST.GDT - 4/6/22 15:35 - G:\GINTW\PROJECTS\19-8362-2.GPJ

Attachment 11

LOG OF BORING B2

MID-COAST GEOTECHNICAL, INC.

3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
1													S1	Dark brown silty SAND, loose to medium dense, damp
2			9											
3													S2	Brown clayey SAND w/ gravel, medium dense to hard, damp
4														
5			12											
6													C2	Brown sandy CLAY, stiff, damp
7														
8									61					
9														
10			9										S3	Red brown clayey SAND with gravel, hard, moist
11														
12														
13														
14														
15			11											Boring terminated at 15 feet

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

Attachment 11

LOG OF BORING B3

MID-COAST GEOTECHNICAL, INC.

3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
1													S1	Dark brown silty SAND, loose to medium dense, damp
2			13											
3									48				C3	Brown sandy CLAY, firm, damp
4														
5		N = 32	12	115	86									Light brown clayey SAND, hard, damp
6														
7													S2	
8														
9			8											
10														Boring Terminated at 10 feet

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

LOG OF BORING B4

MID-COAST GEOTECHNICAL, INC.
3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
													S1	Dark brown silty SAND, loose to medium dense, damp
1														
2			15						86				C1	Brown sandy CLAY, firm, damp
3			7										S2	Red brown clayey SAND with gravel, hard, moist
4														Refusal at 4' below grade on cobbles

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

Attachment 11

LOG OF BORING B5

MID-COAST GEOTECHNICAL, INC.

3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT (LL)	ATTERBERG LIMITS: PLASTIC LIMIT (PL)	ATTERBERG LIMITS: PLASTICITY INDEX (PI)	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
													S1	Dark brown silty SAND, loose to medium dense, damp
1														
2			20										C1	Brown sandy CLAY, firm, moist
3													S2	Red brown clayey SAND with gravel, hard, damp
4			6											
														Refusal at 4.5' below grade on cobbles

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

LOG OF BORING - MIDCOAST.GDT - 4/6/22 15:35 - G:\GINTW\PROJECTS\19-8362-2.GPJ

Attachment 11

LOG OF BORING B6

MID-COAST GEOTECHNICAL, INC.

3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
													S1	Dark brown silty SAND, loose to medium dense, damp
1														
2			15										C1	Brown sandy CLAY, firm, damp
3														Red brown clayey SAND with gravel, hard, damp
4													S2	
5		N = 18	12											
														Refusal at 5.5' below grade on cobbles

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

LOG OF BORING - MIDCOAST.GDT - 4/6/22 15:35 - G:\GINTW\PROJECTS\19-8362-2.GPJ

LOG OF BORING B7

MID-COAST GEOTECHNICAL, INC.
3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

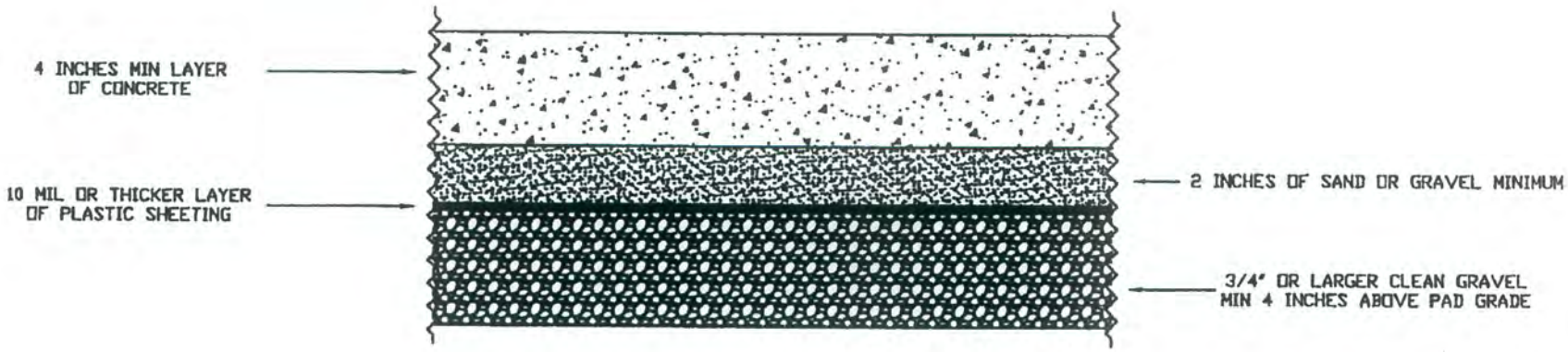
GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
													S1	Dark brown silty SAND, loose to medium dense, damp
1														
2			17						70				C2	Brown sandy CLAY, firm, moist
3														
4														Red brown silty SAND with gravel, medium dense, damp
5		N = 33	5	88	70								S4	
6			4											
7														Refusal at 7' below grade on cobbles

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

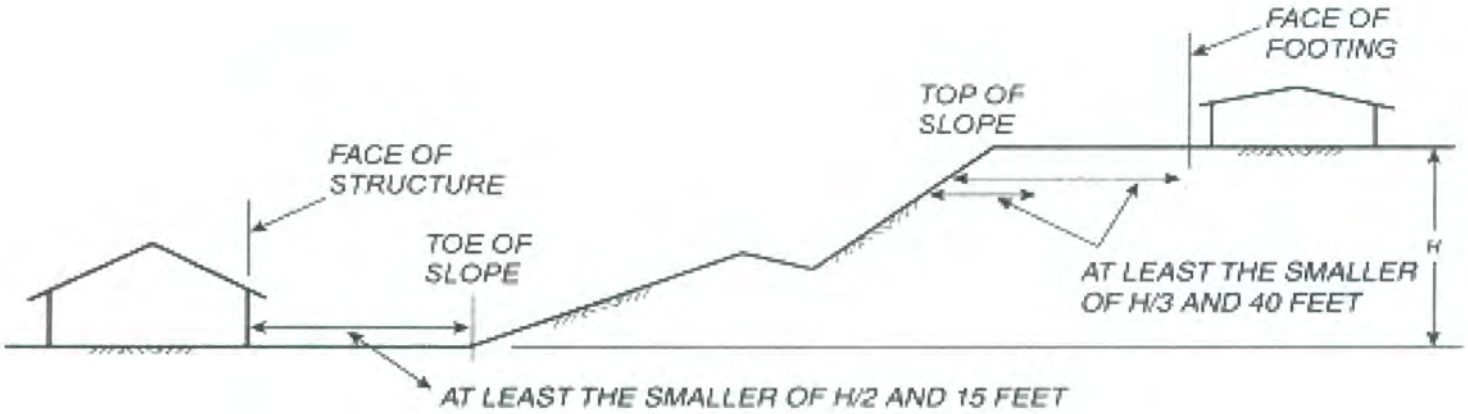


MID-COAST GEOTECHNICAL, INC.

SUB-SLAB MOISTURE BARRIER
(Typical)

Plate S

Attachment 11



For SI: 1 foot = 304.8 mm.

FIGURE 1808.7.1

FOUNDATION CLEARANCES FROM SLOPES

MID-COAST GEOTECHNICAL, INC.	Slope Setbacks - Per 1808.7.1 CBC 2019	**Plate T**

Attachment 11

PRELIMINARY STORMWATER CONTROL PLAN
FOR
SDG PASO ROBLES 194 DISTRIBUTION CENTER

May 24, 2022

SDG Paso Robles 413, LLC
413 W Yosemite Ave
Suite 105
Madera, CA 93637

Prepared by:

Wallace Group
Brett Hadley

REGISTERED PROFESSIONAL ENGINEER
BRETT D. HADLEY
No. 80124
DRAFT - FOR REVIEW ONLY
CIVIL
STATE OF CALIFORNIA

WALLACE GROUP®
CIVIL AND TRANSPORTATION ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES
612 CLARION COURT
SAN LUIS OBISPO, CA 93401
T 805 544-4011 F 805 544-4294
www.wallacegroup.us

Table of Contents

I. Project Data 4

II. Setting 4

- **a. Project Location and Description** 4
- **b. Existing Site Features and Conditions** 5
- **c. Opportunities and Constraints for Stormwater Control** 6

III. Low Impact Development Design Strategies 6

- **a. Optimization of Site Layout** 6
- **b. Use of Permeable Pavements** 6
- **c. Dispersal of Runoff to Pervious Areas** 6

IV. Documentation of Drainage Design 7

- a. Applicable Stormwater Requirements 7
- **b. Drainage Management Areas** 7
- **c. Hydrologic Analysis** 8
- **d. Summary of Calculations** 8

V. Source Control Measures 10

VI. Stormwater Facility Maintenance 10

- a. Ownership and Responsibility for Maintenance in Perpetuity 10

VII. Construction Checklist 10

VIII. Certifications 11

Tables

Table 1: Project Data 4
Table 2: Table of Drainage Management Areas 7
Table 3: Runoff Retention Summary 9
Table 4: Peak Flow Management for DMAs 1-4 9
Table 5: Source Control Table 10
Table 6: Construction Checklist Table 11

Figures

Figure 1: Vicinity Map 5
Figure 2: Watershed 8

Attachments

A. Exhibit 1 - Existing Watershed
B. Exhibit 2 - Proposed Watershed
C. Exhibit 3 - Hydrologic Model Results
D. Exhibit 4 - Web Soil Survey / Geotechnical Report

I. Project Data

Table 1: Project Data

Project Name/Number	SDG Paso Robles 194 Distribution Center
Application Submittal Date	5/24/2022
Project Location	5175 Airport Road, Paso Robles, CA 93446
Project Phase No.	Single Phase
Project Type and Description	Commercial Wine Storage and Processing Facility
Total Project Site Area (acres)	(onsite) 429,878 sf / 9.87 acres, (offsite) 75,103 sf / 1.72 acres
Total New Impervious Surface Area	370,163 sf / 8.50 acres
Total Replaced Impervious Surface Area	7,988 sf
Total Pre-Project Impervious Surface Area	41,619 sf
Total Post-Project Impervious Surface Area	378,151 sf / 8.68 acres
Net Impervious Area (Exhibit shall be provided to justify net impervious area results)	378,151 sf / 8.68 acres
Watershed Management Zone(s)	Zone 1
Design Storm Frequency and Depth	1.40 inches (95th-percentile) 2.02 inches (2-year) 3.62 inches (10-year) 5.91 inches (100-year)
Drainage Report	SDG Paso Robles 194 Distribution Center Drainage Report

II. Setting

a. Project Location and Description

The proposed site is located west of Airport Road and north of Buena Vista Drive in Paso Robles, CA. The project consists of a 194,196 square-foot winery warehouse with associated parking, driveways, and stormwater control measures. The segment of Airport Road that fronts the property will be widened with a center turn lane and shoulder. All construction for the proposed project will be completed in one phase.

The project layout will create >25,000 square feet of net impervious area and will need to meet the Central Coast Regional Water Quality Control Board Post Construction Stormwater Requirements (PCR's) 1, 2, 3 and 4. Stormwater Control Measures will be implemented to treat, retain, and mitigate peak flows.

Figure 1 - Vicinity Map

b. Existing Site Features and Conditions

The historical condition of the site consists of brush grasses with sandy clay soils (Type C), according to a Web Soil Survey and the project Geotechnical Report, see Exhibit 4. The site is bounded by Airport Road to the east, agricultural fields to the north, undeveloped open space to the west, and American Way Development to the south. The site slopes gently to the west and continues downstream as overland flow through rural developments and agricultural land and is eventually collected by Huer Huero Creek tributaries. There are no existing swales, channels, or other drainage conveyance systems present immediately downstream of the proposed project.

The project site does not receive offsite runon from adjacent properties, but the site does receive offsite runoff from the western half of Airport Road. This runoff sheet flows directly onto the site whereas the east half of Airport Road is collected by an existing roadside swale. The existing east Airport Road swale flows approximately 2,300 feet north to an existing drainage course tributary to Huer Huero Creek. The west side of airport road north and south of the project site drains directly to native vegetated areas.

c. Opportunities and Constraints for Stormwater Control

Constraints:

The site is constrained by low infiltrating clay soils up to 3 feet below grade. Below the clayey soils, hard sandy material is present as well as some locations of cobbles at 5 to 7 feet below grade. The proposed site developments also have a large percentage of impervious coverage due to the large building footprint, required truck and vehicle access, and parking. High imperviousness constrains opportunities for infiltration and stormwater management. The development is constrained by the lack of an existing downstream conveyance systems. The project will need to consider full retention of the 100-year stormwater volume.

Opportunities:

Proposed stormwater control features will take advantage of open space to treat and retain runoff from the project site. Bioswales will be integrated into the landscape on the south and east side of the building to pre-treat portions of roof and roadway runoff. Excess runoff from the bioswales and other direct runoff will be collected by a proposed storm drain system and routed to a proposed retention basin. Prior to entering the retention basin, runoff will be treated by a First Defense Stormwater Quality Unit (or approved equal).

The basin will be sized to fully retain the 100-year storm runoff to mitigate concentrated discharge to downstream properties. Discharging runoff to the existing Airport Road swale via a pump system was considered, but determined infeasible due to existing regional drainage deficiencies. The basin design may incorporate dry wells to promote infiltration and increase drawdown time to drain the basin. In the event that the basin reaches capacity during a large storm, a spillway will be incorporated to allow a safe overflow escape path downstream.

The east side of Airport Road will take advantage of the existing roadside swale for treatment and retention benefits. Similarly, the west side of Airport Road that does not directly drain to the site will flow to native vegetated areas as it has done historically.

III. Low Impact Development Design Strategies

a. Optimization of Site Layout

The proposed site will follow existing grades to maintain general sloping from east to west. The site layout uses minimum driveway widths to reduce impervious coverage and to maximize open space for structural control measures and landscaping. Roadway widening will be limited to the minimum lane widths necessary for increased traffic.

b. Use of Permeable Pavements

Permeable pavements were not considered for this project due to anticipated vehicle loads.

c. Dispersal of Runoff to Pervious Areas

Runoff will be directed to bioswales, native landscape areas, and a retention basin.

IV. Documentation of Drainage Design

a. Applicable Stormwater Requirements

The following list outlines the PRs that apply to this project:

- PR #1 Site Design and Runoff Reduction
- PR #2 Water Quality Treatment
- PR #3 Runoff Retention
- PR #4 Peak Management

Performance requirements that do not apply to the project are:

- PR #5 Special Circumstances

b. Drainage Management Areas

The DMA numbers in the following tables correspond with the DMA numbers of the DMA exhibit. A summary of each DMA is provided in Table 2.

Table 2: Table of Drainage Management Areas

DMA ID	SURFACE TYPE & DESCRIPTION	AREA (SF)	DRAINS TO	SCM TYPE	SCM AREA (SF)
1	Asphalt, Roof, Offsite Roadway Widening Asphalt	22,435	SCM 1	Bioswale	2,556
1A	Landscape	20,239			
2	Asphalt, Roof, Offsite Roadway Widening Asphalt	19,146	SCM 2	Bioswale	1,881
2A	Landscape	15,749			
3	Asphalt, Roof, Concrete	28,248	SCM 3	Bioswale	1,958
3A	Landscape	9,488			
4	Asphalt, Roof, Concrete, Offsite Roadway Widening Asphalt	252,269	SCM 4	Detention Basin	30,671
4A	Landscape	44,529			
5	Offsite Roadway Asphalt	5,062	Native Vegetated Areas		n/a
6	Offsite Roadway Asphalt	12,895	Native Vegetated Areas		n/a
7	Offsite Roadway Asphalt	38,096	Native Vegetated Areas		n/a

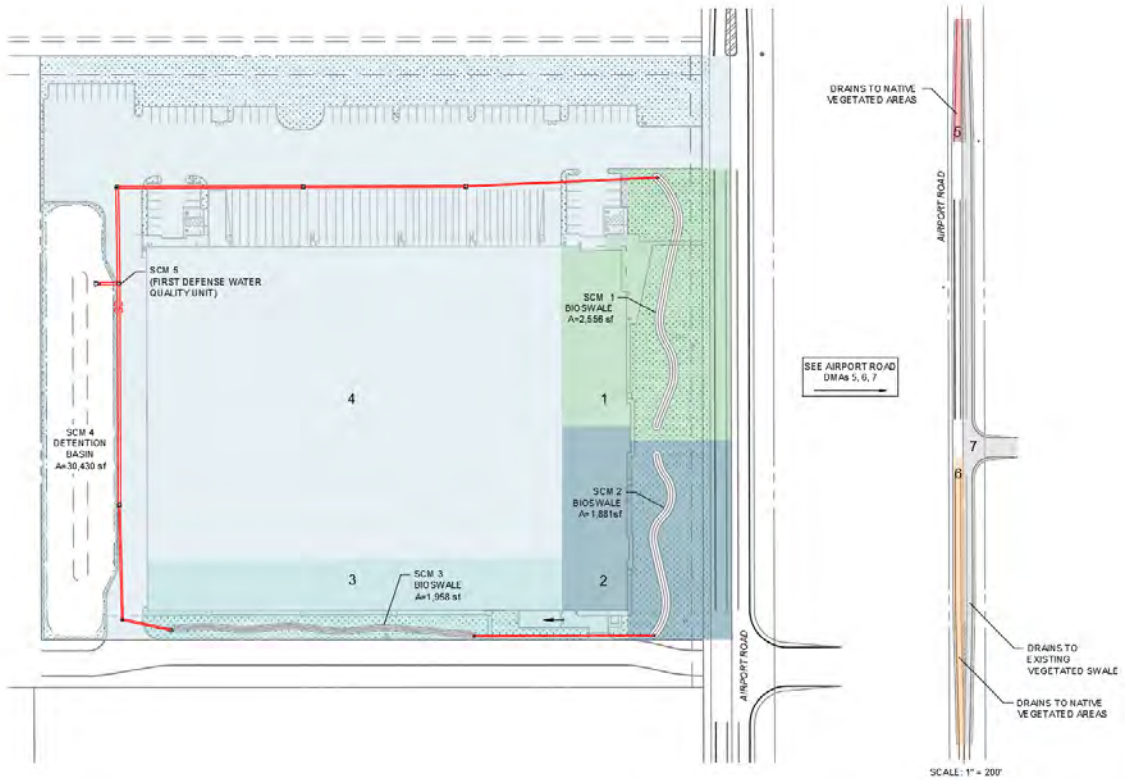


Figure 2 - Watershed Map

c. Hydrologic Analysis

The hydrograph method was used to calculate the runoff for each DMA and to size the SCM's. The following criteria was used in the hydraulic stormwater model:

95th percentile design storm:	1.40 inches
Hydrograph Analysis Method:	Santa Barbara Urban Hydrograph
Pond Routing Method:	Dynamic-Storage-indication
Infiltration Rate (in/hr):	0.2 in/hr (Web Soil Survey)
Rainfall Distribution:	NRCS Type I, NOAA Atlas 14, Vol. 6, Version 2
Time of Concentration:	Minimum of 6 minutes
Time Increment:	1 hr

d. Summary of Calculations

PR 1 Site Design and Runoff Reduction – As outlined in Section III, stormwater management has been incorporated into the design of the project.

PR 2 Water Quality Treatment – Bioswales will pre-treat runoff from DMA 1, 2, and 3. Excess runoff from the bioswales and direct runoff from DMA 4 will flow through a First Defense Stormwater Quality Unit before entering the proposed basin. As necessary, the proposed dry wells will be connected to the basin through an outlet pipe held 3 feet above the bottom of the basin, The basin outlet pipe is designed with a debris screen and a 90 degree downward bend to minimize sediment, debris, and other floatable from entering the dry wells. The number and sizing of dry wells will be

coordinated with the geotechnical engineer during final design. Several of the geotechnical borings on the south portion of the site reported a cobble layer at 5 to 7 feet below grade.

DMA 5 and 6 drain to native self retaining areas which slow the velocity of runoff and allow runoff to infiltrate. DMA 7 drains to the existing vegetated roadside swale which flows approximately 2,300 ft north into a tributary of Huer Huero Creek.

PR-3 Runoff Retention – Retention of the 95th percentile storm event from DMA 1-4 is achieved within the proposed basin. Retention of the 95th percentile storm runoff from DMA 5-6 is achieved as runoff is directed to native, vegetated, self retaining areas. DMA 7 drains to the existing vegetated swale which is heavily vegetated and has a mild slope. This vegetated swale is considered a self retaining area to retain the 95th percentile runoff volume associated with the minor roadway widening.

Table 3: Runoff Retention Summary

DMA ID	DMA 95TH RUNOFF VOLUME (CF)	DRAINS TO	SCM 95TH RUNOFF VOLUME RETAINED IN SCM (CF)
DMA 1	1,584	SCM 1	0
DMA 2	1,352	SCM 2	0
DMA 3	1,995	SCM 3	0
DMA 4	17,812	SCM 4	22,743*
DMA 5	357	Native Vegetated Areas	357
DMA 6	910	Native Vegetated Areas	910
DMA 7	2,690	Existing Swale	2,690

*Includes runoff from DMA 1, 2, 3

PR-4 Peak Management – Peak management requires post developed peak flows to match existing flow rates for storms up to the 10 year. Due to the constraint of avoiding discharged flows from the basin onto the rural residential property to the west, the proposed basin will fully retain runoff from storms up to the 100-year event, refer to the Drainage Report. The only intended outflow from the basin will be through the proposed dry wells which will slowly drain the basin through percolation.

Table 4: Peak Flow Management for DMAs 1-4

DESIGN STORM	TOTAL PRE-DEVELOPED PEAK FLOW (CFS)	TOTAL POST-DEVELOPED PEAK FLOW (CFS)
2 YR	1.00	0.00
10 YR	4.57	0.00

The large vegetated open areas will help decrease peak flows for DMA 5 and 6. Similarly, the existing swale will help decrease peak flow from DMA 7 by slowing the velocity of runoff. Some increase in peak flow compared to existing conditions may be expected for DMAs 5-7, but the increase in runoff can be considered negligible in relation to the watershed area.

V. Source Control Measures

Hydrocarbons, trash, debris from trees, sediment and fertilizers will be the most apparent sources of pollutants on the project site.

Table 5: Source Control Table

	Pollutants Associated with Activity						
Potential Pollutant Source	Sediment/ Litter/ Debris	Nutrients/ Organic Matter	Bacteria	Hydro-carbons	Toxics/ Chemicals/ Paint	Other	Source Control BMP Proposed
Parking Lot	X			X			Vehicle Maintenance, Fueling and Storage, street sweeping
Fertilizers, Pesticides,	X	X			X		Effective irrigation and planting
Roof runoff		X			X		Bioretention, landscape maintenance for healthy plants.

VI. Stormwater Facility Maintenance

a. Ownership and Responsibility for Maintenance in Perpetuity

This project is required to record an Agreement with the City accepting responsibility for inspection, operation and maintenance of facilities.

This project will utilize an Agreement to meet this requirement, and the responsible party will be the City of Paso Robles. An Operations and Maintenance Plan and Draft Agreement will be provided after preliminary approvals.

VII. Construction Checklist

Table 6: Construction Checklist Table

To be provided after preliminary approvals.

