COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF PLANNING & BUILDING

Initial Study – Environmental Checklist

PLN-2039
04/2019

Project Title & No. Collins General Plan Amendment ED23-055 LRP2021-00005

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

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

DETERMINATION: (To be completed by the Lead Agency)

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

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

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

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

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

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

Annika Kiemm, SWCA Environmental Consultants		4/13/2023
Prepared by (Print)	Signature	Date
Eric Hughes		4/13/2023
Reviewed by (Print)	Signature	Date

Initial Study – Environmental Checklist

Project Environmental Analysis

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

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

A. Project

DESCRIPTION: Request by Kirt Collins for a General Plan and Land Use Ordinance (LUO) Amendment (LRP2021-00005) to amend the land use designation of a 15.06-acre parcel from Agriculture (AG) to Residential Rural (RR) and create a planning area standard intended to regulate future development on the property (project). The project is located at 6686 Monte Road, approximately 810 feet east of U.S. Route 101 (US 101), approximately 3.3 miles south of the city of San Luis Obispo, in the San Luis Bay Inland Sub Area of the San Luis Obispo planning area.

Expanded Project Description

The project includes a General Plan and LUO Amendment to amend the land use designation of the project parcel from AG to RR and create a planning area standard to regulate future development on the property. The proposed planning area standard would require any future subdivisions to utilize the cluster subdivision standards set forth in *County of San Luis Obispo Inland Land Use Ordinance* (County LUO) Section 22.22.140 and would require future development to be limited to the northeastern portion of the parcel, where there is existing development (Figures 1 and 2).

If approved, the General Plan and LUO Amendment would allow for the future subdivision and development of new residential uses on the project site. Based on correspondence with the project applicant, future subdivision of the 15.06-acre parcel into three separate parcels is anticipated. Future subdivision of the project site is expected to result in creation of one approximately 10-acre parcel located within the western portion of the property to be maintained under an open space easement and two approximately 2.5-acre parcels in the existing developed areas of the site (Figure 3):

- Parcel A of the future cluster subdivision would be 2.5 acres in size and allow for the future development of one primary residence on-site. Existing development on Parcel A includes a mobile home that is proposed to be remodeled to meet all applicable state and local accessory dwelling unit (ADU) standards.
- Parcel B of the future cluster subdivision would be 2.5 acres in size and allow for the future development of either an ADU or a guesthouse. Existing development on Parcel B includes a primary residence (a farmhouse constructed in 1880), a workshop, and two agricultural accessory structures.

- Parcel C of the future cluster subdivision would be 10 acres in size (67% of the current parcel area) and would be maintained under an open space easement. No existing structures are located within this parcel. Future development on this site would be prohibited, with the exception of agriculture accessory buildings, per County LUO Section 22.22.140.F.1.

An ADU is defined in the *County of San Luis Obispo General Plan 2020-2028 Housing Element* as an attached or detached residential dwelling that provides complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation. An accessory dwelling is an accessory use to the permitted primary residential use and is required to be located on the same parcel as the primary residential use. A guesthouse is defined in the County LUO as an accessory use to a residence that may contain a living area, a maximum of two bedrooms, and one bathroom, but does not contain or accommodate cooking or laundry facilities and is not used for residential occupancy independent from the principal residence or as a dwelling unit for rental (County LUO Section 22.30.090.E).

Future subdivision of the project site would be required to include roadway improvements along Monte Road. Monte Road is currently paved and varies in width from 18.6 to 21.5 feet (average 19.6 feet) and has a maximum speed of 25 miles per hour (mph). Based on the number of projected average daily trips (ADT) for this road segment, required road improvements would include widening of Monte Road to provide two 10-foot travel lanes with two 3-foot shoulders (Rural Road Section A-1b) along the frontage of the project property. According to the Road Safety Analysis and Speed Study conducted by Roberts Engineering, road widening to accommodate these future improvement requirements along the property frontage would result in a significant expense