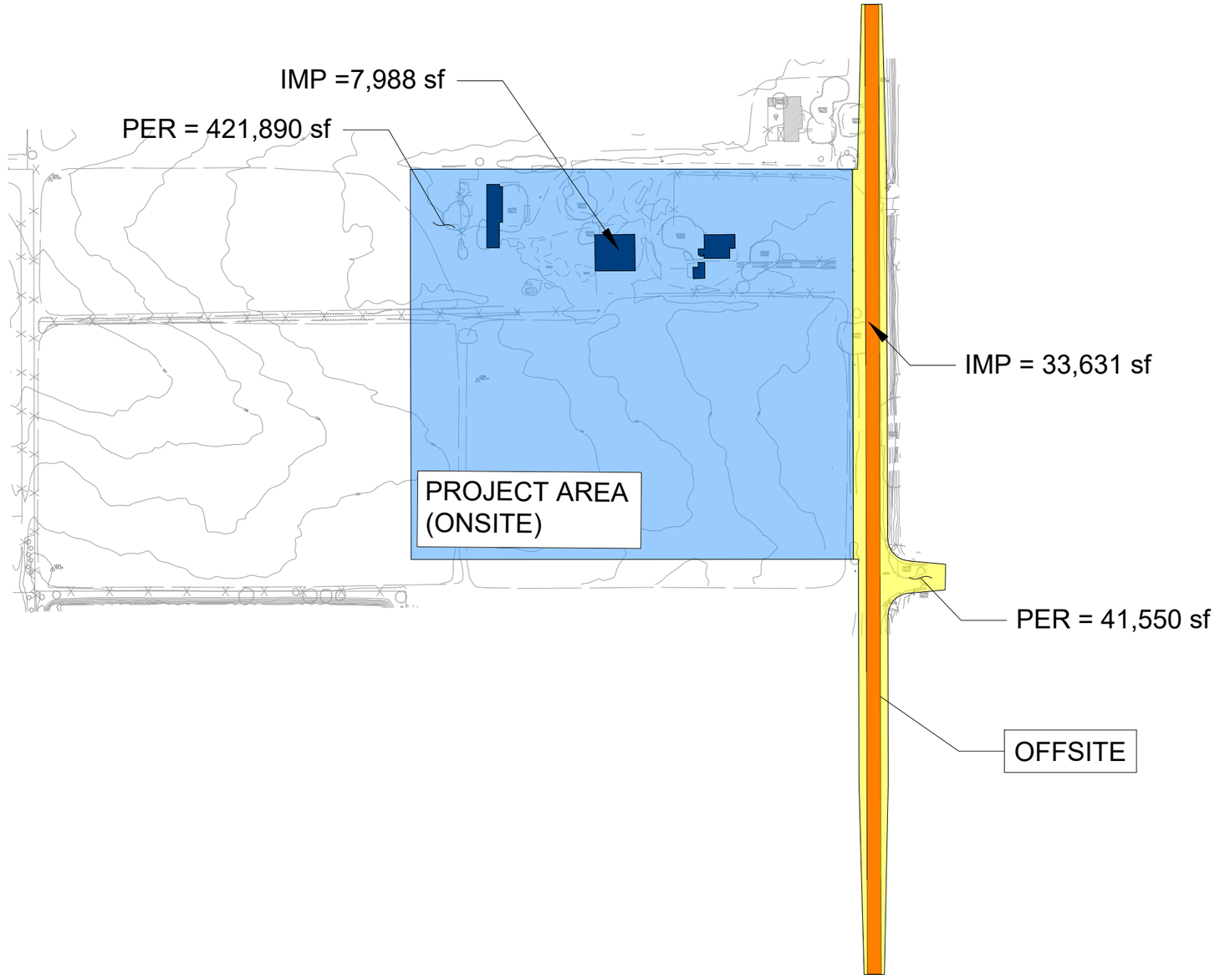
STRUCTURAL CONTROL MEASURE SCMs	PLAN SHEET NUMBER	SCM DETAIL NUMBER
1		
2		
3		
4		

VIII. Certifications

The design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the Post-Construction Stormwater Management Resolution R3-2013-0032.

Exhibit 1

Existing Watershed



SDG PASO ROBLES 413 DISTRIBUTION CENTER
INDUSTRIAL AND COMMERCIAL CONTRACTORS

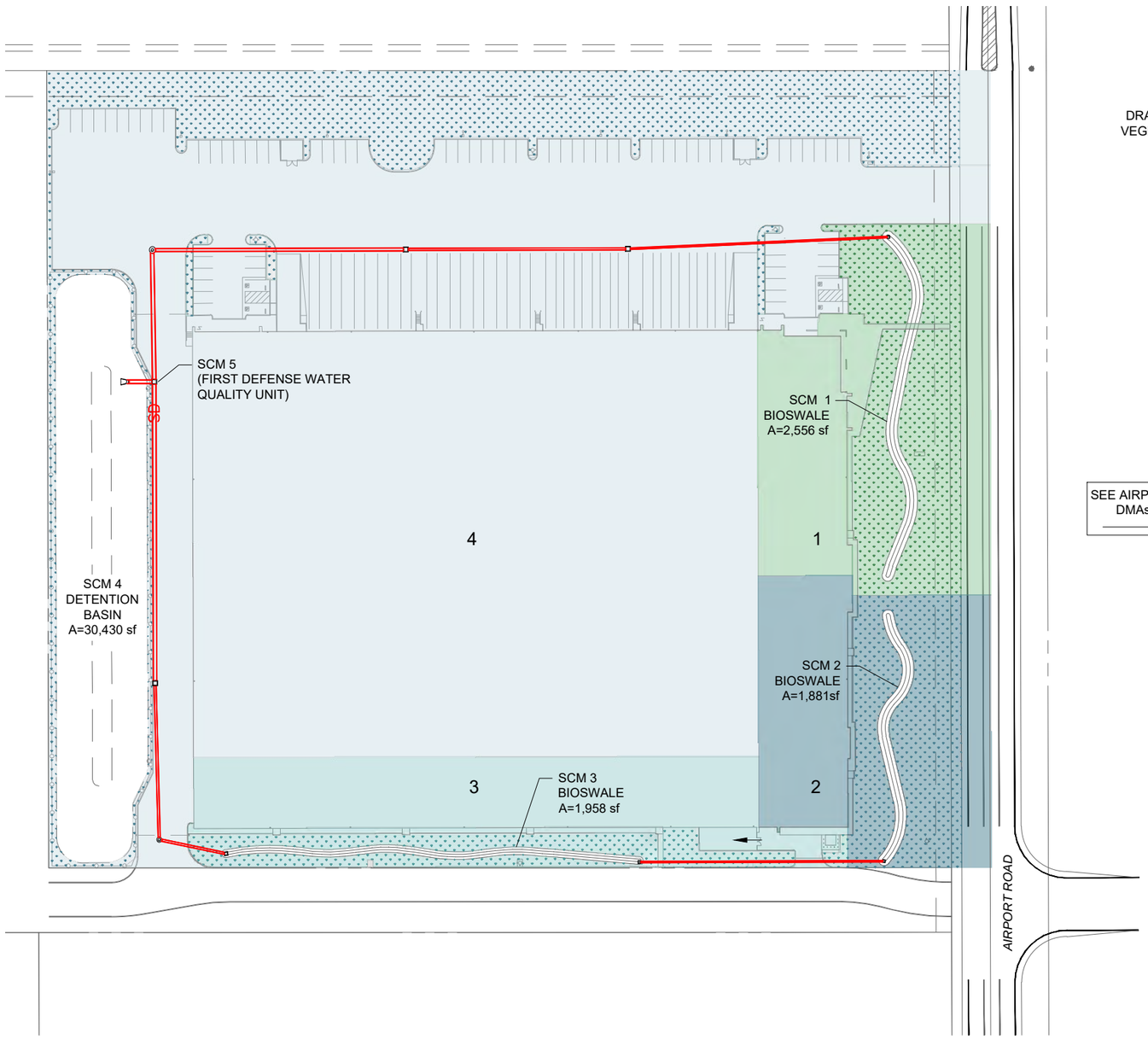
EXISTING DMA EXHIBIT

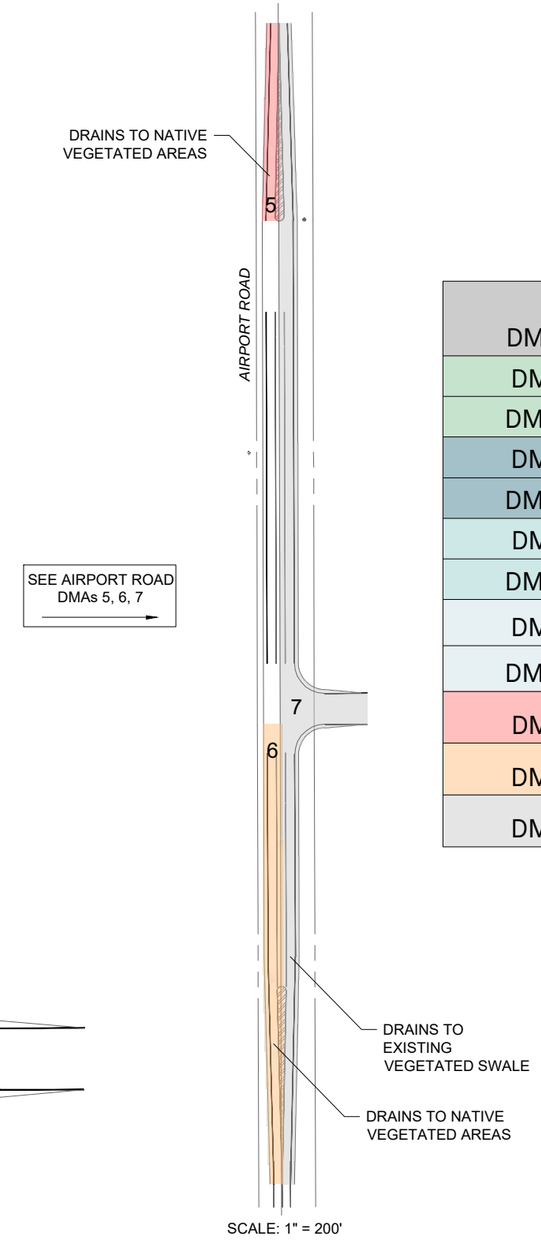
0 100 200 400
1 IN = 200 FT

WALLACE GROUP®

Exhibit 2

Proposed Watersheds





DMA ID	Area (sf)	Total Area (sf)
DMA 1	22,435	42,674
DMA 1a	20,239	
DMA 2	19,146	34,895
DMA 2a	15,749	
DMA 3	28,248	37,736
DMA 3a	9,488	
DMA 4	252,269	296,798
DMA 4a	44,529	
DMA 5	5,062	5,062
DMA 6	12,895	12,895
DMA 7	38,096	38,096

SDG PASO ROBLES 194 DISTRIBUTION CENTER
INDUSTRIAL AND COMMERCIAL CONTRACTORS

DMA EXHIBIT

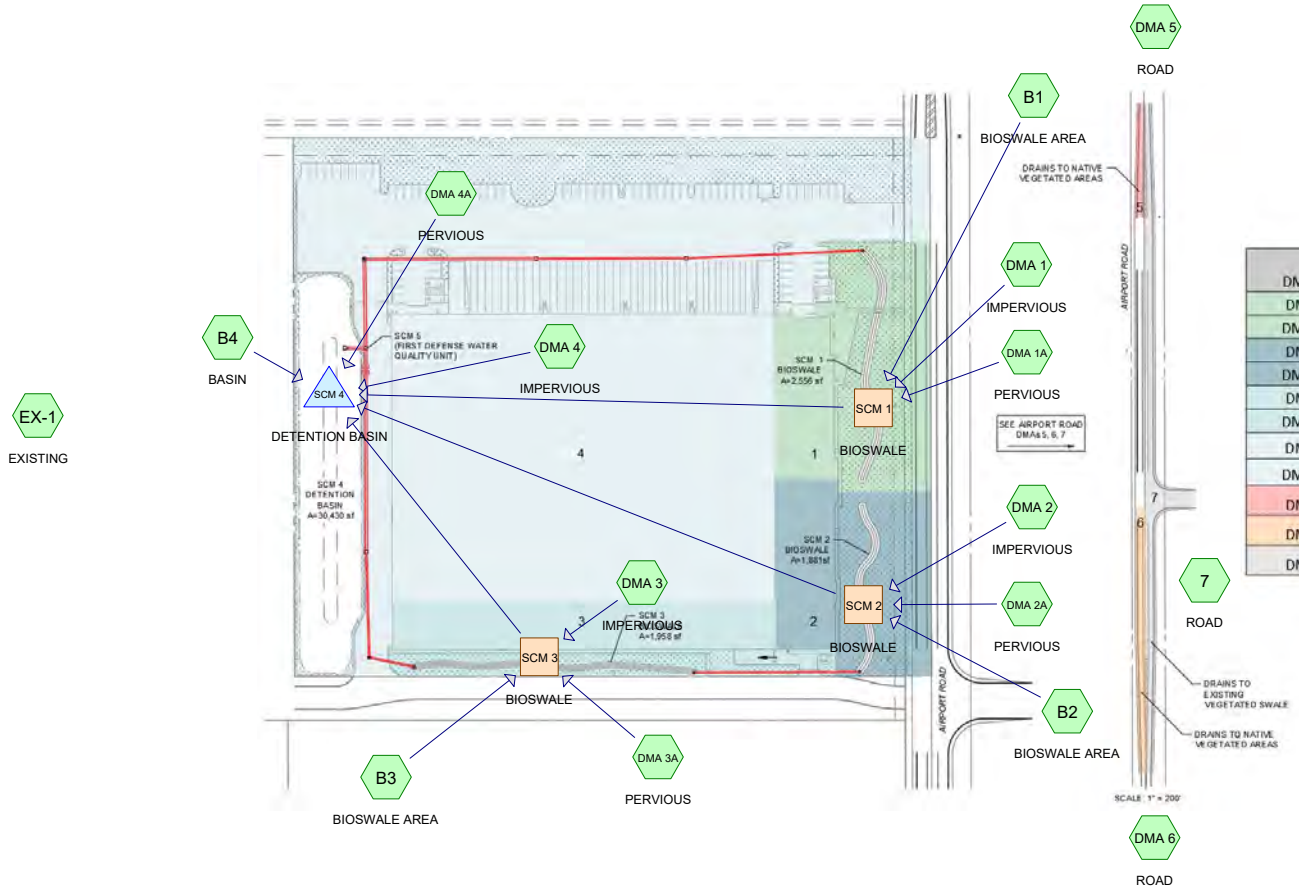
0 50 100 200
1 IN = 100 FT

WALLACE GROUP®

Exhibit 3

Hydrologic Model Results

Attachment 12



DMA ID	Area (sf)	Total Area (sf)
DMA 1	22,435	42,674
DMA 1a	20,239	
DMA 2	19,146	34,895
DMA 2a	15,749	
DMA 3	28,248	37,736
DMA 3a	9,488	
DMA 4	252,269	296,798
DMA 4a	44,529	
DMA 5	5,062	5,062
DMA 6	12,895	12,895
DMA 7	38,096	38,096

(new Text)

Subcat Reach Pond Link

Routing Diagram for 1638 HydroCAD

Prepared by {enter your company name here}, Printed 5/19/2022

HydroCAD® 10.00-22 s/n 05444 © 2018 HydroCAD Software Solutions LLC

Time span=0.00-96.00 hrs, dt=0.05 hrs, 1921 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment7: ROAD Runoff Area=38,096 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=1.07 cfs 5,696 cf

SubcatchmentB1: BIOSWALE AREA Runoff Area=2,556 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.07 cfs 382 cf

SubcatchmentB2: BIOSWALE AREA Runoff Area=1,881 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.05 cfs 281 cf

SubcatchmentB3: BIOSWALE AREA Runoff Area=1,958 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.06 cfs 293 cf

SubcatchmentB4: BASIN Runoff Area=30,430 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.86 cfs 4,550 cf

SubcatchmentDMA 1: IMPERVIOUS Runoff Area=22,435 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.63 cfs 3,354 cf

SubcatchmentDMA 1A: PERVIOUS Runoff Area=20,239 sf 0.00% Impervious Runoff Depth=0.36"
Tc=10.0 min CN=74/0 Runoff=0.05 cfs 606 cf

SubcatchmentDMA 2: IMPERVIOUS Runoff Area=19,146 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.54 cfs 2,863 cf

SubcatchmentDMA 2A: PERVIOUS Runoff Area=15,749 sf 0.00% Impervious Runoff Depth=0.36"
Tc=10.0 min CN=74/0 Runoff=0.04 cfs 471 cf

SubcatchmentDMA 3: IMPERVIOUS Runoff Area=28,248 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.79 cfs 4,223 cf

SubcatchmentDMA 3A: PERVIOUS Runoff Area=9,488 sf 0.00% Impervious Runoff Depth=0.36"
Tc=10.0 min CN=74/0 Runoff=0.02 cfs 284 cf

SubcatchmentDMA 4: IMPERVIOUS Runoff Area=252,269 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=7.10 cfs 37,718 cf

SubcatchmentDMA 4A: PERVIOUS Runoff Area=44,529 sf 0.00% Impervious Runoff Depth=0.36"
Tc=10.0 min CN=74/0 Runoff=0.10 cfs 1,333 cf

SubcatchmentDMA 5: ROAD Runoff Area=5,062 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.14 cfs 757 cf

SubcatchmentDMA 6: ROAD Runoff Area=12,895 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.36 cfs 1,928 cf

SubcatchmentEX-1: EXISTING Runoff Area=504,774 sf 8.25% Impervious Runoff Depth=0.48"
Flow Length=720' Slope=0.0100 '/' Tc=36.1 min CN=74/98 Runoff=1.00 cfs 20,087 cf

Reach SCM 1: BIOSWALE Avg. Flow Depth=0.51' Max Vel=0.18 fps Inflow=0.74 cfs 4,342 cf
n=0.300 L=275.0' S=0.0051 '/' Capacity=1.58 cfs Outflow=0.42 cfs 4,342 cf

Reach SCM 2: BIOSWALE Avg. Flow Depth=0.50' Max Vel=0.18 fps Inflow=0.62 cfs 3,615 cf
n=0.300 L=200.0' S=0.0050 '/' Capacity=1.57 cfs Outflow=0.40 cfs 3,615 cf

Reach SCM 3: BIOSWALE Avg. Flow Depth=0.17' Max Vel=2.19 fps Inflow=0.87 cfs 4,800 cf
n=0.013 L=320.0' S=0.0050 '/' Capacity=23.53 cfs Outflow=0.84 cfs 4,800 cf

Pond SCM 4: DETENTION BASIN Peak Elev=782.35' Storage=52,172 cf Inflow=9.48 cfs 56,359 cf
Outflow=0.07 cfs 20,321 cf

Total Runoff Area = 1,009,755 sf Runoff Volume = 84,826 cf Average Runoff Depth = 1.01"
54.78% Pervious = 553,160 sf 45.22% Impervious = 456,595 sf

Summary for Subcatchment 7: ROAD

Runoff = 1.07 cfs @ 9.96 hrs, Volume= 5,696 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	38,096	98	
	38,096	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B1: BIOSWALE AREA

Runoff = 0.07 cfs @ 9.96 hrs, Volume= 382 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	2,556	98	impervious
	2,556	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B2: BIOSWALE AREA

Runoff = 0.05 cfs @ 9.96 hrs, Volume= 281 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	1,881	98	impervious
	1,881	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B3: BIOSWALE AREA

Runoff = 0.06 cfs @ 9.96 hrs, Volume= 293 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	1,958	98	impervious
	1,958	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B4: BASIN

Runoff = 0.86 cfs @ 9.96 hrs, Volume= 4,550 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	30,430	98	impervious
	30,430	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1: IMPERVIOUS

Runoff = 0.63 cfs @ 9.96 hrs, Volume= 3,354 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	22,435	98	impervious
	22,435	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1A: PERVIOUS

Runoff = 0.05 cfs @ 10.02 hrs, Volume= 606 cf, Depth= 0.36"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	20,239	74	Pervious
	20,239	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 2: IMPERVIOUS

Runoff = 0.54 cfs @ 9.96 hrs, Volume= 2,863 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	19,146	98	impervious
	19,146	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 2A: PERVIOUS

Runoff = 0.04 cfs @ 10.02 hrs, Volume= 471 cf, Depth= 0.36"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	15,749	74	Pervious
	15,749	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 3: IMPERVIOUS

Runoff = 0.79 cfs @ 9.96 hrs, Volume= 4,223 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	28,248	98	impervious
	28,248	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 3A: PERVIOUS

Runoff = 0.02 cfs @ 10.02 hrs, Volume= 284 cf, Depth= 0.36"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	9,488	74	Pervious
	9,488	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 4: IMPERVIOUS

Runoff = 7.10 cfs @ 9.96 hrs, Volume= 37,718 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	252,269	98	impervious
	252,269	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 4A: PERVIOUS

Runoff = 0.10 cfs @ 10.02 hrs, Volume= 1,333 cf, Depth= 0.36"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	44,529	74	Pervious
	44,529	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 5: ROAD

Runoff = 0.14 cfs @ 9.96 hrs, Volume= 757 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	5,062	98	
	5,062	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 6: ROAD

Runoff = 0.36 cfs @ 9.96 hrs, Volume= 1,928 cf, Depth= 1.79"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	12,895	98	
	12,895	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-1: EXISTING

Runoff = 1.00 cfs @ 10.05 hrs, Volume= 20,087 cf, Depth= 0.48"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	7,988	98	Onsite Impervious
*	421,890	74	Onsite Pervious
*	33,631	98	Offsite Impervious
*	41,265	74	Offsite Pervious
	504,774	76	Weighted Average
	463,155	74	91.75% Pervious Area
	41,619	98	8.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.5	150	0.0100	0.11		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.02"
13.6	570	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
36.1	720	Total			

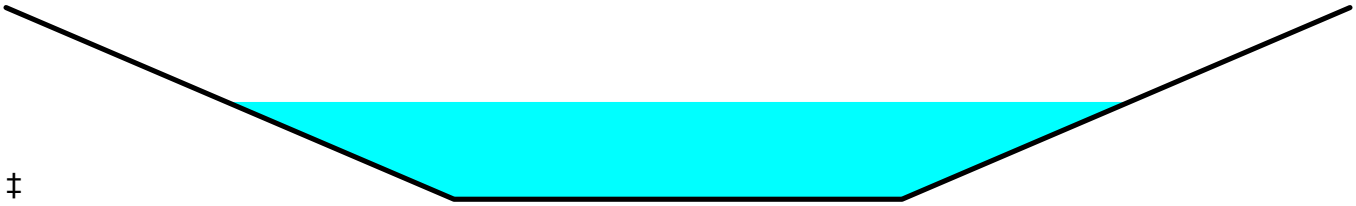
Summary for Reach SCM 1: BIOSWALE

Inflow Area = 45,230 sf, 55.25% Impervious, Inflow Depth = 1.15" for 2-Yr event
Inflow = 0.74 cfs @ 9.96 hrs, Volume= 4,342 cf
Outflow = 0.42 cfs @ 10.11 hrs, Volume= 4,342 cf, Atten= 44%, Lag= 9.2 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.18 fps, Min. Travel Time= 25.2 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 100.6 min

Peak Storage= 630 cf @ 10.11 hrs
Average Depth at Peak Storage= 0.51'
Bank-Full Depth= 1.00' Flow Area= 6.0 sf, Capacity= 1.58 cfs

3.00' x 1.00' deep channel, n= 0.300
Side Slope Z-value= 3.0 '/' Top Width= 9.00'
Length= 275.0' Slope= 0.0051 '/'
Inlet Invert= 792.50', Outlet Invert= 791.10'



‡

Summary for Reach SCM 2: BIOSWALE

Inflow Area = 36,776 sf, 57.18% Impervious, Inflow Depth = 1.18" for 2-Yr event
Inflow = 0.62 cfs @ 9.96 hrs, Volume= 3,615 cf
Outflow = 0.40 cfs @ 10.09 hrs, Volume= 3,615 cf, Atten= 36%, Lag= 7.7 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.18 fps, Min. Travel Time= 18.7 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 69.8 min

Peak Storage= 444 cf @ 10.09 hrs
Average Depth at Peak Storage= 0.50'
Bank-Full Depth= 1.00' Flow Area= 6.0 sf, Capacity= 1.57 cfs

3.00' x 1.00' deep channel, n= 0.300
Side Slope Z-value= 3.0 '/' Top Width= 9.00'
Length= 200.0' Slope= 0.0050 '/'
Inlet Invert= 792.50', Outlet Invert= 791.50'

‡

Summary for Reach SCM 3: BIOSWALE

Inflow Area = 39,694 sf, 76.10% Impervious, Inflow Depth = 1.45" for 2-Yr event
Inflow = 0.87 cfs @ 9.96 hrs, Volume= 4,800 cf
Outflow = 0.84 cfs @ 9.99 hrs, Volume= 4,800 cf, Atten= 3%, Lag= 1.7 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.19 fps, Min. Travel Time= 2.4 min
Avg. Velocity = 0.73 fps, Avg. Travel Time= 7.3 min

Peak Storage= 123 cf @ 9.99 hrs
Average Depth at Peak Storage= 0.17'
Bank-Full Depth= 1.00' Flow Area= 4.0 sf, Capacity= 23.53 cfs

2.00' x 1.00' deep channel, n= 0.013
Side Slope Z-value= 2.0 '/' Top Width= 6.00'
Length= 320.0' Slope= 0.0050 '/'
Inlet Invert= 791.87', Outlet Invert= 790.26'

Summary for Pond SCM 4: DETENTION BASIN

Inflow Area = 448,928 sf, 79.95% Impervious, Inflow Depth = 1.51" for 2-Yr event
Inflow = 9.48 cfs @ 9.96 hrs, Volume= 56,359 cf
Outflow = 0.07 cfs @ 24.24 hrs, Volume= 20,321 cf, Atten= 99%, Lag= 856.8 min
Discarded = 0.07 cfs @ 24.24 hrs, Volume= 20,321 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Peak Elev= 782.35' @ 24.24 hrs Surf.Area= 14,635 sf Storage= 52,172 cf

Plug-Flow detention time= 2,521.8 min calculated for 20,321 cf (36% of inflow)
Center-of-Mass det. time= 2,289.2 min (3,024.0 - 734.8)

Volume	Invert	Avail.Storage	Storage Description
#1	777.00'	246,974 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
777.00	4,852	0.0	0	0
791.00	30,430	100.0	246,974	246,974

Device	Routing	Invert	Outlet Devices
#1	Discarded	777.00'	**0.200 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 10.00'

Discarded OutFlow Max=0.07 cfs @ 24.24 hrs HW=782.35' (Free Discharge)
└**1=Exfiltration** (Controls 0.07 cfs)

Time span=0.00-96.00 hrs, dt=0.05 hrs, 1921 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment7: ROAD Runoff Area=38,096 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=1.97 cfs 10,750 cf

SubcatchmentB1: BIOSWALE AREA Runoff Area=2,556 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=0.13 cfs 721 cf

SubcatchmentB2: BIOSWALE AREA Runoff Area=1,881 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=0.10 cfs 531 cf

SubcatchmentB3: BIOSWALE AREA Runoff Area=1,958 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=0.10 cfs 553 cf

SubcatchmentB4: BASIN Runoff Area=30,430 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=1.57 cfs 8,587 cf

SubcatchmentDMA 1: IMPERVIOUS Runoff Area=22,435 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=1.16 cfs 6,331 cf

SubcatchmentDMA 1A: PERVIOUS Runoff Area=20,239 sf 0.00% Impervious Runoff Depth=1.32"
Tc=10.0 min CN=74/0 Runoff=0.32 cfs 2,232 cf

SubcatchmentDMA 2: IMPERVIOUS Runoff Area=19,146 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=0.99 cfs 5,403 cf

SubcatchmentDMA 2A: PERVIOUS Runoff Area=15,749 sf 0.00% Impervious Runoff Depth=1.32"
Tc=10.0 min CN=74/0 Runoff=0.25 cfs 1,737 cf

SubcatchmentDMA 3: IMPERVIOUS Runoff Area=28,248 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=1.46 cfs 7,971 cf

SubcatchmentDMA 3A: PERVIOUS Runoff Area=9,488 sf 0.00% Impervious Runoff Depth=1.32"
Tc=10.0 min CN=74/0 Runoff=0.15 cfs 1,046 cf

SubcatchmentDMA 4: IMPERVIOUS Runoff Area=252,269 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=13.06 cfs 71,184 cf

SubcatchmentDMA 4A: PERVIOUS Runoff Area=44,529 sf 0.00% Impervious Runoff Depth=1.32"
Tc=10.0 min CN=74/0 Runoff=0.70 cfs 4,911 cf

SubcatchmentDMA 5: ROAD Runoff Area=5,062 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=0.26 cfs 1,428 cf

SubcatchmentDMA 6: ROAD Runoff Area=12,895 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=0.67 cfs 3,639 cf

SubcatchmentEX-1: EXISTING Runoff Area=504,774 sf 8.25% Impervious Runoff Depth=1.49"
Flow Length=720' Slope=0.0100 '/' Tc=36.1 min CN=74/98 Runoff=4.57 cfs 62,823 cf

Reach SCM 1: BIOSWALE Avg. Flow Depth=0.79' Max Vel=0.23 fps Inflow=1.60 cfs 9,284 cf
n=0.300 L=275.0' S=0.0051 '/' Capacity=1.58 cfs Outflow=0.99 cfs 9,284 cf

Reach SCM 2: BIOSWALE Avg. Flow Depth=0.77' Max Vel=0.23 fps Inflow=1.33 cfs 7,670 cf
n=0.300 L=200.0' S=0.0050 '/' Capacity=1.57 cfs Outflow=0.92 cfs 7,670 cf

Reach SCM 3: BIOSWALE Avg. Flow Depth=0.24' Max Vel=2.74 fps Inflow=1.71 cfs 9,570 cf
n=0.013 L=320.0' S=0.0050 '/' Capacity=23.53 cfs Outflow=1.67 cfs 9,570 cf

Pond SCM 4: DETENTION BASIN Peak Elev=785.41' Storage=105,496 cf Inflow=18.43 cfs 111,206 cf
Outflow=0.09 cfs 28,526 cf

Total Runoff Area = 1,009,755 sf Runoff Volume = 189,845 cf Average Runoff Depth = 2.26"
54.78% Pervious = 553,160 sf 45.22% Impervious = 456,595 sf

Summary for Subcatchment 7: ROAD

Runoff = 1.97 cfs @ 9.95 hrs, Volume= 10,750 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	38,096	98	
	38,096	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B1: BIOSWALE AREA

Runoff = 0.13 cfs @ 9.95 hrs, Volume= 721 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	2,556	98	impervious
	2,556	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B2: BIOSWALE AREA

Runoff = 0.10 cfs @ 9.95 hrs, Volume= 531 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	1,881	98	impervious
	1,881	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B3: BIOSWALE AREA

Runoff = 0.10 cfs @ 9.95 hrs, Volume= 553 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	1,958	98	impervious
	1,958	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B4: BASIN

Runoff = 1.57 cfs @ 9.95 hrs, Volume= 8,587 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	30,430	98	impervious
	30,430	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1: IMPERVIOUS

Runoff = 1.16 cfs @ 9.95 hrs, Volume= 6,331 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	22,435	98	impervious
	22,435	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1A: PERVIOUS

Runoff = 0.32 cfs @ 9.99 hrs, Volume= 2,232 cf, Depth= 1.32"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	20,239	74	Pervious
	20,239	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 2: IMPERVIOUS

Runoff = 0.99 cfs @ 9.95 hrs, Volume= 5,403 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	19,146	98	impervious
	19,146	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 2A: PERVIOUS

Runoff = 0.25 cfs @ 9.99 hrs, Volume= 1,737 cf, Depth= 1.32"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	15,749	74	Pervious
	15,749	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 3: IMPERVIOUS

Runoff = 1.46 cfs @ 9.95 hrs, Volume= 7,971 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	28,248	98	impervious
	28,248	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 3A: PERVIOUS

Runoff = 0.15 cfs @ 9.99 hrs, Volume= 1,046 cf, Depth= 1.32"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	9,488	74	Pervious
	9,488	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 4: IMPERVIOUS

Runoff = 13.06 cfs @ 9.95 hrs, Volume= 71,184 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	252,269	98	impervious
	252,269	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 4A: PERVIOUS

Runoff = 0.70 cfs @ 9.99 hrs, Volume= 4,911 cf, Depth= 1.32"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	44,529	74	Pervious
	44,529	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 5: ROAD

Runoff = 0.26 cfs @ 9.95 hrs, Volume= 1,428 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	5,062	98	
	5,062	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 6: ROAD

Runoff = 0.67 cfs @ 9.95 hrs, Volume= 3,639 cf, Depth= 3.39"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	12,895	98	
	12,895	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-1: EXISTING

Runoff = 4.57 cfs @ 10.05 hrs, Volume= 62,823 cf, Depth= 1.49"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	7,988	98	Onsite Impervious
*	421,890	74	Onsite Pervious
*	33,631	98	Offsite Impervious
*	41,265	74	Offsite Pervious
	504,774	76	Weighted Average
	463,155	74	91.75% Pervious Area
	41,619	98	8.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.5	150	0.0100	0.11		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.02"
13.6	570	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
36.1	720	Total			

Summary for Reach SCM 1: BIOSWALE

[55] Hint: Peak inflow is 101% of Manning's capacity

Inflow Area = 45,230 sf, 55.25% Impervious, Inflow Depth = 2.46" for 10-Yr event
Inflow = 1.60 cfs @ 9.96 hrs, Volume= 9,284 cf
Outflow = 0.99 cfs @ 10.10 hrs, Volume= 9,284 cf, Atten= 38%, Lag= 8.4 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.23 fps, Min. Travel Time= 19.7 min
Avg. Velocity = 0.06 fps, Avg. Travel Time= 81.9 min

Peak Storage= 1,176 cf @ 10.10 hrs
Average Depth at Peak Storage= 0.79'
Bank-Full Depth= 1.00' Flow Area= 6.0 sf, Capacity= 1.58 cfs

3.00' x 1.00' deep channel, n= 0.300
Side Slope Z-value= 3.0 '/' Top Width= 9.00'
Length= 275.0' Slope= 0.0051 '/'
Inlet Invert= 792.50', Outlet Invert= 791.10'

‡

Summary for Reach SCM 2: BIOSWALE

Inflow Area = 36,776 sf, 57.18% Impervious, Inflow Depth = 2.50" for 10-Yr event
Inflow = 1.33 cfs @ 9.96 hrs, Volume= 7,670 cf
Outflow = 0.92 cfs @ 10.07 hrs, Volume= 7,670 cf, Atten= 30%, Lag= 6.8 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.23 fps, Min. Travel Time= 14.8 min
Avg. Velocity = 0.06 fps, Avg. Travel Time= 56.3 min

Peak Storage= 816 cf @ 10.07 hrs
Average Depth at Peak Storage= 0.77'
Bank-Full Depth= 1.00' Flow Area= 6.0 sf, Capacity= 1.57 cfs

3.00' x 1.00' deep channel, n= 0.300
Side Slope Z-value= 3.0 '/' Top Width= 9.00'
Length= 200.0' Slope= 0.0050 '/'
Inlet Invert= 792.50', Outlet Invert= 791.50'

‡

Summary for Reach SCM 3: BIOSWALE

Inflow Area = 39,694 sf, 76.10% Impervious, Inflow Depth = 2.89" for 10-Yr event
Inflow = 1.71 cfs @ 9.96 hrs, Volume= 9,570 cf
Outflow = 1.67 cfs @ 9.98 hrs, Volume= 9,570 cf, Atten= 2%, Lag= 1.4 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.74 fps, Min. Travel Time= 1.9 min
Avg. Velocity = 0.92 fps, Avg. Travel Time= 5.8 min

Peak Storage= 195 cf @ 9.98 hrs
Average Depth at Peak Storage= 0.24'
Bank-Full Depth= 1.00' Flow Area= 4.0 sf, Capacity= 23.53 cfs

2.00' x 1.00' deep channel, n= 0.013
Side Slope Z-value= 2.0 '/' Top Width= 6.00'
Length= 320.0' Slope= 0.0050 '/'
Inlet Invert= 791.87', Outlet Invert= 790.26'

Summary for Pond SCM 4: DETENTION BASIN

Inflow Area = 448,928 sf, 79.95% Impervious, Inflow Depth = 2.97" for 10-Yr event
Inflow = 18.43 cfs @ 9.96 hrs, Volume= 111,206 cf
Outflow = 0.09 cfs @ 24.32 hrs, Volume= 28,526 cf, Atten= 99%, Lag= 861.1 min
Discarded = 0.09 cfs @ 24.32 hrs, Volume= 28,526 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Peak Elev= 785.41' @ 24.32 hrs Surf.Area= 20,224 sf Storage= 105,496 cf

Plug-Flow detention time= 2,618.5 min calculated for 28,511 cf (26% of inflow)
Center-of-Mass det. time= 2,335.7 min (3,056.9 - 721.1)

Volume	Invert	Avail.Storage	Storage Description
#1	777.00'	246,974 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
777.00	4,852	0.0	0	0
791.00	30,430	100.0	246,974	246,974

Device	Routing	Invert	Outlet Devices
#1	Discarded	777.00'	**0.200 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 10.00'

Discarded OutFlow Max=0.09 cfs @ 24.32 hrs HW=785.41' (Free Discharge)
└**1=Exfiltration** (Controls 0.09 cfs)

Time span=0.00-96.00 hrs, dt=0.05 hrs, 1921 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment7: ROAD Runoff Area=38,096 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.52 cfs 2,690 cf

SubcatchmentB1: BIOSWALE AREA Runoff Area=2,556 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.03 cfs 180 cf

SubcatchmentB2: BIOSWALE AREA Runoff Area=1,881 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.03 cfs 133 cf

SubcatchmentB3: BIOSWALE AREA Runoff Area=1,958 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.03 cfs 138 cf

SubcatchmentB4: BASIN Runoff Area=30,430 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.41 cfs 2,149 cf

SubcatchmentDMA 1: IMPERVIOUS Runoff Area=22,435 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.31 cfs 1,584 cf

SubcatchmentDMA 1A: PERVIOUS Runoff Area=20,239 sf 0.00% Impervious Runoff Depth=0.00"
Tc=10.0 min AMC Adjusted CN=55/0 Runoff=0.00 cfs 0 cf

SubcatchmentDMA 2: IMPERVIOUS Runoff Area=19,146 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.26 cfs 1,352 cf

SubcatchmentDMA 2A: PERVIOUS Runoff Area=15,749 sf 0.00% Impervious Runoff Depth=0.00"
Tc=10.0 min AMC Adjusted CN=55/0 Runoff=0.00 cfs 0 cf

SubcatchmentDMA 3: IMPERVIOUS Runoff Area=28,248 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.38 cfs 1,995 cf

SubcatchmentDMA 3A: PERVIOUS Runoff Area=9,488 sf 0.00% Impervious Runoff Depth=0.00"
Tc=10.0 min AMC Adjusted CN=55/0 Runoff=0.00 cfs 0 cf

SubcatchmentDMA 4: IMPERVIOUS Runoff Area=252,269 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=3.43 cfs 17,812 cf

SubcatchmentDMA 4A: PERVIOUS Runoff Area=44,529 sf 0.00% Impervious Runoff Depth=0.00"
Tc=10.0 min AMC Adjusted CN=55/0 Runoff=0.00 cfs 0 cf

SubcatchmentDMA 5: ROAD Runoff Area=5,062 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.07 cfs 357 cf

SubcatchmentDMA 6: ROAD Runoff Area=12,895 sf 100.00% Impervious Runoff Depth=0.85"
Tc=6.0 min AMC Adjusted CN=0/94 Runoff=0.18 cfs 910 cf

SubcatchmentEX-1: EXISTING Runoff Area=504,774 sf 8.25% Impervious Runoff Depth=0.07"
Flow Length=720' Slope=0.0100 '/' Tc=36.1 min AMC Adjusted CN=55/94 Runoff=0.25 cfs 2,939 cf

Reach SCM 1: BIOSWALE Avg. Flow Depth=0.30' Max Vel=0.14 fps Inflow=0.34 cfs 1,765 cf
n=0.300 L=275.0' S=0.0051 '/' Capacity=1.58 cfs Outflow=0.16 cfs 1,765 cf

Reach SCM 2: BIOSWALE Avg. Flow Depth=0.30' Max Vel=0.13 fps Inflow=0.29 cfs 1,485 cf
n=0.300 L=200.0' S=0.0050 '/' Capacity=1.57 cfs Outflow=0.16 cfs 1,485 cf

Reach SCM 3: BIOSWALE Avg. Flow Depth=0.11' Max Vel=1.69 fps Inflow=0.41 cfs 2,133 cf
n=0.013 L=320.0' S=0.0050 '/' Capacity=23.53 cfs Outflow=0.39 cfs 2,133 cf

Pond SCM 4: DETENTION BASIN Peak Elev=779.98' Storage=22,616 cf Inflow=4.45 cfs 25,342 cf
Outflow=0.05 cfs 13,698 cf

Total Runoff Area = 1,009,755 sf Runoff Volume = 32,239 cf Average Runoff Depth = 0.38"
54.78% Pervious = 553,160 sf 45.22% Impervious = 456,595 sf

Summary for Subcatchment 7: ROAD

Runoff = 0.52 cfs @ 9.96 hrs, Volume= 2,690 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	38,096	98		
	38,096	98	94	Weighted Average, AMC Adjusted
	38,096	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B1: BIOSWALE AREA

Runoff = 0.03 cfs @ 9.96 hrs, Volume= 180 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	2,556	98		impervious
	2,556	98	94	Weighted Average, AMC Adjusted
	2,556	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B2: BIOSWALE AREA

Runoff = 0.03 cfs @ 9.96 hrs, Volume= 133 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	1,881	98		impervious
	1,881	98	94	Weighted Average, AMC Adjusted
	1,881	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B3: BIOSWALE AREA

Runoff = 0.03 cfs @ 9.96 hrs, Volume= 138 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	1,958	98		impervious
	1,958	98	94	Weighted Average, AMC Adjusted
	1,958	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment B4: BASIN

Runoff = 0.41 cfs @ 9.96 hrs, Volume= 2,149 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	30,430	98		impervious
	30,430	98	94	Weighted Average, AMC Adjusted
	30,430	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1: IMPERVIOUS

Runoff = 0.31 cfs @ 9.96 hrs, Volume= 1,584 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	22,435	98		impervious
	22,435	98	94	Weighted Average, AMC Adjusted
	22,435	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1A: PERVIOUS

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	20,239	74		Pervious
	20,239	74	55	Weighted Average, AMC Adjusted
	20,239	74	55	100.00% Pervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 2: IMPERVIOUS

Runoff = 0.26 cfs @ 9.96 hrs, Volume= 1,352 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	19,146	98		impervious
	19,146	98	94	Weighted Average, AMC Adjusted
	19,146	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 2A: PERVIOUS

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	15,749	74		Pervious
	15,749	74	55	Weighted Average, AMC Adjusted
	15,749	74	55	100.00% Pervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 3: IMPERVIOUS

Runoff = 0.38 cfs @ 9.96 hrs, Volume= 1,995 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	28,248	98		impervious
	28,248	98	94	Weighted Average, AMC Adjusted
	28,248	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 3A: PERVIOUS

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	9,488	74		Pervious
	9,488	74	55	Weighted Average, AMC Adjusted
	9,488	74	55	100.00% Pervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 4: IMPERVIOUS

Runoff = 3.43 cfs @ 9.96 hrs, Volume= 17,812 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	252,269	98		impervious
	252,269	98	94	Weighted Average, AMC Adjusted
	252,269	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 4A: PERVIOUS

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	44,529	74		Pervious
	44,529	74	55	Weighted Average, AMC Adjusted
	44,529	74	55	100.00% Pervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Subcatchment DMA 5: ROAD

Runoff = 0.07 cfs @ 9.96 hrs, Volume= 357 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	5,062	98		
	5,062	98	94	Weighted Average, AMC Adjusted
	5,062	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 6: ROAD

Runoff = 0.18 cfs @ 9.96 hrs, Volume= 910 cf, Depth= 0.85"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	12,895	98		
	12,895	98	94	Weighted Average, AMC Adjusted
	12,895	98	94	100.00% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment EX-1: EXISTING

Runoff = 0.25 cfs @ 10.04 hrs, Volume= 2,939 cf, Depth= 0.07"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr WQ-95th Rainfall=1.40", AMC=1

	Area (sf)	CN	Adj	Description
*	7,988	98		Onsite Impervious
*	421,890	74		Onsite Pervious
*	33,631	98		Offsite Impervious
*	41,265	74		Offsite Pervious
	504,774	76	58	Weighted Average, AMC Adjusted
	463,155	74	55	91.75% Pervious Area, AMC Adjusted
	41,619	98	94	8.25% Impervious Area, AMC Adjusted

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.5	150	0.0100	0.11		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.02"
13.6	570	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
36.1	720	Total			

Summary for Reach SCM 1: BIOSWALE

Inflow Area = 45,230 sf, 55.25% Impervious, Inflow Depth = 0.47" for WQ-95th event
Inflow = 0.34 cfs @ 9.96 hrs, Volume= 1,765 cf
Outflow = 0.16 cfs @ 10.15 hrs, Volume= 1,765 cf, Atten= 53%, Lag= 11.3 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.14 fps, Min. Travel Time= 33.5 min
Avg. Velocity = 0.04 fps, Avg. Travel Time= 129.3 min

Peak Storage= 325 cf @ 10.15 hrs
Average Depth at Peak Storage= 0.30'
Bank-Full Depth= 1.00' Flow Area= 6.0 sf, Capacity= 1.58 cfs

3.00' x 1.00' deep channel, n= 0.300
Side Slope Z-value= 3.0 '/' Top Width= 9.00'
Length= 275.0' Slope= 0.0051 '/'
Inlet Invert= 792.50', Outlet Invert= 791.10'

‡

Summary for Reach SCM 2: BIOSWALE

Inflow Area = 36,776 sf, 57.18% Impervious, Inflow Depth = 0.48" for WQ-95th event
Inflow = 0.29 cfs @ 9.96 hrs, Volume= 1,485 cf
Outflow = 0.16 cfs @ 10.12 hrs, Volume= 1,485 cf, Atten= 45%, Lag= 9.2 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.13 fps, Min. Travel Time= 24.7 min
Avg. Velocity = 0.04 fps, Avg. Travel Time= 90.2 min

Peak Storage= 235 cf @ 10.12 hrs
Average Depth at Peak Storage= 0.30'
Bank-Full Depth= 1.00' Flow Area= 6.0 sf, Capacity= 1.57 cfs

3.00' x 1.00' deep channel, n= 0.300
Side Slope Z-value= 3.0 '/' Top Width= 9.00'
Length= 200.0' Slope= 0.0050 '/'
Inlet Invert= 792.50', Outlet Invert= 791.50'

‡

Summary for Reach SCM 3: BIOSWALE

Inflow Area = 39,694 sf, 76.10% Impervious, Inflow Depth = 0.64" for WQ-95th event
Inflow = 0.41 cfs @ 9.96 hrs, Volume= 2,133 cf
Outflow = 0.39 cfs @ 10.00 hrs, Volume= 2,133 cf, Atten= 4%, Lag= 2.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.69 fps, Min. Travel Time= 3.2 min
Avg. Velocity = 0.58 fps, Avg. Travel Time= 9.1 min

Peak Storage= 75 cf @ 10.00 hrs
Average Depth at Peak Storage= 0.11'
Bank-Full Depth= 1.00' Flow Area= 4.0 sf, Capacity= 23.53 cfs

2.00' x 1.00' deep channel, n= 0.013
Side Slope Z-value= 2.0 '/' Top Width= 6.00'
Length= 320.0' Slope= 0.0050 '/'
Inlet Invert= 791.87', Outlet Invert= 790.26'

Summary for Pond SCM 4: DETENTION BASIN

Inflow Area = 448,928 sf, 79.95% Impervious, Inflow Depth = 0.68" for WQ-95th event
Inflow = 4.45 cfs @ 9.97 hrs, Volume= 25,342 cf
Outflow = 0.05 cfs @ 24.18 hrs, Volume= 13,698 cf, Atten= 99%, Lag= 852.9 min
Discarded = 0.05 cfs @ 24.18 hrs, Volume= 13,698 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Peak Elev= 779.98' @ 24.18 hrs Surf.Area= 10,304 sf Storage= 22,616 cf

Plug-Flow detention time= 2,422.6 min calculated for 13,690 cf (54% of inflow)
Center-of-Mass det. time= 2,231.7 min (3,028.8 - 797.2)

Volume	Invert	Avail.Storage	Storage Description
#1	777.00'	246,974 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
777.00	4,852	0.0	0	0
791.00	30,430	100.0	246,974	246,974

Device	Routing	Invert	Outlet Devices
#1	Discarded	777.00'	**0.200 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 10.00'

Discarded OutFlow Max=0.05 cfs @ 24.18 hrs HW=779.98' (Free Discharge)
└**1=Exfiltration** (Controls 0.05 cfs)

Exhibit 4

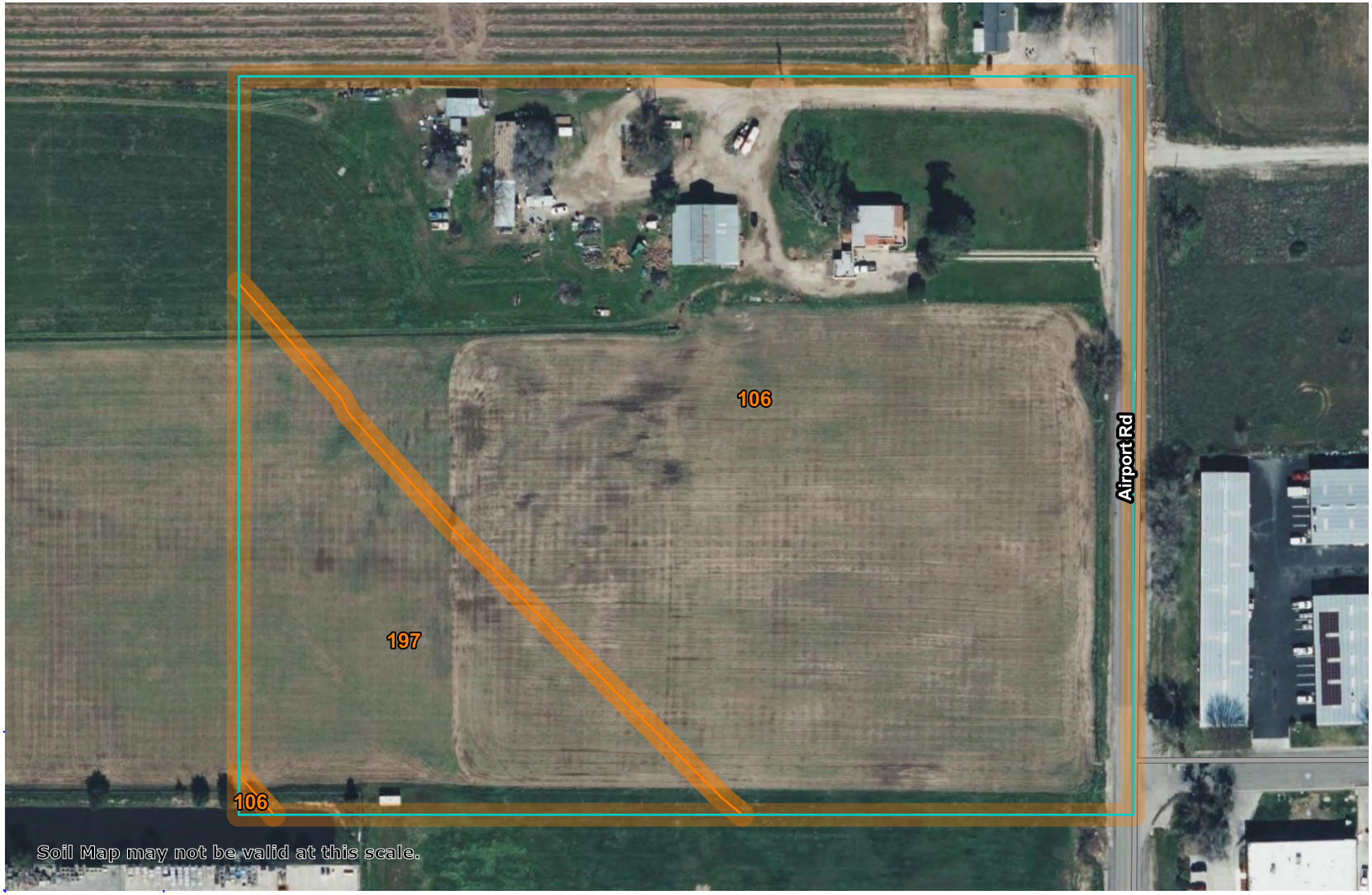
Web Soil Survey / Geotechnical Report

Attachment 12

Soil Map—San Luis Obispo County, California, Paso Robles Area

120° 38' 40" W 120° 38' 24" W

35° 40' 39" N 35° 40' 39" N



35° 40' 31" N 35° 40' 31" N

120° 38' 40" W 120° 38' 24" W

Map Scale: 1:1,830 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Luis Obispo County, California, Paso Robles Area
Survey Area Data: Version 15, Sep 9, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 1, 2019—Aug 17, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Arbuckle-San Ysidro complex, 2 to 9 percent slopes	11.3	80.7%
197	San Ysidro loam, 0 to 2 percent slopes, MLRA 14	2.7	19.3%
Totals for Area of Interest		**14.0**	**100.0%**

San Luis Obispo County, California, Paso Robles Area

197—San Ysidro loam, 0 to 2 percent slopes, MLRA 14

Map Unit Setting

National map unit symbol: 2tyys
Elevation: 70 to 1,990 feet
Mean annual precipitation: 13 to 22 inches
Mean annual air temperature: 59 to 61 degrees F
Frost-free period: 300 to 360 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

San ysidro and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of San Ysidro

Setting

Landform: Valley floors, alluvial fans, terraces
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

A - 0 to 23 inches: loam
B1 - 23 to 38 inches: clay loam
Bt2 - 38 to 64 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 16 to 24 inches to abrupt textural change
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C
Ecological site: R014XE029CA - LOAMY CLAYPAN
Hydric soil rating: No

Minor Components

Arbuckle
Percent of map unit: 6 percent
Hydric soil rating: No

Solano
Percent of map unit: 2 percent
Hydric soil rating: No

Pleasanton, loam
Percent of map unit: 2 percent
Hydric soil rating: No

Rincon
Percent of map unit: 2 percent
Hydric soil rating: No

Pescadero
Percent of map unit: 1 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Palexeralfs
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Cropley, clay
Percent of map unit: 1 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Paso Robles Area
Survey Area Data: Version 15, Sep 9, 2021

San Luis Obispo County, California, Paso Robles Area

106—Arbuckle-San Ysidro complex, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hbrp
Elevation: 600 to 1,500 feet
Mean annual precipitation: 12 to 20 inches
Mean annual air temperature: 60 to 61 degrees F
Frost-free period: 200 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Arbuckle and similar soils: 40 percent
San ysidro and similar soils: 20 percent
Minor components: 39 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arbuckle

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock sources

Typical profile

H1 - 0 to 29 inches: fine sandy loam
H2 - 29 to 38 inches: sandy clay loam
H3 - 38 to 62 inches: stratified sandy loam to very gravelly sandy clay loam

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C
Ecological site: R014XE003CA - COARSE LOAMY
Hydric soil rating: No

Description of San Ysidro

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rocks

Typical profile
H1 - 0 to 23 inches: loam
H2 - 23 to 38 inches: clay loam
H3 - 38 to 71 inches: sandy loam

Properties and qualities
Slope: 2 to 9 percent
Depth to restrictive feature: 20 to 37 inches to abrupt textural change
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.4 inches)

Interpretive groups
Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R014XE029CA - LOAMY CLAYPAN
Hydric soil rating: No

Minor Components

Greenfield, fine sandy loam
Percent of map unit: 14 percent
Hydric soil rating: No

Unnamed, similar to san ysidro soil
Percent of map unit: 10 percent
Hydric soil rating: No

Unnamed, simialr to arbuckle
Percent of map unit: 5 percent
Hydric soil rating: No

Hanford, fine sandy loam
Percent of map unit: 5 percent

Hydric soil rating: No

Cropley, clay
Percent of map unit: 2 percent
Hydric soil rating: No

Rincon, clay loam
Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed
Percent of map unit: 1 percent
Landform: Drainageways
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Paso Robles Area
Survey Area Data: Version 15, Sep 9, 2021

Attachment 12

MID-COAST GEOTECHNICAL, INC.

Geotechnical Engineering Services

GEOTECHNICAL ENGINEERING REPORT

Proposed Distribution Warehouse

5175 Airport Road

Paso Robles

for:

ICC, LP/SDG Paso Robles 413, LLC.

413 W. Yosemite Avenue, Suite 405

Madera, CA 93637

Date: April 6, 2022

File No. 19-8362

Report No. 20647

P.O. Box 2220 • 3124 El Camino Real • Atascadero, CA 93423-2220
Bus. (805)461-0965 • FAX (805)461-0161 • www.midcoastgeotech.com

TABLE OF CONTENTS

TITLE PAGE I
TABLE OF CONTENTS ii

1 INTRODUCTION 1

2 SCOPE OF THE GEOTECHNICAL INVESTIGATION 1

3 SUMMARY OF FINDINGS 1
3.1 SITE DESCRIPTION 1
3.2 EXPANSIVE NATURE OF THE SOIL 2
3.3 EXISTING SOIL CONDITIONS 2
3.4 GROUND WATER CONDITION 2
3.5 SEISMIC PARAMETERS 2
3.6 LIQUEFACTION POTENTIAL 3
3.7 INFILTRATION TESTING 3

4 GRADING RECOMMENDATIONS 4
4.1 GENERAL GRADING RECOMMENDATIONS 4
4.2 BUILDING AREA REMOVAL DEPTH 5
4.4 TENTATIVE STRUCTURAL SECTION 6
4.5 BOTTOM CHECK AND PROCESSING OF REMOVAL AREA 6
4.6 PLACEMENT OF FILL 7
4.7 IMPORT MATERIAL 7
4.8 SITE DRAINAGE 7

5 FOUNDATION DESIGN RECOMMENDATIONS 8
5.1 SOIL EXPANSION POTENTIAL 8
5.2 SUB-SLAB MOISTURE BARRIER 8
5.3 BEARING CAPACITY: CONTINUOUS FOOTINGS 8
5.4 BEARING CAPACITY: INDEPENDENT FOOTINGS 9
5.5 FOUNDATIONS NEAR SLOPES 9
5.6 WIND AND SEISMIC LOADS 9
5.7 PASSIVE AND FRICTIONAL RESISTANCE 9
5.8 RETAINING WALLS: ACTIVE EARTH PRESSURE 10
5.9 RETAINING WALL - AT-REST EARTH PRESSURE 11
5.10 ESTIMATED SETTLEMENT 11

6 ADDITIONAL RECOMMENDATIONS 11
6.1 PERIMETER SLABS AND GARDEN WALLS 11
6.2 COMPACTION OF EXCESS SOIL 11
6.3 ROOF GUTTERS AND DOWN SPOUTS 12

7 OBSERVATIONS AND TESTING 12

8 LIMITS AND LIABILITY 12

9 WARRANTY 14

APPENDIX
(Laboratory results, maps, and logs) 15

10 LABORATORY TEST RESULTS 16
10.1 MOISTURE-DENSITY DETERMINATIONS 16
10.2 FIELD DENSITY SUMMARY 16
10.3 EXPANSION INDEX TEST 17

1 INTRODUCTION

This report presents the results of our geotechnical investigation performed at the site of the proposed distribution warehouse located on Airport Road in the City of Paso Robles. The principal purpose of this investigation was to determine the geotechnical properties of the surface and subsurface soils in order to provide recommendations for general site grading and to design a suitable foundation for the proposed structure. From a geotechnical stand point the site appears to be suitable to support the proposed development when prepared as recommended herein. Research and exploratory work was conducted in accordance with presently accepted procedures consistent with the scope of work you have requested for this development. No warranty regarding the uniformity of subsurface conditions is implied.

2 SCOPE OF THE GEOTECHNICAL INVESTIGATION

The scope of our geotechnical investigation consisted of the following:

a. 7 truck mounted auger borings extended to depths of 4 to 15 feet. The location and identification of the excavations are shown on the attached drawings.
b. Observing existing man-made and natural field conditions.
c. Obtaining and testing representative bulk and undisturbed soil samples and logging the formations encountered.
d. Analysis of the field observations and laboratory testing.

3 SUMMARY OF FINDINGS

3.1 SITE DESCRIPTION

The proposed warehouse structure will be located near the center of the parcel which slopes very gently to the west at less than 1 percent slope. An existing residence is located north of the site, an existing commercial building is located south of the site and Airport Road borders the parcel on the east.

3.2 EXPANSIVE NATURE OF THE SOIL

The surface soils are a very low expansive sandy material that are underlain with low to medium expansive clayey soils.

3.3 EXISTING SOIL CONDITIONS

The loose sandy surface soils were encountered to 1 to 2.5 feet below grade and are underlain with firm clayey material. Hard sandy material underlies the site at 3 to 6 feet below grade.

3.4 GROUND WATER CONDITION

At the time of our investigation no ground water was encountered in the excavations to a depth of 15 feet below existing grade. Fluctuation in the level of the ground water may occur due to variation in rainfall, temperature, or other factors.

3.5 SEISMIC PARAMETERS

We have reviewed the available information regarding the site locations and soil type. The purpose of our review was to determine the appropriate seismic parameters for the 2019 CBC Section 1613 requirements. The site is underlain with hard sandy material according to the logs available from the area. Density of the soil with respect to blow counts, shear strength, or shear wave velocities to a depth of 100 feet, has not been determined. However, due to the sandy nature of the near-surface material and the high blow counts in the upper 15 feet of material, we recommend that a site class D be used for the project. Based on information provided in IBC Figures 1613.2.1 (1) and (2) and Tables 1613.2.3, the maximum considered earthquake spectral response acceleration values, adjusted for site class effects, are as follows:

short periods: $S_{DS} = 0.827g$

1-second periods: $S_{D1} = 0.523g$

(Confirmed with the USGS website www.hazards.atcouncil.org)

3.6 LIQUEFACTION POTENTIAL

We have reviewed the subsurface data to provide an opinion regarding the liquefaction potential of the site. Exploratory borings were extended 15 feet deep in the building area. In both excavations, hard sandy material was noted within about 5 feet of the existing grade. In addition, no groundwater was observed in either test boring.

Liquefaction is generally considered a result from development of pore pressure in loose saturated sandy soil during a seismic event. The potential of liquefaction is based on the seismicity of the site, the presence and depth of groundwater, the presence of sandy soil, and density of the soil. We have not extended an exploratory boring more than 15 feet deep in the building area. Based on the presence of hard sandy material at a depth of about 5 feet and no groundwater in the area, it is our opinion that the likelihood of liquefaction of the site is very low.

3.7 INFILTRATION TESTING

We have performed shallow quick infiltration testing at the subject site, in the area of the proposed stormwater control measures (SCM). The testing was performed in two locations, at depths of 3 and 5 feet below existing grade, the assumed bottom of the SCM. The test pits were excavated using a 6" solid flight auger and were cased with a 4" diameter perforated pipe and fine gravel. In addition to the test pits, one 10' deep profile boring was excavated in the area of the test pits. A site plan showing the location of the infiltration test pits and the profile boring is attached to this report. The test pits were pre-saturated the day before the testing was performed. The infiltration tests were performed on February 24, 2022 with the final test duration resulting in a two hour test. The results follow:

Infiltration Test Number	I1	I2
Depth (ft)	3	5
Slowest Infiltration Rate Observed (in/hr)	20	65

Based on the standards set forth in the *Post Construction Requirement Handbook (Version 1.1-March 2014 Draft),* Appendix D, infiltration of stormwater at the depths and locations of this site appears to be feasible for small to moderate volumes of water depending on the depth of the basin.

4 GRADING RECOMMENDATIONS

The following recommendations are made based on your representations that a reinforced concrete structure will be constructed on the site. It is your responsibility to notify the geotechnical engineer of any changes to the proposed development. If changes occur, the recommendations contained in this report will be reviewed and may need to be revised.

4.1 GENERAL GRADING RECOMMENDATIONS

a. All grading work should be done in a professional manner and in conformance with the current local jurisdiction's grading ordinances and per the grading recommendations stated herein. In addition, all grading work shall be observed by the geotechnical engineers representatives.

b. All removal areas and footing excavations shall be observed by the representative of the geotechnical engineer before any fill or steel reinforcement is placed. It is your responsibility to notify MID-COAST Geotechnical, Inc. when grading operations or construction begins so that the required observations can be made.

c. All surface vegetation and debris shall be removed from the work area as grading operations begin.

d. A careful search shall be made for subsurface debris and abandoned water wells, septic tanks, etc., during grading operations. If any such subsurface cavities are encountered, they shall be removed down to the firm underlying soil and properly backfilled and compacted as directed by a representative of the geotechnical engineer.

e. Special inspections should be performed in accordance with Table 1705.6 below:

TABLE 1705.6
REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. Verify materials below footings are adequate to achieve the design bearing capacity.	-----	X
2. Verify excavations are extended to proper depth and have reached proper material.	-----	X
3. Perform classification and testing of controlled filled materials.	-----	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of controlled fill.	X	-----
5. Prior to placement of controlled fill, observe subgrade and verify that the site has been prepared properly.	-----	X

*2019 California Building Code

4.2 BUILDING AREA REMOVAL DEPTH

The existing surface soils and any uncertified fill material underlying the proposed building area shall be removed to a minimum depth of 36 inches below the bottom of the proposed footings or down to firm natural material, whichever is deeper.

NOTE: Certified structural fill is required for any fill to be used for an engineering purpose. All fill beneath structures, on slopes greater than 5:1, in embankments or other earthen structures, must be certified structural fill. All other fills, deeper than 12 inches, not to be used for structural support should be compacted but in some cases may not require certification. These uncertified fill areas, such as landscape fills, must be approved by this office and the local jurisdiction prior to grading.

4.3 PREPARATION OF STREET AND PARKING AREAS

The following guidelines are to be used for grading in the streets, roadways, and parking areas:

In those areas that will be supporting pavement, the existing surface soils shall be removed to a minimum depth of 24 inches below subgrade elevation. The exposed soils at the bottom of the removal areas shall then be scarified to a depth of 8 inches, brought to near optimum moisture content, and compacted to a minimum of 90 percent of the maximum density (ASTM D-1557) before any fill is placed. The area prepared as suggested above will provide adequate support for the proposed pavement but will not be certified as structural fill.

4.4 TENTATIVE STRUCTURAL SECTION

A tentative structural section for the paved firelanes is 3"AC/14.5"AB which is based on an assumed Traffic Index of 6.0 and an R-value of <5 as determined by our firm. Tentative structural sections for the paved auto parking is 2.5"AC/9.5"AB and Airport Road is 4.0"AC/20.0"AB. All subgrade soils shall be compacted to a minimum of 95 percent of the maximum density (ASTM D1557) to a minimum depth of 12 inches below the subgrade elevation. Aggregate Base (AB) shall be defined as "Processed Miscellaneous Base" or "Class II Base" material as required by the local jurisdiction. AB shall be extended under curbs and gutters where subgrade soils exceed an expansion index of 50. The structural sections shall be confirmed or modified by R-value testing as necessary when the subgrade is prepared.

4.5 BOTTOM CHECK AND PROCESSING OF REMOVAL AREA

Field observations will be required to confirm that the removal bottom has been established in firm natural material prior to processing operations. The exposed material at the bottom of the removal areas shall then be properly prepared and brought to near optimum moisture content before any fill is placed. The removal shall extend a minimum of 5 feet beyond the

foundation perimeter or equal to the depth of removal, whichever is greater. The removed soil may be used as backfill providing all the deleterious materials, if any, are picked out.

4.6 PLACEMENT OF FILL

All fill shall be placed in layers approximately 8 inches in depth, brought to a moisture content near optimum moisture content, and compacted to a minimum of 95 percent of the maximum density (ASTM D1557) up to final pad subgrade. Fill compacted at high moisture content may be subject to yielding. Yielding or pumping grades will not be approved by this office. Material placed as certified fill shall be free of debris and rocks greater than six inches in width across the widest point.

4.7 IMPORT MATERIAL

All imported material, if any, to be used for structural fills shall be observed and approved by a representative of the geotechnical engineer prior to transport to the site. Imported fill material shall be free of debris and rocks greater than six (6) inches at the widest point. Imported soils shall be similar or less expansive than those existing on the site. The rock-to-soil ratio of the import material shall not exceed 50 percent.

4.8 SITE DRAINAGE

Small ponds of water near any structure should be eliminated. Final grading shall provide a positive drainage away from the footings. If a swale is required to collect the flow, the swale bottom should preferably be at least 10 feet from the footings or outside of the foundation wall backfill and sloped sufficiently to direct the runoff away from the building area and lot. All pad and roof drainage should be collected and transferred away from the buildings in non-erosive devices. Proper drainage shall also be provided away from the building footings and from the lot during construction. This is especially important when construction takes place during the rainy season. All drainage plans should also be in compliance with the local jurisdictions grading requirements.

5 FOUNDATION DESIGN RECOMMENDATIONS

The foundation design recommended below shall be confirmed or modified, if necessary, after grading operations are completed, depending upon the nature of the soils resulting on the surface of the graded building pad.

5.1 SOIL EXPANSION POTENTIAL

At a minimum, any foundation design should take into consideration construction on soils in the expansion index range of 51 to 90. The actual expansion index range may vary depending on the nature of the soil resulting after the completion of grading. Structural details of any foundations, such as footing thickness, concrete strength and the amount of reinforcement should be established by your structural engineer.

5.2 SUB-SLAB MOISTURE BARRIER

In order to reduce the migration of moisture through the foundation and into office areas and other areas that receive flooring that is sensitive to moisture, we recommend that 3/4" or larger clean gravel be placed in a minimum thickness of 4 inches above pad grade. A vapor retarder shall be placed over the gravel with a minimum of 2 inches of sand or gravel placed over the plastic and beneath the slab. The vapor retarder shall conform to the requirements of ASTM E1745-11 and shall be installed in conformance with ASTM E1643.

5.3 BEARING CAPACITY: CONTINUOUS FOOTINGS

Continuous footings supported on certified fill material are adequate for foundation support of the proposed structure and may be designed using a bearing pressure of 1850 psf. The footing depth should meet the minimum recommendations noted above. The recommended bearing values are based on an assumed embedment of a minimum of 24 inches into certified fill material and be a minimum of 12 inches wide. A 5 percent increase of bearing pressure values is allowable for each additional 6-inch increment of width or depth up to a maximum value of 3500 psf.

5.4 BEARING CAPACITY: INDEPENDENT FOOTINGS

Independent footings supported on certified fill material may be designed using a bearing pressure of 1950 psf. They shall be a minimum of 15 inches in width and extend a minimum of 18 inches below the lowest adjacent grade. A 5 percent increase is allowable for each additional 6 inches of width and/or depth up to a maximum value of 3500 psf.

5.5 FOUNDATIONS NEAR SLOPES

All foundations excavated on or adjacent to any existing or proposed slopes will require a minimum 10 feet horizontal distance to daylight. The horizontal distance is measured from the bottom of the footings to daylight on the slope or to the extent of the competent material on the slope, i.e., all slough or loose material on the slope will be discounted when measuring the distance to daylight.

5.6 WIND AND SEISMIC LOADS

The bearing pressures given are for the total of dead and frequently applied live loads and may be increased by one-third for short duration loading which includes the effects of wind or seismic forces.

5.7 PASSIVE AND FRICTIONAL RESISTANCE

Resistance to lateral loading may be provided by friction acting at the base of foundations and by passive earth pressure. An allowable coefficient of friction of 0.35 may be used with the dead load forces in the certified fill material.

Passive earth pressure may be computed as an equivalent fluid having a density of 350 pcf with a maximum earth pressure of 1750 psf. When combining passive and friction for lateral resistance, the passive component should be reduced by one-third.

5.8 RETAINING WALLS: ACTIVE EARTH PRESSURE

Retaining walls may be designed for an equivalent fluid pressure of 37 psf per foot of depth. Additional active pressure should be added for a surcharge condition due to sloping ground, vehicular traffic, or adjacent structures. The allowable bearing, friction, and passive earth pressure may be found in the preceding sections.

All other retaining walls may be designed for the corresponding active pressures shown on the table below:

Surface Slope of Retained Material Horizontal to Vertical	Equivalent Fluid Weight (pcf)
Level	37
5 to 1	39
4 to 1	42
3 to 1	45
2 to 1	50

All walls should be backfilled with a minimum 1-foot wide layer of free draining soil, approved by MID-COAST Geotechnical, Inc., synthetic drain product, or clean, uniform sized gravel placed against the wall up to 18 inches below finish grade. Where the cavity to be filled behind a wall is less than 18 inches at the surface, the use of gravel is allowed without testing if compacted to the satisfaction of the geotechnical engineer. In the case of walls constructed with gravel backfill in areas where subsurface water is anticipated, we recommend that a geotextile fabric be placed between the backfill and cut.

In order to reduce the migration of water behind the wall, the surface of the gravel backfill should be sealed by pavement or covered by 18 inches of compacted soil. The surface water drainage shall be directed away from the wall and shall meet the requirements of the current local jurisdiction's building code. Where weep holes are not used at the base of the retaining wall, a perforated pipe shall be placed within a bed of approved rock at the base of the retaining wall and shall be drained to discharge into an approved drainage course.

5.9 RETAINING WALL - AT-REST EARTH PRESSURE

Retaining walls which are restrained at both top and bottom, such as with basement walls, shall be designed for at-rest earth pressures. The walls should be designed for an equivalent fluid pressure of 65 pcf. Additional surcharge should be added to the lateral loading if there is sloping backfill, vehicular traffic, or structures adjacent to the wall. As with other retaining walls, adequate back drains should be provide to relieve any excess hydrostatic pressures.

5.10 ESTIMATED SETTLEMENT

Based upon test results, field observations, and compliance with these recommendations, a total settlement of less than 1.5 inch and differential settlement of less than 1/2 inch is expected in a distance of 20 feet.

6 ADDITIONAL RECOMMENDATIONS

6.1 PERIMETER SLABS AND GARDEN WALLS

Perimeter slabs (walkways, patios, etc.) and garden walls shall be designed as free-floating and independent of the adjacent structure. Subgrade materials in areas to receive slab-on-grade shall be prepared and presaturated as per the "Foundation" recommendations provided herein.

6.2 COMPACTION OF EXCESS SOIL

Soils generated during footing excavation operations should not be placed across the pads unless the materials are compacted to at least 90 percent of the maximum density (ASTM D1557). This also applies to sand, agricultural, and landscape fill exceeding 12 inches in depth. Compaction tests should be taken in additional fills placed in order to confirm that the minimum relative compaction requirements are achieved. It is your responsibility to notify MID-COAST Geotechnical, Inc. if testing is needed.

6.3 ROOF GUTTERS AND DOWN SPOUTS

We advise that gutters and down spouts be installed on all buildings as a means of improving the flow of run-off away from the foundation and building area. Gutters and down spouts are of particular importance when the structure is located on expansive soil, on sandy soil underlain with low permeability material, on structures with subterranean areas, or other conditions which may be sensitive to excess moisture. Down spouts should be connected to PVC pipe and drained to an approved drainage course such as a street or storm drain.

7 OBSERVATIONS AND TESTING

All foundation excavations should be approved by this firm prior to placing concrete or any steel reinforcement. All removal excavation bottoms shall be observed and approved by a geotechnical engineer or his representative prior to placement of backfill. Any fill placed for engineering purposes should be tested and certified.

Temporary wall excavations should be observed by a representative of this firm. It is your responsibility to notify MID-COAST Geotechnical, Inc. at each stage of the excavations so that observations can be made. If the examination reveals any hazard, appropriate treatment will be recommended. Please advise this office at least 24 hours prior to any required observations.

8 LIMITS AND LIABILITY

Please be aware that our contract fee for our services to prepare this report do not include additional work which may be required such as grading observation and testing, footing observations, presaturation observations, etc. Since the extent of grading and the amount of involvement of our services varies for each project, our services are normally billed on an hourly rate or per-test basis.

This report provides recommendations and comments in accordance with currently accepted practice applicable to the scope of your project. Further requirements may be imposed by the reviewing agency or necessary as a result of changes to your building or grading plans. Where additional services are

requested or required, you will be billed for any equipment costs and on an hourly basis for consultation or analysis.

All documents, including maps, plans, drawings, specification and test results which we prepare or furnish or which are prepared or furnished by our independent professional associates and consultants pursuant to this agreement are considered instruments of service with respect to the project, and we will retain an ownership and property interest therein, whether or not the project is completed. Without limiting the foregoing, we reserve the right to make use of all information obtained in the performance of our services in projects for other clients, including without limitation, the right to use all test results and reports in performing services for future owners of your property.

The limits of our liability for data contained in this report and our warranty are presented on the following page.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to assure that the information and recommendations contained herein are called to the attention of the designers and builders for the project.

Respectfully submitted,
MID-COAST Geotechnical, Inc.

Dane C. Jensen, RCE C60675
Expiration Date 12/31/2022

DCJ/gjr
ICC, LP/SDG Paso Robles 413, LLC. (1 + e-mail)

9 WARRANTY

This report is based on the development plans provided to our office. In the event that any significant changes in the design or location of the structure(s) as outlined in this report are planned, the conclusions and recommendations contained in this report may not be considered valid unless the changes are reviewed and the conclusions of this report are modified or approved by the geotechnical engineer.

The subsurface conditions, excavations, and characteristics described herein have been projected from individual borings or test pits placed on the subject property. The subsurface conditions, excavation, and characteristics shown should in no way be construed to reflect any variation which may occur between these borings or test pits.

It should be noted that fluctuations in the level of the groundwater may occur due to variation in rainfall, temperature, changes in drainage and grading, and other factors not evident at the time measurements were made and reported herein. MID-COAST Geotechnical, Inc. assumes no responsibility for variations which may occur across the site.

If conditions encountered during construction appear to differ from those disclosed, this office shall be notified so as to consider the need for modifications. No responsibility for construction compliance with the design concepts, specifications or recommendations is assumed unless on-site construction review is performed during the course of construction which pertains to the specific recommendations contained herein.

This report has been prepared in accordance with generally accepted practice. No warranties, either express or implied, are made as to the professional advice provided under the terms of the agreement and included in this report.

APPENDIX

(Laboratory results, maps, and logs)

10 LABORATORY TEST RESULTS

10.1 MOISTURE-DENSITY DETERMINATIONS

Maximum Density-Optimum Moisture data were determined in the laboratory from soil samples using the ASTM D-1557-12e1 Test Method.

SOIL TYPE	SOIL DESCRIPTION	MAXIMUM DRY DENSITY (lbs/cu.ft)	OPTIMUM MOISTURE (%)
S2	Light brown clayey SAND	133.2	9.0
S4	Red brown silty SAND w/ gravel	126.0	10.0

10.2 FIELD DENSITY SUMMARY (Ring Density Method)

TEST NO.	DEPTH (FT)	SOIL TYPE	FIELD MOISTURE CONTENT (%)	DRY DENSITY (lbs/cu.ft)	% OF MAX. DRY DENSITY
B1	2	C1	11.3		
B1	5	S2	11.9	115.6	87
B1	10	C2	8.8		
B2	2	S1	8.6		
B2	5	S2	12.4		
B2	10	S3	9.3		
B2	15	S3	11.1		
B3	2	S1	13.2		
B3	5	S2	11.7	114.6	86
B3	10	S2	7.8		
B4	2	C1	14.7		
B4	4	S2	6.7		
B5	2	C1	19.8		
B5	4	S2	6.4		
B6	2	C1	15.1		
B6	5	S2	11.9		
B7	2	C2	17.3		
B7	5	S4	5.1	88.2	70
B7	7	S4	4.4		

10.3 EXPANSION INDEX TEST

Each Expansion Index Test was performed on a representative bulk sample of the soil collected during our investigation. Expansion index test procedure is performed in accordance with ASTM D4289-19. The results follow:

SOIL TYPE	LOCATION	EXPANSION INDEX
C1	B1 @ 2-4'	83
C2	B2 @ 6-10'	61
C3	B3 @ 2.5-4.5'	48
C1	B4 @ 1.5-3'	86
C2	B7 @ 1-4'	70

Midcoast Geotechnical, Inc
3124 El Camino Real
Atascadero CA 93422
Telephone: 805-461-0965

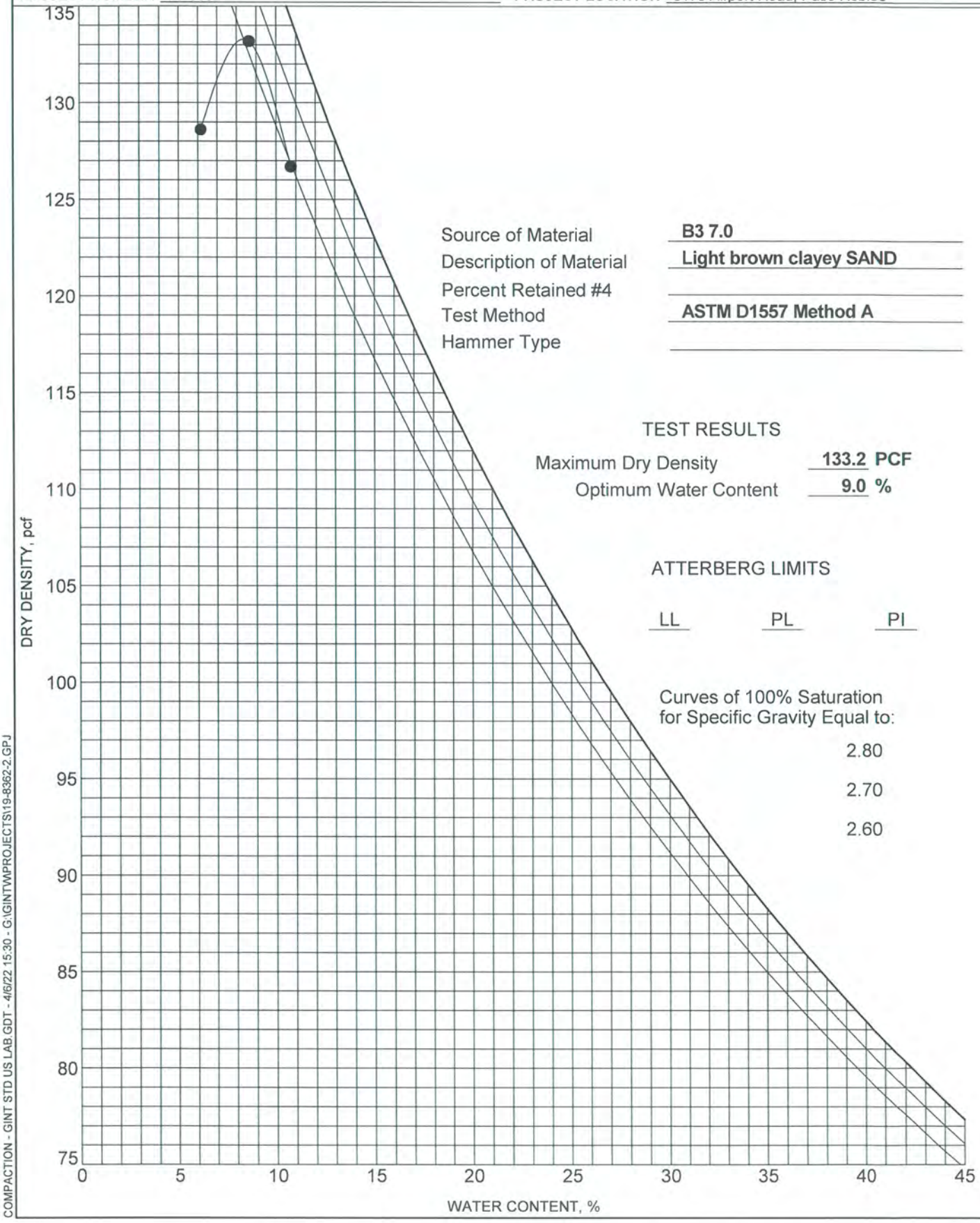
MOISTURE-DENSITY RELATIONSHIP

CLIENT ICC Stravinski

PROJECT NAME Proposed Distribution Warehouse

PROJECT NUMBER 19-8362

PROJECT LOCATION 5175 Airport Road, Paso Robles



Source of Material: B3 7.0

Description of Material: Light brown clayey SAND

Percent Retained #4:

Test Method: ASTM D1557 Method A

Hammer Type:

TEST RESULTS

Maximum Dry Density: 133.2 PCF

Optimum Water Content: 9.0 %

ATTERBERG LIMITS

LL PL PI

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

Midcoast Geotechnical, Inc
3124 El Camino Real
Atascadero CA 93422
Telephone: 805-461-0965

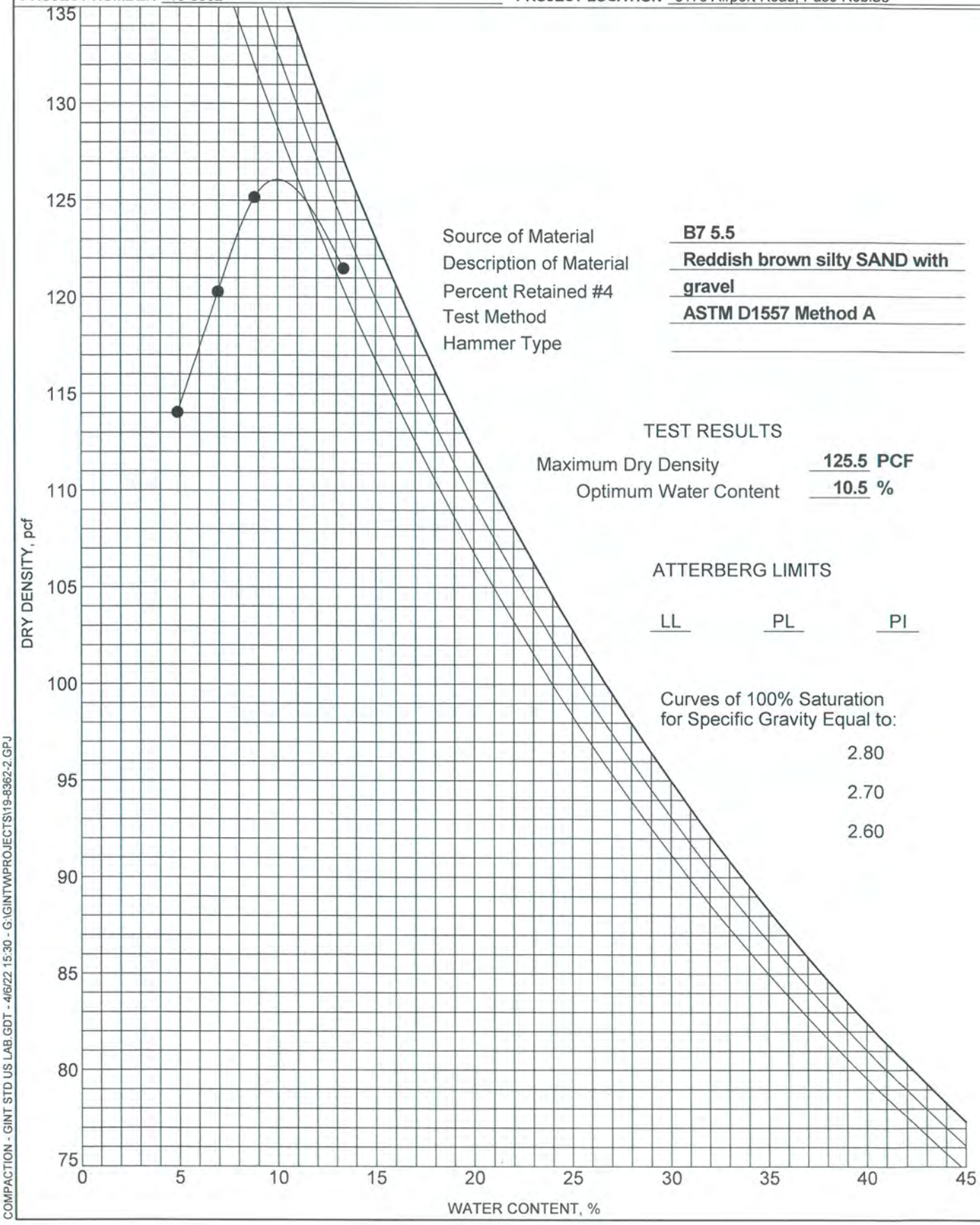
MOISTURE-DENSITY RELATIONSHIP

CLIENT ICC Stravinski

PROJECT NAME Proposed Distribution Warehouse

PROJECT NUMBER 19-8362

PROJECT LOCATION 5175 Airport Road, Paso Robles



Source of Material	B7 5.5
Description of Material	Reddish brown silty SAND with gravel
Percent Retained #4	
Test Method	ASTM D1557 Method A
Hammer Type	

TEST RESULTS

Maximum Dry Density 125.5 PCF

Optimum Water Content 10.5 %

ATTERBERG LIMITS

LL PL PI

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

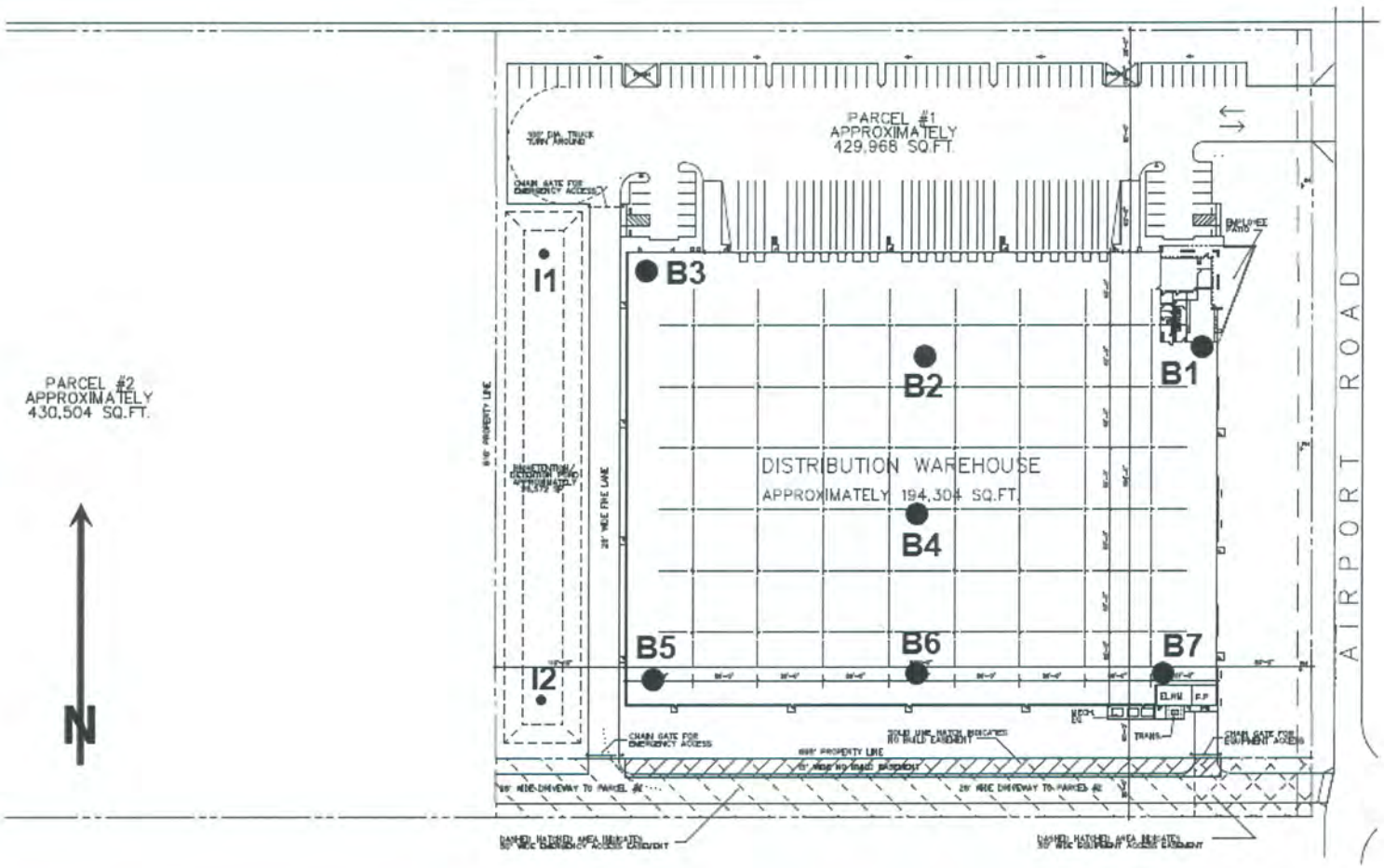
2.60

Vicinity Map **N.T.S.**

*MAP PROVIDED BY BING MAPS

MCG MID-COAST GEOTECHNICAL, INC.	ICC, LP/SDG Paso Robles 413, LLC. Proposed Distribution Warehouse 5175 Airport Road Paso Robles California	Date: April 6, 2022 **Plate 1**

Attachment 12



Legend **N.T.S.**

- ● Exploratory Soils Boring
- • Infiltration Test Location

*PLAN PROVIDED BY OTHERS

MID-COAST GEOTECHNICAL, INC.

ICC, LP/SDG Paso Robles 413, LLC.
Proposed Distribution Warehouse
5175 Airport Road
Paso Robles
California

Date: April 6, 2022

Plate 2

Attachment 12

Attachment 12

LOG OF BORING B1

MID-COAST GEOTECHNICAL, INC.

3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
1													S1	Brown silty SAND, loose to m.d., damp
2														
			11											Brown sandy CLAY, firm, damp
3									83				C1	
4														Light brown clayey SAND w/ gravel, medium dense to hard, damp
5		N = 50	12	116	87								S2	
6														
7														Brown sandy CLAY w/ gravel, stiff, damp
8													C2	
9														
			9											
10														Boring Terminated at 10 feet

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

Attachment 12

LOG OF BORING B2

MID-COAST GEOTECHNICAL, INC.

3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
1													S1	Dark brown silty SAND, loose to medium dense, damp
2			9											
3													S2	Brown clayey SAND w/ gravel, medium dense to hard, damp
4														
5			12											
6													C2	Brown sandy CLAY, stiff, damp
7														
8									61					
9														
10			9										S3	Red brown clayey SAND with gravel, hard, moist
11														
12														
13														
14														
15			11											Boring terminated at 15 feet

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

LOG OF BORING B3

MID-COAST GEOTECHNICAL, INC.
3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
1													S1	Dark brown silty SAND, loose to medium dense, damp
2			13											
3									48				C3	Brown sandy CLAY, firm, damp
4														
5		N = 32	12	115	86									Light brown clayey SAND, hard, damp
6														
7													S2	
8														
9			8											
10														Boring Terminated at 10 feet

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

LOG OF BORING B4

MID-COAST GEOTECHNICAL, INC.
3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
													S1	Dark brown silty SAND, loose to medium dense, damp
1														
2			15						86				C1	Brown sandy CLAY, firm, damp
3			7										S2	Red brown clayey SAND with gravel, hard, moist
4														Refusal at 4' below grade on cobbles

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

Attachment 12

LOG OF BORING B5

MID-COAST GEOTECHNICAL, INC.

3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
													S1	Dark brown silty SAND, loose to medium dense, damp
1														
2			20										C1	Brown sandy CLAY, firm, moist
3													S2	Red brown clayey SAND with gravel, hard, damp
4			6											
														Refusal at 4.5' below grade on cobbles

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

LOG OF BORING - MIDCOAST.GDT - 4/6/22 15:35 - G:\GINTW\PROJECTS\19-8362-2.GPJ

Attachment 12

LOG OF BORING B6

MID-COAST GEOTECHNICAL, INC.

3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
1													S1	Dark brown silty SAND, loose to medium dense, damp
2			15										C1	Brown sandy CLAY, firm, damp
3													S2	Red brown clayey SAND with gravel, hard, damp
4														
5		N = 18	12											Refusal at 5.5' below grade on cobbles

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

LOG OF BORING - MIDCOAST.GDT - 4/6/22 15:35 - G:\GINTW\PROJECTS\19-8362-2.GPJ

LOG OF BORING B7

MID-COAST GEOTECHNICAL, INC.
3124 El Camino Real Atascadero CA 93422
Telephone: 805-461-0965

CLIENT: ICC Stravinski
PROJECT: Proposed Distribution Warehouse
LOCATION: 5175 Airport Road, Paso Robles
NUMBER: 19-8362
DATE(S) DRILLED: 2/23/2022 - 2/23/2022

DRILLING METHOD(S):
Mobile B24 Truck Mounted Drill Rig

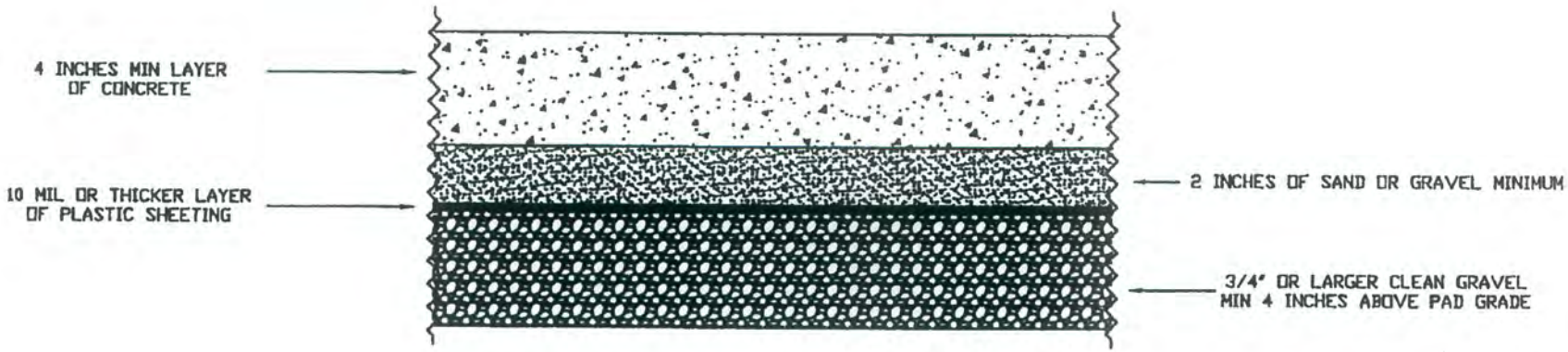
GROUNDWATER INFORMATION:
No Ground Water Detected

SURFACE ELEVATION:

FIELD DATA			LABORATORY DATA								CLASS.			
DEPTH (FT)	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	RELATIVE COMPACTION (%)	ATTERBERG LIMITS: LIQUID LIMIT LL	ATTERBERG LIMITS: PLASTIC LIMIT PL	ATTERBERG LIMITS: PLASTICITY INDEX PI	EXPANSION INDEX	MINUS NO. 200 SIEVE (%)	USCS	SOIL SYMBOL	SOIL TYPE	DESCRIPTION OF STRATUM
													S1	Dark brown silty SAND, loose to medium dense, damp
1														
2			17						70				C2	Brown sandy CLAY, firm, moist
3														
4														Red brown silty SAND with gravel, medium dense, damp
5		N = 33	5	88	70								S4	
6			4											
7														Refusal at 7' below grade on cobbles

N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:
Boring was backfilled with auger clippings

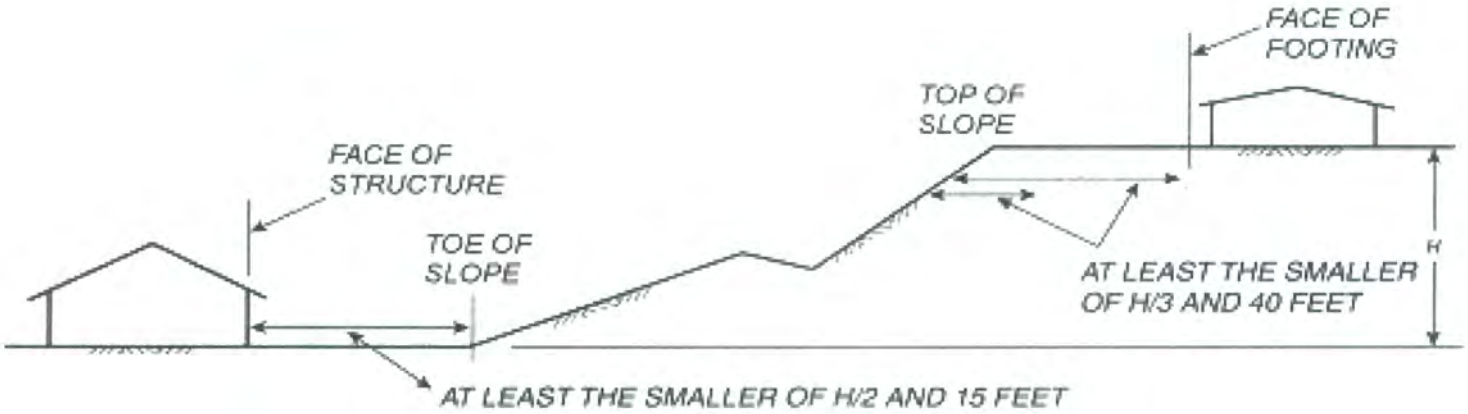


MID-COAST GEOTECHNICAL, INC.

SUB-SLAB MOISTURE BARRIER
(Typical)

Plate S

Attachment 12



For SI: 1 foot = 304.8 mm.

FIGURE 1808.7.1

FOUNDATION CLEARANCES FROM SLOPES

MID-COAST GEOTECHNICAL, INC.	Slope Setbacks - Per 1808.7.1 CBC 2019	**Plate T**

Attachment 12

PRELIMINARY STORMWATER CONTROL PLAN
FOR
DAOU CAMPUS AIRPORT ROAD

May 26, 2022

Daou Vineyards & Winery
2777 Hidden Mountain Road
Paso Robles, CA 93446

Prepared by:

Wallace Group
Brett Hadley

REGISTERED PROFESSIONAL ENGINEER
BRETT D. HADLEY
No. 80124
DRAFT - FOR REVIEW ONLY
CIVIL
STATE OF CALIFORNIA

WALLACE GROUP®
CIVIL AND TRANSPORTATION ENGINEERING
CONSTRUCTION MANAGEMENT
LANDSCAPE ARCHITECTURE
MECHANICAL ENGINEERING
PLANNING
PUBLIC WORKS ADMINISTRATION
SURVEYING / GIS SOLUTIONS
WATER RESOURCES
612 CLARION COURT
SAN LUIS OBISPO, CA 93401
T 805 544-4011 F 805 544-4294
www.wallacegroup.us

Table of Contents

I. Project Data 4
II. Setting 4
- **a. Project Location and Description** 4
- **b. Existing Site Features and Conditions** 5
- **c. Opportunities and Constraints for Stormwater Control** 5

III. Low Impact Development Design Strategies 6
- **a. Optimization of Site Layout** 6
- **b. Use of Permeable Pavements** 6
- **c. Dispersal of Runoff to Pervious Areas** 6

IV. Documentation of Drainage Design 6
- **a. Applicable Stormwater Requirements** 6
- **b. Drainage Management Areas** 6
- **c. Hydrologic Analysis** 7
- **d. Summary of Calculations** 8

V. Source Control Measures 8
VI. Stormwater Facility Maintenance 9
- **a. Ownership and Responsibility for Maintenance in Perpetuity** 9

VII. Construction Checklist 9
VIII. Certifications 9

Tables

Table 1: Project Data 4
Table 2: Table of Drainage Management Areas 7
Table 3: Runoff Retention Summary 9
Table 4: Peak Flow Management for DMAs 1-4 9
Table 5: Source Control Table 10
Table 6: Construction Checklist Table 11

Figures

Figure 1: Vicinity Map 5
Figure 2: Watershed 8

Attachments

A. Exhibit 1 - Existing Site Map
B. Exhibit 2 - Proposed Watershed Map
C. Exhibit 3 - Hydrologic Model Results
D. Exhibit 4 - Web Soil Survey

I. Project Data

Table 1: Project Data

Project Name/Number	Daou Campus Airport Road
Application Submittal Date	TBD
Project Location	5175 Airport Road, Paso Robles, CA 93446
Project Phase No.	Single Phase
Project Type and Description	Commercial Wine Storage and Processing Facility
Total Project Site Area (acres)	(onsite) 430,840 sf / 9.89 acres , (offsite)
Total New Impervious Surface Area	343,954 sf (7.90 acres)
Total Replaced Impervious Surface Area	0 sf
Total Pre-Project Impervious Surface Area	0 sf
Total Post-Project Impervious Surface Area	343,954 sf (7.90 acres)
Net Impervious Area (Exhibit shall be provided to justify net impervious area results)	343,954 sf (7.90 acres)
Watershed Management Zone(s)	Zone 1
Design Storm Frequency and Depth	1.40 inches (95th-percentile) 2.02 inches (2-year) 3.62 inches (10-year) 5.91 inches (100-year)

II. Setting

a. Project Location and Description

This report supports the proposed improvements for the Daou Campus Airport Road project, which is located at 5175 Airport Road in Paso Robles, California. This report has been prepared to demonstrate that proposed drainage facilities meet the Central Coast Post Construction Stormwater Requirements for water quality, retention, and peak flow management.

The proposed improvements at Daou Campus Airport Road includes a new winery production building with associated parking, access driveway, and stormwater facilities. All construction for the proposed project will be completed in one phase.

The project layout will create >25,000 square feet of net impervious area and is required to meet the Central Coast Regional Water Quality Control Board Post Construction Stormwater Requirements (PCR's) 1, 2, 3 and 4. Stormwater Control Measures will be implemented to treat, retain, and mitigate peak flows.

Figure 1 - Vicinity Map

b. Existing Site Features and Conditions

The proposed project is located on the western half of an existing parcel which will be split into two separate parcels. Based on a Web Soil Survey – as shown in Exhibit 4 – the historical conditions of the site consists of short grasses underlain with sandy clay loam soils (Type C and D). The site is bounded by rural residential properties to the west, PRSW and American Way property to the south, agricultural fields to the north, and the future SDG Paso Robles 194 Distribution Center to the east.

The site slopes gently from east to west and continues downstream as overland flow through rural developments and agricultural land. Eventually, runoff is collected by a tributary of Huer Huero Creek approximately 1 mile west of the site. There are no existing swales, channels, or other drainage conveyance systems present immediately downstream of the proposed project.

There is a small amount of offsite run-on that enters the existing Daou Campus Airport Road site at the south-east corner. This runoff comes from the American Way property, which utilizes its own stormwater control facilities to treat, retain, and reduce post-developed peak flows to existing conditions. No additional offsite run-on enters the existing site.

c. Opportunities and Constraints for Stormwater Control

Opportunities:

The proposed stormwater management strategy takes advantage of open space for stormwater control measures. The site generally slopes from east to west which provides opportunity for stormwater to be routed by gravity towards the western portion of the site, which is lowest in

elevation. Offsite run-on from the American Way property will be bypassed and released along its historic drainage path.

Constraints:

The site has a number of constraints that limits the effectiveness of stormwater control. Low infiltrating soils – as shown in Exhibit 4 – require larger stormwater facilities and takes longer to drain. Additionally, the proposed site developments have a large percentage of impervious coverage due to the large building footprint, required truck and vehicle access, and parking, which constrains opportunities for infiltration and peak flow management. Mild slopes across the site constrains the use of a low basin outfall which could otherwise help mitigate peak flows and limit the amount of excess retention within a basin.

III. Low Impact Development Design Strategies

a. Optimization of Site Layout

The proposed site will follow existing grades to maintain general sloping from east to west. The site layout uses minimum driveway widths to reduce impervious coverage and to maximize open space for structural control measures and landscaping.

b. Use of Permeable Pavements

Permeable pavements are not expected to be compatible with the proposed commercial winery usage of the site.

c. Dispersal of Runoff to Pervious Areas

All runoff will be directed to a vegetated retention basin.

IV. Documentation of Drainage Design

a. Applicable Stormwater Requirements

The following list outlines the PRs that apply to this project:

- PR #1 Site Design and Runoff Reduction
- PR #2 Water Quality Treatment
- PR #3 Runoff Retention
- PR #4 Peak Management

Performance requirements that do not apply to the project are:

- PR #5 Special Circumstances

b. Drainage Management Areas

The DMA numbers in the following tables correspond with the DMA numbers of the DMA exhibit. A summary of each DMA is provided in Table 2.

Table 2: Table of Drainage Management Areas

DMA ID	SURFACE TYPE & DESCRIPTION	AREA (SF)	DRAINS TO	SCM TYPE	SCM AREA (SF)
1	Roof, Asphalt, Concrete	343,954	SCM 1	Detention Basin	29,843
1a	Landscape	57,043			

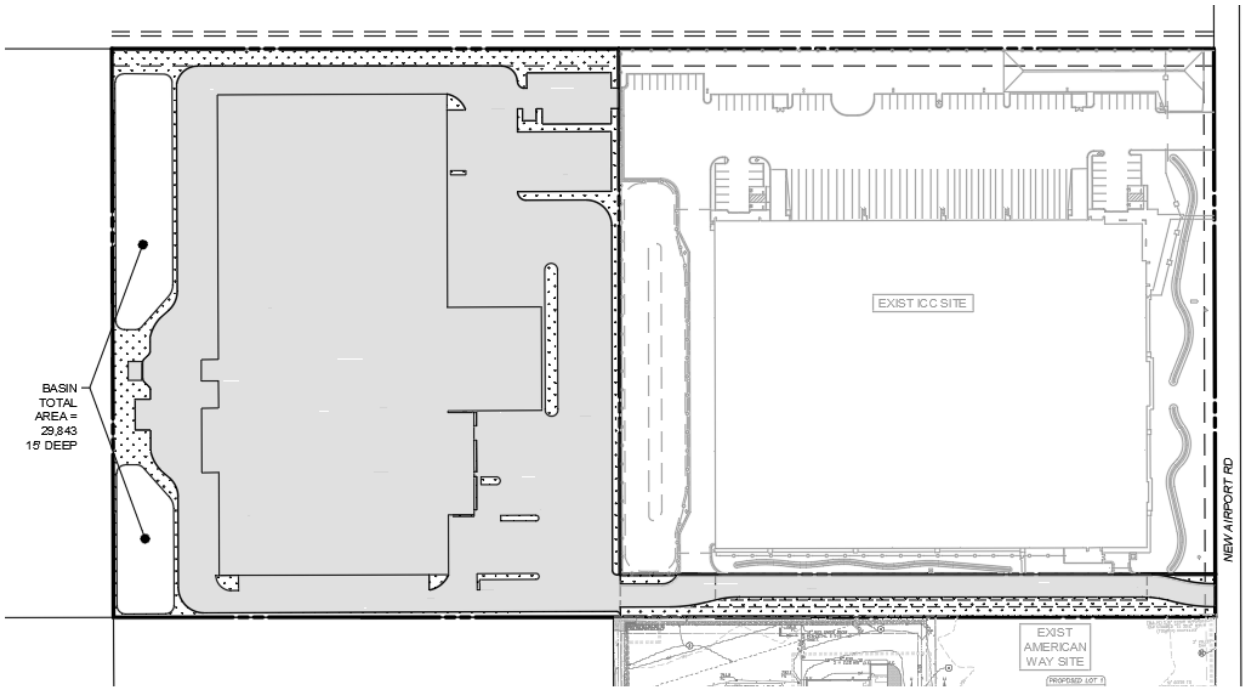


Figure 2 - Watershed Map

c. Hydrologic Analysis

The hydrograph method was used to calculate the runoff for each DMA and to size the SCM's. The following criteria was used in the hydraulic stormwater model:

95th percentile design storm:	1.40 inches
Hydrograph Analysis Method:	Santa Barbara Urban Hydrograph
Pond Routing Method:	Dynamic-Storage-indication
Infiltration Rate (in/hr):	0.2 in/hr (Web Soil Survey)
Rainfall Distribution:	NRCS Type I, NOAA Atlas 14, Vol. 6, Version 2
Time of Concentration:	Minimum of 6 minutes
Time Increment:	1 hr

d. Summary of Calculations

PR 1 Site Design and Runoff Reduction – As outlined in Section III, stormwater management has been incorporated into the design of the project. The site layout uses minimum driveway widths to reduce impervious coverage and to maximize open space for structural control measures and landscaping.

PR 2 Water Quality Treatment –

A water quality device (First Defense or approved equal) is proposed to treat on-site runoff before discharging into the proposed retention basin. In addition, the proposed basin will retain and infiltrate the 85th percentile stormwater runoff. As necessary, proposed dry wells will be connected to the basin through an outlet pipe held 3 feet above the bottom of the basin, The basin outlet pipe is designed with a debris screen and a 90 degree downward bend to minimize sediment, debris, and other floatable from entering the dry wells. The number and sizing of dry wells will be coordinated with the geotechnical engineer during final design.

PR-3 Runoff Retention –

Retention of the 95th percentile storm event from DMA 1-4 is achieved within the proposed basin. Refer to Table 3 below.

Table 3: Runoff Retention Summary

DMA ID	DMA 95TH RUNOFF VOLUME (CF)	DRAINS TO	SCM 95TH RUNOFF VOLUME RETAINED IN SCM (CF)
DMA 1	24,286	SCM 1	24,286

PR-4 Peak Management –

Peak management requires post developed peak flows to match existing flow rates for storms up to the 10 year. Due to the constraint of avoiding discharged flows from the basin onto the rural residential property to the west, the proposed basin will fully retain runoff from storms up to the 100-year event. The only intended outflow from the basin will be through the proposed dry wells which will slowly drain the basin through percolation.

Table 4: Peak Flow Management for DMAs

DESIGN STORM	TOTAL PRE-DEVELOPED PEAK FLOW (CFS)	TOTAL POST-DEVELOPED PEAK FLOW (CFS)
2 YR	0.40	0.00
10 YR	2.55	0.00

V. Source Control Measures

Hydrocarbons, trash, debris from trees, sediment and fertilizers will be the most apparent sources of pollutants on the project site.

Table 5: Source Control Table

	Pollutants Associated with Activity						
Potential Pollutant Source	Sediment/ Litter/ Debris	Nutrients/ Organic Matter	Bacteria	Hydro-carbons	Toxics/ Chemicals/ Paint	Other	Source Control BMP Proposed
Parking Lot	X			X			Vehicle Maintenance, Fueling and Storage, street sweeping
Fertilizers, Pesticides,	X	X			X		Effective irrigation and planting
Roof runoff		X			X		Bioretention, landscape maintenance for healthy plants.

VI. Stormwater Facility Maintenance

a. Ownership and Responsibility for Maintenance in Perpetuity

This project is required to record an Agreement with the City accepting responsibility for inspection, operation and maintenance of facilities.

This project will utilize an Agreement to meet this requirement, and the responsible party will be Daou Vineyards & Winery. An Operations and Maintenance Plan and Draft Agreement will be provided after preliminary approvals.

VII. Construction Checklist

To be provided after preliminary approvals.

Table 6: Construction Checklist Table

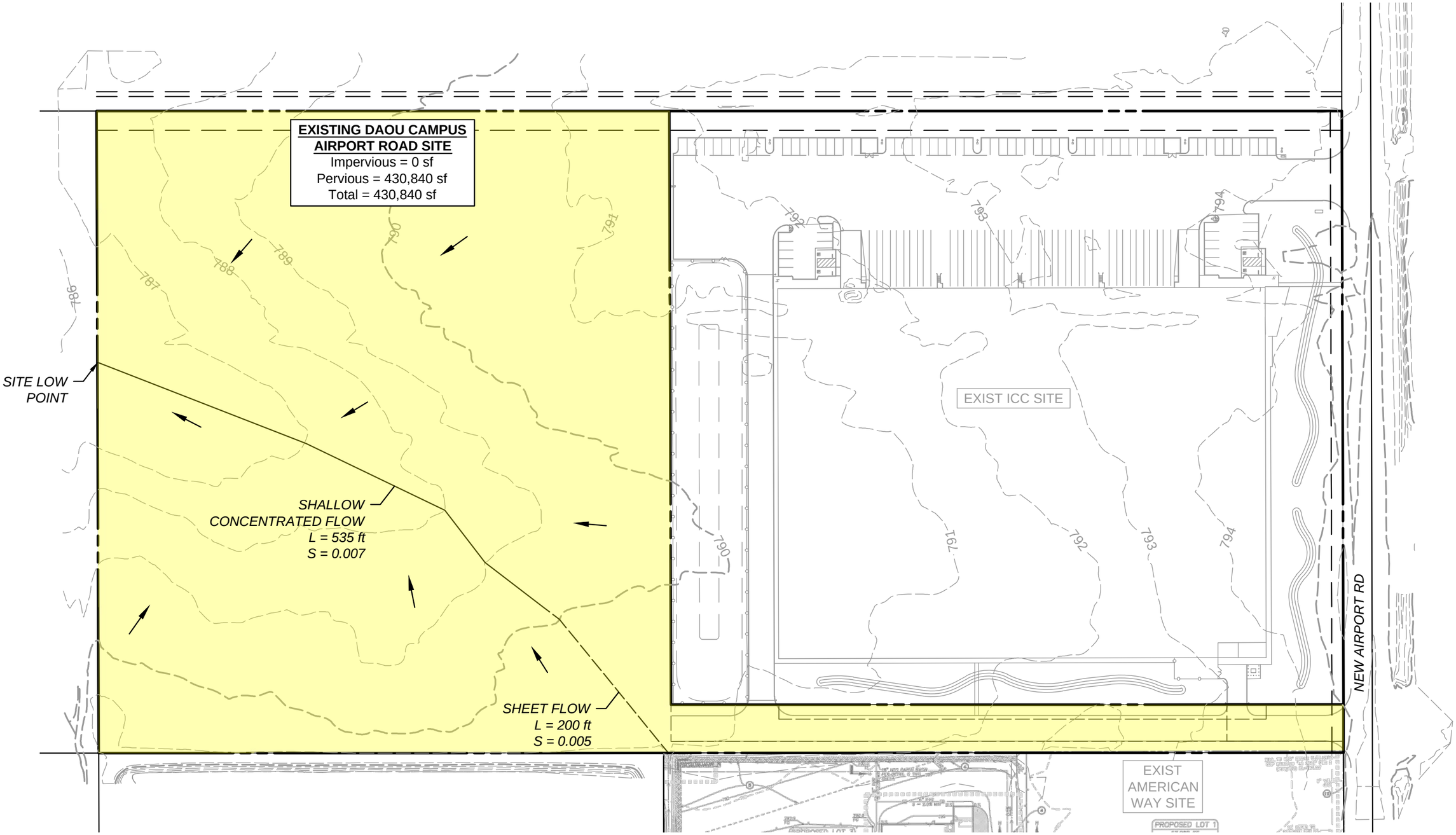
STRUCTURAL CONTROL MEASURE SCMs	PLAN SHEET NUMBER	SCM DETAIL NUMBER

VIII. Certifications

The design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the Post-Construction Stormwater Management Resolution R3-2013-0032.

Exhibit 1

Existing Watershed



DAOU CAMPUS AIRPORT ROAD
PASO ROBLES, CA

EXISTING SITE

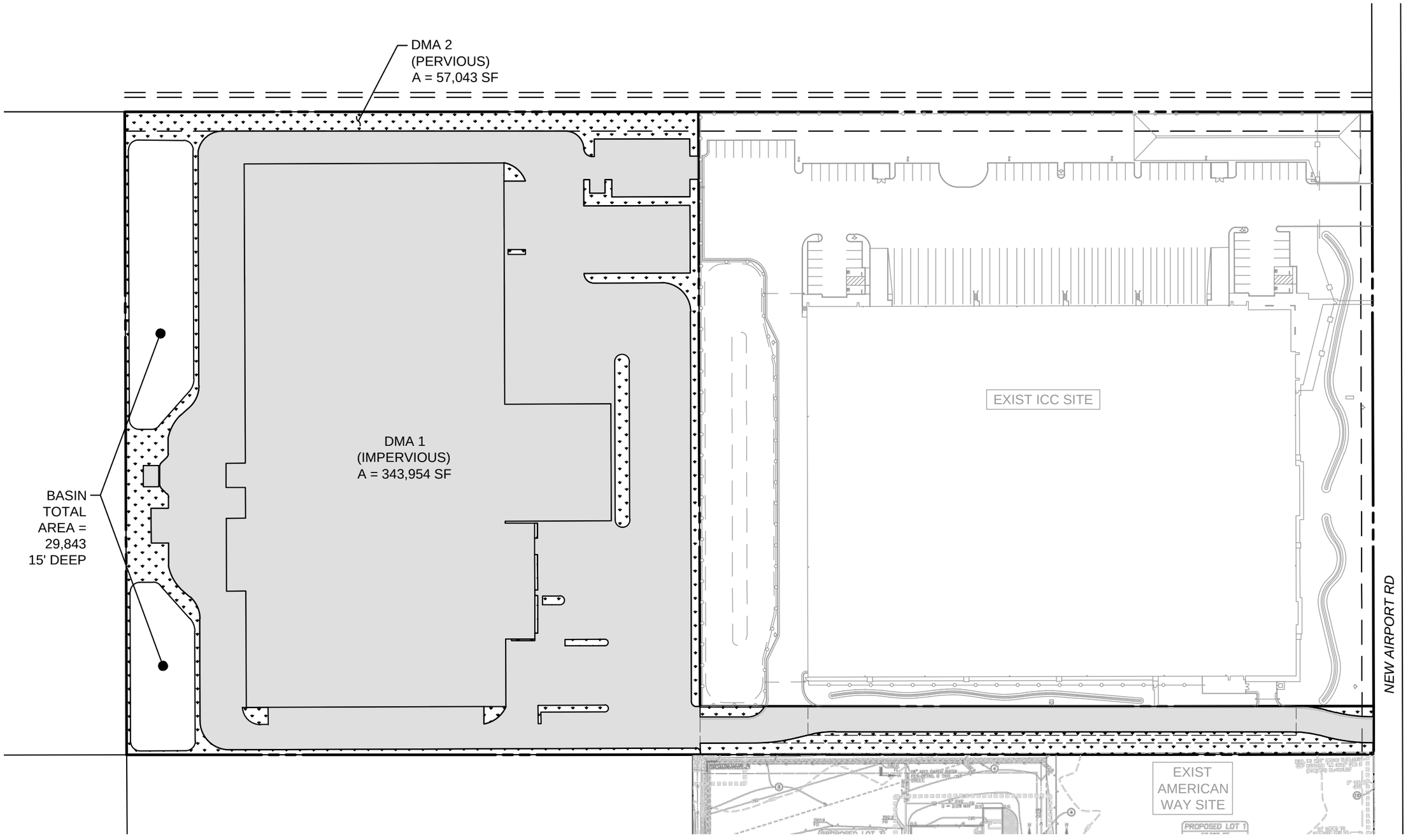
0 50 100 200
1 IN = 100 FT

WALLACE GROUP

Exhibit 2

Proposed Watersheds

Attachment 13



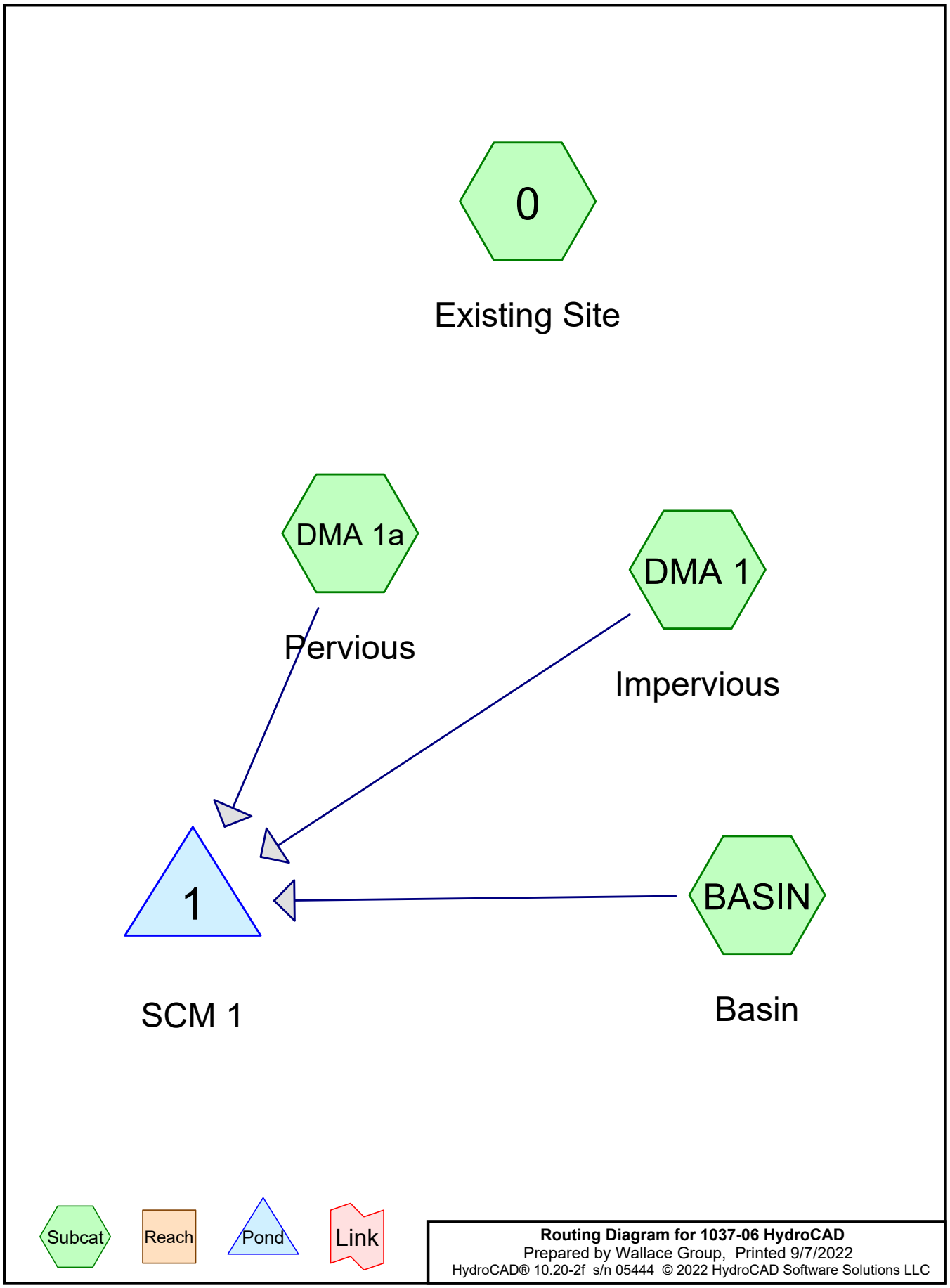
DAOU CAMPUS
PASO ROBLES, CA

0 50 100 200
1 IN = 100 FT

WALLACE GROUP

Exhibit 3

Hydrologic Model Results


0
Existing Site
DMA 1a
Pervious
DMA 1
Impervious
1
SCM 1
BASIN
Basin
Subcat
Reach
Pond
Link
Routing Diagram for 1037-06 HydroCAD
Prepared by Wallace Group, Printed 9/7/2022
HydroCAD® 10.20-2f s/n 05444 © 2022 HydroCAD Software Solutions LLC

Time span=0.00-96.00 hrs, dt=0.05 hrs, 1921 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment0: Existing Site Runoff Area=430,840 sf 0.00% Impervious Runoff Depth=0.36"
Flow Length=735' Tc=52.6 min CN=74/0 Runoff=0.40 cfs 12,897 cf

SubcatchmentBASIN: Basin Runoff Area=29,843 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=0.84 cfs 4,462 cf

SubcatchmentDMA 1: Impervious Runoff Area=343,954 sf 100.00% Impervious Runoff Depth=1.79"
Tc=6.0 min CN=0/98 Runoff=9.68 cfs 51,426 cf

SubcatchmentDMA 1a: Pervious Runoff Area=56,993 sf 0.00% Impervious Runoff Depth=0.36"
Tc=10.0 min CN=74/0 Runoff=0.13 cfs 1,706 cf

Pond 1: SCM 1 Peak Elev=782.07' Storage=57,594 cf Inflow=10.63 cfs 57,594 cf
Outflow=0.00 cfs 0 cf

Total Runoff Area = 861,630 sf Runoff Volume = 70,491 cf Average Runoff Depth = 0.98"
56.62% Pervious = 487,833 sf 43.38% Impervious = 373,797 sf

Summary for Subcatchment 0: Existing Site

Runoff = 0.40 cfs @ 10.66 hrs, Volume= 12,897 cf, Depth= 0.36"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	430,840	74	
	430,840	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
37.4	200	0.0050	0.09		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.02"
15.2	535	0.0070	0.59		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
52.6	735	Total			

Summary for Subcatchment BASIN: Basin

Runoff = 0.84 cfs @ 9.96 hrs, Volume= 4,462 cf, Depth= 1.79"
Routed to Pond 1 : SCM 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	29,843	98	Roof, Concrete, Asphalt
	29,843	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1: Impervious

Runoff = 9.68 cfs @ 9.96 hrs, Volume= 51,426 cf, Depth= 1.79"
Routed to Pond 1 : SCM 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	343,954	98	Impervious
	343,954	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1a: Pervious

Runoff = 0.13 cfs @ 10.02 hrs, Volume= 1,706 cf, Depth= 0.36"
Routed to Pond 1 : SCM 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 2-Yr Rainfall=2.02"

	Area (sf)	CN	Description
*	56,993	74	Landscape
	56,993	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Pond 1: SCM 1

Inflow Area = 430,790 sf, 86.77% Impervious, Inflow Depth = 1.60" for 2-Yr event
Inflow = 10.63 cfs @ 9.96 hrs, Volume= 57,594 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Peak Elev= 782.07' @ 27.85 hrs Surf.Area= 14,742 sf Storage= 57,594 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	775.25'	239,873 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
775.25	2,140	0.0	0	0
790.25	29,843	100.0	239,873	239,873

Time span=0.00-96.00 hrs, dt=0.05 hrs, 1921 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment0: Existing Site Runoff Area=430,840 sf 0.00% Impervious Runoff Depth=1.32"
Flow Length=735' Tc=52.6 min CN=74/0 Runoff=2.55 cfs 47,515 cf

SubcatchmentBASIN: Basin Runoff Area=29,843 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=1.54 cfs 8,421 cf

SubcatchmentDMA 1: Impervious Runoff Area=343,954 sf 100.00% Impervious Runoff Depth=3.39"
Tc=6.0 min CN=0/98 Runoff=17.80 cfs 97,056 cf

SubcatchmentDMA 1a: Pervious Runoff Area=56,993 sf 0.00% Impervious Runoff Depth=1.32"
Tc=10.0 min CN=74/0 Runoff=0.89 cfs 6,285 cf

Pond 1: SCM 1 Peak Elev=785.15' Storage=111,762 cf Inflow=20.20 cfs 111,762 cf
Outflow=0.00 cfs 0 cf

Total Runoff Area = 861,630 sf Runoff Volume = 159,277 cf Average Runoff Depth = 2.22"
56.62% Pervious = 487,833 sf 43.38% Impervious = 373,797 sf

Summary for Subcatchment 0: Existing Site

Runoff = 2.55 cfs @ 10.17 hrs, Volume= 47,515 cf, Depth= 1.32"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	430,840	74	
	430,840	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
37.4	200	0.0050	0.09		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.02"
15.2	535	0.0070	0.59		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
52.6	735	Total			

Summary for Subcatchment BASIN: Basin

Runoff = 1.54 cfs @ 9.95 hrs, Volume= 8,421 cf, Depth= 3.39"
Routed to Pond 1 : SCM 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	29,843	98	Roof, Concrete, Asphalt
	29,843	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1: Impervious

Runoff = 17.80 cfs @ 9.95 hrs, Volume= 97,056 cf, Depth= 3.39"
Routed to Pond 1 : SCM 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	343,954	98	Impervious
	343,954	98	100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Subcatchment DMA 1a: Pervious

Runoff = 0.89 cfs @ 9.99 hrs, Volume= 6,285 cf, Depth= 1.32"
Routed to Pond 1 : SCM 1

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type I 24-hr 10-Yr Rainfall=3.62"

	Area (sf)	CN	Description
*	56,993	74	Landscape
	56,993	74	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Summary for Pond 1: SCM 1

Inflow Area = 430,790 sf, 86.77% Impervious, Inflow Depth = 3.11" for 10-Yr event
Inflow = 20.20 cfs @ 9.96 hrs, Volume= 111,762 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Peak Elev= 785.15' @ 27.90 hrs Surf.Area= 20,430 sf Storage= 111,762 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	775.25'	239,873 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

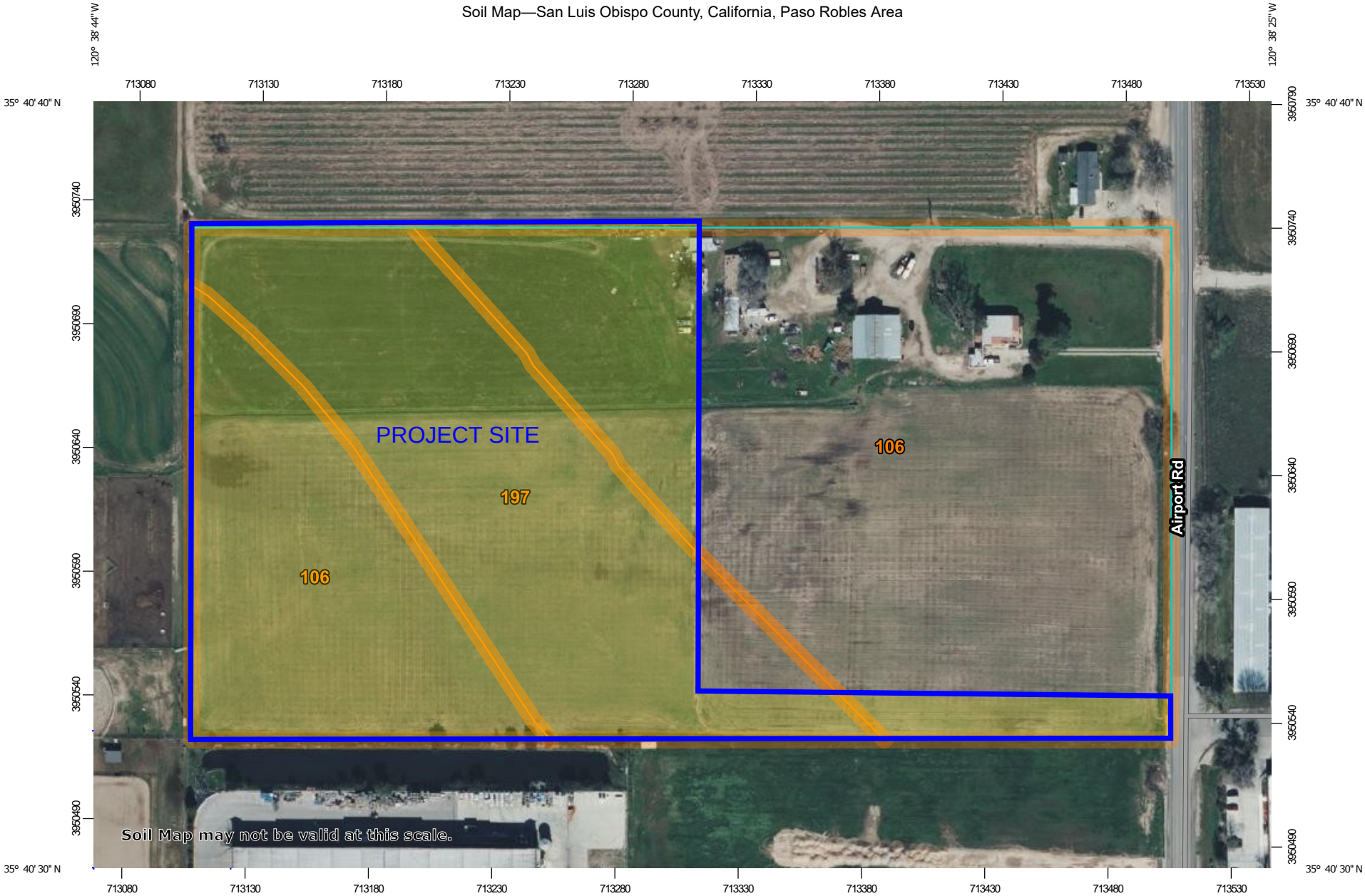
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
775.25	2,140	0.0	0	0
790.25	29,843	100.0	239,873	239,873

Exhibit 4

Web Soil Survey

Attachment 13

Soil Map—San Luis Obispo County, California, Paso Robles Area



Map Scale: 1:2,180 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Luis Obispo County, California, Paso Robles Area
Survey Area Data: Version 15, Sep 9, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 1, 2019—Aug 17, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Arbuckle-San Ysidro complex, 2 to 9 percent slopes	14.7	72.0%
197	San Ysidro loam, 0 to 2 percent slopes, MLRA 14	5.7	28.0%
Totals for Area of Interest		**20.4**	**100.0%**

San Luis Obispo County, California, Paso Robles Area

106—Arbuckle-San Ysidro complex, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hbrp
Elevation: 600 to 1,500 feet
Mean annual precipitation: 12 to 20 inches
Mean annual air temperature: 60 to 61 degrees F
Frost-free period: 200 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Arbuckle and similar soils: 40 percent
San ysidro and similar soils: 20 percent
Minor components: 39 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arbuckle

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock sources

Typical profile

H1 - 0 to 29 inches: fine sandy loam
H2 - 29 to 38 inches: sandy clay loam
H3 - 38 to 62 inches: stratified sandy loam to very gravelly sandy clay loam

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C
Ecological site: R014XE003CA - COARSE LOAMY
Hydric soil rating: No

Description of San Ysidro

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed rocks

Typical profile
H1 - 0 to 23 inches: loam
H2 - 23 to 38 inches: clay loam
H3 - 38 to 71 inches: sandy loam

Properties and qualities
Slope: 2 to 9 percent
Depth to restrictive feature: 20 to 37 inches to abrupt textural change
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.4 inches)

Interpretive groups
Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R014XE029CA - LOAMY CLAYPAN
Hydric soil rating: No

Minor Components

Greenfield, fine sandy loam
Percent of map unit: 14 percent
Hydric soil rating: No

Unnamed, similar to san ysidro soil
Percent of map unit: 10 percent
Hydric soil rating: No

Unnamed, simialr to arbuckle
Percent of map unit: 5 percent
Hydric soil rating: No

Hanford, fine sandy loam
Percent of map unit: 5 percent

Hydric soil rating: No

Cropley, clay
Percent of map unit: 2 percent
Hydric soil rating: No

Rincon, clay loam
Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed
Percent of map unit: 1 percent
Landform: Drainageways
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Paso Robles Area
Survey Area Data: Version 15, Sep 9, 2021

San Luis Obispo County, California, Paso Robles Area

197—San Ysidro loam, 0 to 2 percent slopes, MLRA 14

Map Unit Setting

National map unit symbol: 2tyys
Elevation: 70 to 1,990 feet
Mean annual precipitation: 13 to 22 inches
Mean annual air temperature: 59 to 61 degrees F
Frost-free period: 300 to 360 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

San ysidro and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of San Ysidro

Setting

Landform: Valley floors, alluvial fans, terraces
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

A - 0 to 23 inches: loam
B1 - 23 to 38 inches: clay loam
Bt2 - 38 to 64 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 16 to 24 inches to abrupt textural change
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C
Ecological site: R014XE029CA - LOAMY CLAYPAN
Hydric soil rating: No

Minor Components

Arbuckle
Percent of map unit: 6 percent
Hydric soil rating: No

Solano
Percent of map unit: 2 percent
Hydric soil rating: No

Pleasanton, loam
Percent of map unit: 2 percent
Hydric soil rating: No

Rincon
Percent of map unit: 2 percent
Hydric soil rating: No

Pescadero
Percent of map unit: 1 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Palexeralfs
Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Cropley, clay
Percent of map unit: 1 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Paso Robles Area
Survey Area Data: Version 15, Sep 9, 2021

Attachment 14

Central Coast Transportation Consulting
Traffic Engineering & Transportation Planning

MEMORANDUM

Date: November 18, 2022

To: David Athey, City of Paso Robles

From: Michelle Matson, Joe Fernandez, and Korinne Tarien, CCTC

Subject: Stravinski-Daou, Paso Robles –Transportation Analysis

This memorandum summarizes the transportation analysis for the proposed Stravinski and Daou warehouses on Airport Road west of the Paso Robles Municipal Airport. The project site plans are included on **Figure 1**.

The currently proposed refrigerated wine warehouse by Stravinski Development Group includes a 194,304 square foot (SF) wine distribution center and office space. The Daou warehouse includes 181,211 SF of wine production, wine storage, and offices. There will not be any public tasting rooms, event centers, retail operations or any other use that would be open to the public on the project site.

TRANSPORTATION ANALYSIS SUMMARY

The Stravinski and Daou warehouse projects would generate approximately 646 new vehicle and truck trips per weekday, including 64 AM and 68 PM peak hour trips using warehouse trip generations rates. The proposed project is expected to have a less than significant impact to VMT. The SR 46 E and Airport Road intersection collision rate is significantly higher than the statewide average rate for similar facilities.

We recommend prohibiting outbound distribution trucks between the following times:

- Monday through Thursday: 3 to 6 PM
- Friday: 2 to 6 PM
- Sunday: 10 AM to 2 PM

We also recommend one of the following improvements be constructed to serve project truck trips:

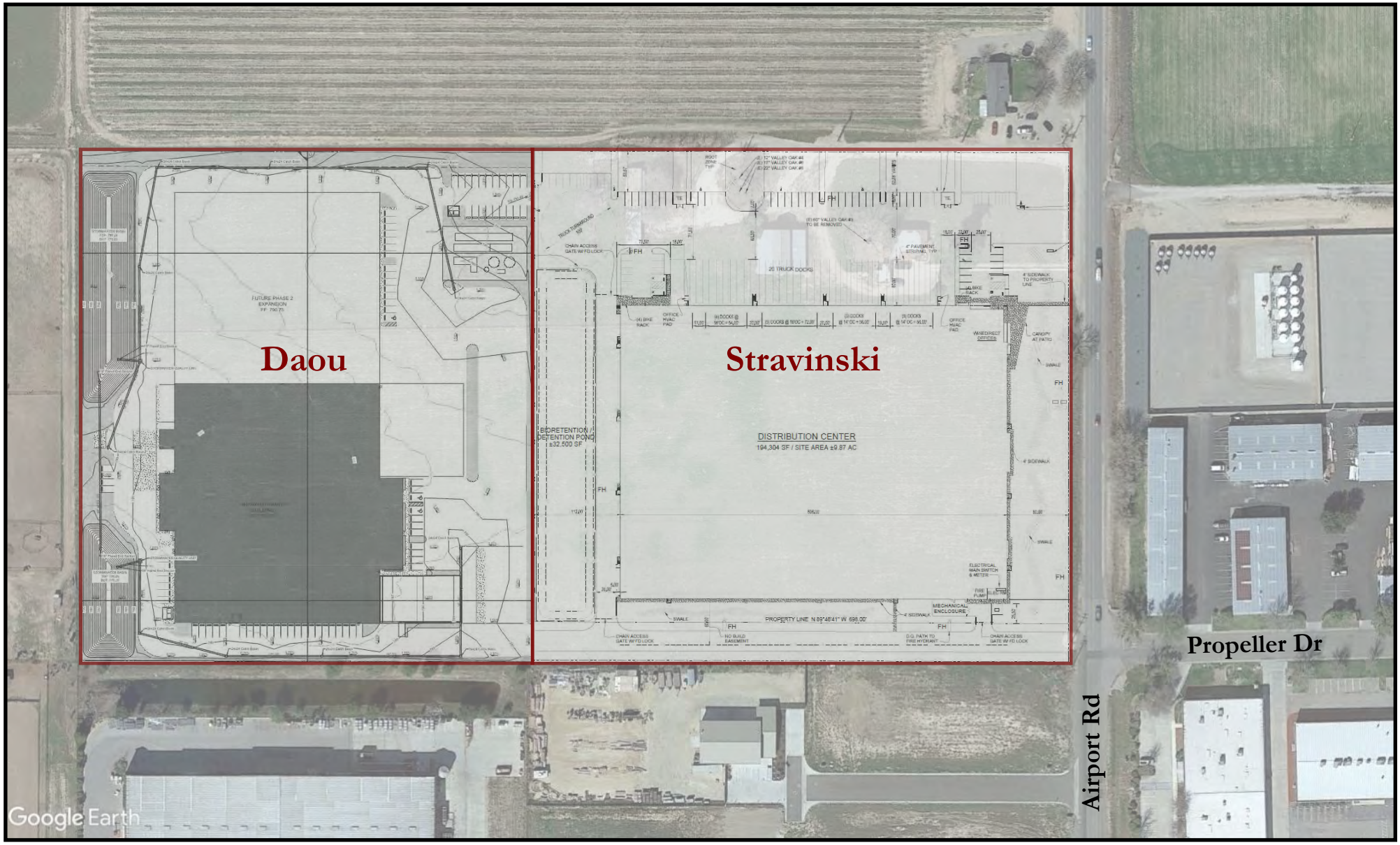
- Extend the eastbound median acceleration lane at the SR 46 E/Airport Road intersection and require trucks to use Airport Road; or
- Accommodate westbound U-turns for STAA trucks on SR 46 E with Caltrans approval; or
- Construct a Huer Huero Creek Bridge (by others) and require trucks to use Golden Hill Road. We recommend evaluating truck levels after occupancy and construction of the bridge prior to removing the time restrictions listed above.

We recommend that the applicant participate in an agreement to share costs associated with construction and maintenance of these and other affected local roads. Other regional improvements to access on SR 46 E are included in the City's Development Impact Fees.

We recommend the frontage improvements be constructed with two travel lanes, a center turn lane serving both driveways, and a southbound shoulder for a future southbound Class II bike lane.

(805) 316-0101
895 Napa Avenue, Suite A-6, Morro Bay, CA 93442

Figure 1 - Site Plan



Stravinski-Daou

Central Coast Transportation Consulting
Traffic Engineering & Transportation Planning

September 2022

CEQA ANALYSIS

Vehicle miles traveled (VMT) were analyzed consistent with recently mandated changes to the California Environmental Quality Act (CEQA) and state Office of Planning and Research (OPR) guidance. The City's 2022 Transportation Impact Analysis (TIA) Guidelines Supplement provide VMT and safety thresholds consistent with OPR guidance. Office and industrial projects may have a significant impact if the work VMT per employee exceeds 85 percent of the regional average. Work VMT captures home-based-work attractions (trips from homes to workplaces).

Projects may have a significant impact if they exacerbate an existing high-priority or similar safety location, introduces a design feature that substantially increases hazards, or propose features that do not meet City design standards.

Caltrans relies on VMT and safety to evaluate transportation impacts and published a VMT Focused TIS Guide in May 2020 which replaced the prior guide reliant on LOS. The TIS Guide notes that lead agencies have the discretion to choose VMT thresholds and methods, and generally conforms to OPR guidance.

The SLOCOG Travel Demand Model was applied to estimate VMT. Project employees were estimated using typical square footage per employee from industry standard sources, then were added to the model. **Table 1** summarizes the VMT results.

Table 1: Regional VMT Analysis

Regional VMT Analysis		
Scenario	**Regional Employees**	**Regional Work VMT**
2020 No Project	117,335	1,595,867
2020 With Project	117,642	1,596,280
Change from No Project	*307*	*413*

1. Work VMT is attracted to workplaces (sum of home-based-work attractions). Threshold calculated as 85% of regional average.
Source: SLOCOG TDM, CCTC, 2022

The regional average work VMT per employee is 13.60 (1,595,867/117,335). A threshold of 85% of this level corresponds to 11.56 work VMT per employee. The project is forecast to have a work VMT per employee of 3.7, well below the threshold. This is due to the provision of jobs in a housing-rich area. Therefore, the project would have a less-than-significant impact to VMT.

TRIP GENERATION

The Institute of Transportation Engineers' (ITE) *Trip Generation Manual* 11th Edition was used to estimate project trip generation. **Table 2** summarizes the project trip generation.

Table 2: Project Trip Generation

Trip Generation								
		Weekday	AM Peak Hour			PM Peak Hour		
Land Use	**Size**	**Daily**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Stravinski[1]	194.304 KSF	332	25	8	33	10	25	35
	Truck Trips[2]	*116*	*2*	*2*	*4*	*3*	*3*	*6*
	Passenger Cars	*216*	*23*	*6*	*29*	*7*	*22*	*29*
Daou[1]	183.871 KSF	314	24	7	31	9	24	33
	Truck Trips[2]	*110*	*2*	*2*	*4*	*3*	*3*	*6*
	Passenger Cars	*204*	*22*	*5*	*27*	*6*	*21*	*27*
	Total Project Trips	***646***	***49***	***15***	***64***	***19***	***49***	***68***
	Total Project Trips as PCE[3]	**1,019**	**56**	**22**	**77**	**29**	**59**	**88**

KSF = Thousand Square Feet; ITE = Institute of Transportation Engineers.

1. ITE Land Use Code #150, Warehouse. Average rates used. Includes passenger car and truck trips.

2. ITE Land Use Code #150, Warehouse. Average rated used. Includes truck trips only.

3. Passenger Car Equivalent (PCE) of 2.65 assumed based on available warehouse facility data.

The proposed project would generate 646 new vehicle and trucks trips per weekday, including 64 AM peak hour trips and 68 PM peak hour trips using the ITE rates. The vehicle and truck trips were converted to passenger car equivalents trips for use in the intersections analysis.

The daily trip rate for a warehouse (Land Use Code #150) is 1.71 per thousand square feet using the 11th edition of ITE. Available trip generation studies for refrigerated wine warehouses provided for the Stravinski warehouse showed a daily trip rate of 1.69, similar to ITE. No AM or PM trip rates were provided by the applicant and ITE rates were used for the intersection analysis.

The Stravinski facility will typically operate on weekdays from 8 AM to 5 PM. During the peak seasonal months the facility will operate from 6 AM to 8 PM with some Saturday operations. Trucking deliveries and shipping movements will usually occur between the hours of 9 AM and 3 PM Monday through Friday and no trucking will occur on weekends. Typically, 20 employees will work at the site, with up to 30 employees during the peak seasonal months. The facility includes 20 truck docks.

The Daou facility currently utilizes a refrigerated wine warehouse on Buena Vista Road near the project site and estimates a net increase to up to nine daily semi-tanker trucks per day. The Stravinski facility estimates up to seven large trucks per day. Note that all truck traffic (garbage, deliveries, etc.) are included in the ITE rates. However, **Table 2** likely overstates the number of trucks to and from the Daou facility.

TRANSPORTATION ANALYSIS

The following sections summarize the SR 46 E/Airport Road intersection operations, collision analysis, median acceleration lanes, and site access and circulation.

Intersection Operations

The SR 46 E/Airport Road intersection operations were evaluated with and without the project as shown in **Table 3.** The lane configurations, existing, and existing plus project volumes (converted to passenger car equivalents) are shown on **Figure 2**. The traffic count data and level of service analysis worksheets are attached.

Table 3: SR 46 and Airport Road Intersection Operations

Existing and Existing Plus Project Weekday Intersection Operations							
Intersection	Weekday Peak Hour	Delay/LOS[1]		Movement	Storage Length (ft)	95th %ile Queue[2]	
		Existing	Existing + Project			Existing	Existing + Project
SR 46E/ Airport Rd	AM	14.3/B	14.9/B	SBL	-	3	5
				SBR	25	28	33
				EBL[3]	520	23	30
	PM	23.0/C	27.6/D	SBL	-	5	10
				SBR	25	88	120
				EBL[3]	520	30	38

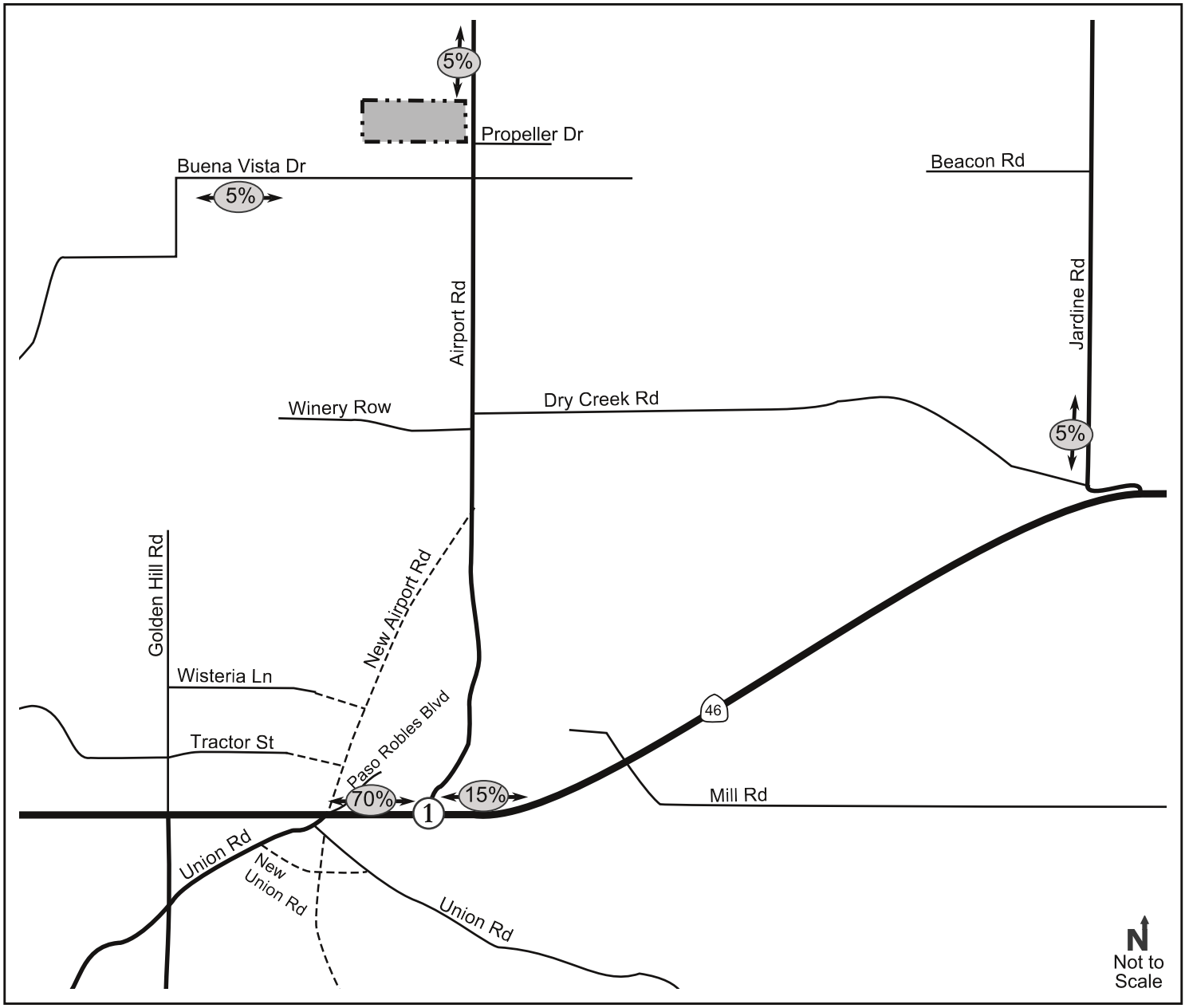
1. HCM 6th average control delay in seconds per vehicle and level of service (LOS) for southbound approach.
2. Queue length in feet that would not be exceeded 95 percent of the time.
3. Deceleration length of 530 feet has been subtracted from the storage length per the Highway Design Manual for 60 mph design speed.

The project would increase the southbound right turn lane queue by more than one vehicle under Existing Plus Project Conditions. However, this queue would not block any intersection or driveway. We recommend prohibiting outbound distribution trucks between the following times:

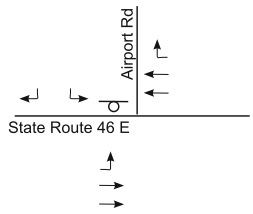
- Monday through Thursday: 3 to 6 PM
- Friday: 2 to 6 PM
- Sunday: 10 AM to 2 PM

We recommend evaluating truck levels after occupancy and construction of the Huer Huero Creek Bridge prior to removing these time restrictions.

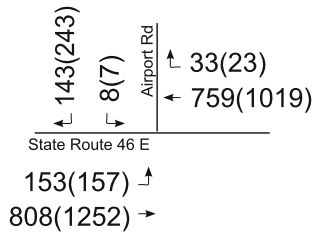
Figure 2: Lane Configurations, Existing and Existing Plus Project Volumes



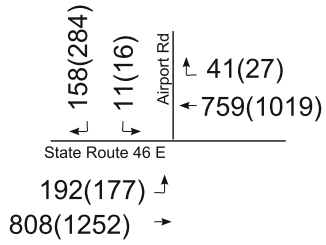
Lane Configuration



Existing Volumes



Existing Plus Project Volumes



Legend:

- Stop Sign
- Project Site
- Future Road
- (x) - Study Intersection
- xx(yy) - AM(PM) Peak Hour Traffic Volumes
- (x%) - Project Trip Distribution

Central Coast Transportation Consulting
Traffic Engineering & Transportation Planning

September 2022

Stravinski-Daou

Collision Analysis

Collision data on City roadways was obtained from the Statewide Integrated Traffic Records System (SWITRS) and Traffic Accident Surveillance and Analysis System (TASAS) collision data for 2017 to 2019 as shown in **Table 4.**

Table 4: Collision Analysis

Collision Analysis													
				Collisions[2]			Actual Rate[3]			State Ave Rate[4]			Number
Roadway	**Length**	**ADT[1]**	**MVM**	**F**	**F+**	**Al**	**F**	**F+I**	**All**	**F**	**F+I**	**All**	**Significant[5]**
Airport (600' n/o Propeller to Dry Creek)	1.000	3,400	3.72	*0*	*1*	3	*0.000*	*0.09*	0.81	*0.022*	*0.61*	1.32	12
Airport (Dry Creek to 100' n/o SR 46 E)	1.290	5,400	7.63	*0*	*0*	3	*0.000*	*0.00*	0.39	*0.022*	*0.61*	1.32	20
	Major	**Minor**		Collisions[2]			Actual Rate[3]			State Ave Rate[4]			Number
Intersection	**ADT[1]**	**ADT[1]**	**MVE**	**F**	**F+**	**Al**	**F**	**F+I**	**All**	**F**	**F+I**	**All**	**Significant[5]**
SR 46 E & Airport Rd	33,500	6,500	40.24	*0*	*5*	14	*0.000*	***0.12***	**0.35**	*0.002*	*0.07*	0.17	15

Length shown in miles, I = Injury, F = Fatality.
Bold indicates rate higher than state average or total collisions greater than number significant.
1. Average daily traffic (ADT) for SR 46 E obtained from TASAS. ADT on local roads, obtained from available traffic studies.
2. 2017 to 2019 collisions included. City collisions obtained from SWITRS.
3. Rates are in collisions per million vehicle miles (MVM) for roadways and per million vehicles entering (MVE) for intersections.
4. Average rate for similar facilities from Caltrans "2017 Collision Data on California State Highways".
5. Number of collisions needed to be significant based on Caltrans Significance Test. Source: Caltrans Table C Task Force Summary Report, 2002.
Source: Statewide Integrated Traffic Records System (SWITRS), Traffic Accident Surveillance & Analysis System (TASAS).

The Airport Road collision rates are well below the state average rates. The collision rate at the SR 46 E/Airport Road intersection is nearly double the state average rate, but the total is below the number considered significant. The SR 46 E corridor also has above average collision rates as documented in multiple other studies.

Median Acceleration Lanes

Currently, the eastbound median acceleration lanes serving southbound left turning vehicles at Jardine Road and Airport Road are 300 feet and 625 feet without tapers, respectively. Acceleration lanes along the corridor vary with some longer than a quarter mile.

Consistent with the AASHTO Green Book and National Cooperative Highway Research Program (NCHRP) Reports, the required acceleration length for a 55 mile per hour design speed starting from a stop condition or 15 mph is 960 and 900 feet without tapers, respectively. For a 60 mile per hour design speed starting from a stop condition or 15 mph the values are 1,200 and 1,140 feet without tapers, respectively.

This analysis indicates that project vehicles and trucks merging on to eastbound SR 46E would enter mainline flow at a substantially lower speed than prevailing traffic.

We recommend the eastbound median acceleration at SR 46 E/Airport Road (#21) be extended. Extending the southbound left to eastbound merge at Airport Road would require the closure of the northbound left-turn movement at the adjacent driveway serving a nursery. However, this driveway is gravel and there are no associated acceleration or turn lanes. This improvement would require Caltrans approval.

Alternatively, truck trips could use the planned Huer Huero Creek Bridge if constructed by others, seek Caltrans approval to allow westbound truck U-Turns on SR 46E, or use a new undercrossing of SR 46E if constructed by others.

We recommend that the applicant participate in an agreement to share costs associated with construction and maintenance of these and other affected local roads. Other regional improvements to access on SR 46 E are included in the City's Development Impact Fees.

Site Access and On-Site Circulation

Airport Road is a two-lane arterial with no bicycle or pedestrian facilities adjacent to the project site. The City's Bicycle and Pedestrian Master Plan does not identify future Class II bike lanes; however, the City's arterial standards include Class II bike lanes.

Two driveways are proposed on Airport Road. The southern driveway is located across from Propeller Way and the northern driveway is located approximately 500 feet north of the southern driveway. We recommended the southern driveway be constructed by extending the existing centerline of Propeller Way.

The site plan shows a left turn lane on Airport Road at the project site. We recommend the frontage improvements be constructed to accommodate two travel lanes, a center turn lane accessing both driveways, and a southbound shoulder for a future southbound Class II bike lane.

ATTACHMENTS

Traffic Count

Synchro Worksheets

REFERENCES

California Department of Transportation. May 2020. Vehicle Miles Traveled-Focused Transportation Impact Study Guide.

City of El Paso De Robles. 2017. Bicycle & Pedestrian Master Plan.

_____. 2018. General Plan Circulation Element.

_____. 2013. Transportation Impact Analysis Guidelines.

_____. 2022. Transportation Impact Analysis Guidelines Supplement.

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

_____. 2017. Trip Generation Handbook, 3rd Edition.

National Cooperative Highway Research Program (NCHRP). 2010. Report 650 Median Intersection Design for Rural High-Speed Divided Highways.

_____. 2003. Report 505 Review of Truck Characteristics.

Omni Means. July 2016. Green Island Wine Warehouse Trip Generation Comparison.

San Luis Obispo Council of Governments. 2019. Regional Transportation Plan.

The Natelson Company, Inc. 2001. Employment Density Study Summary Report.

Transportation Research Board. 2017. Highway Capacity Manual, 6th Edition.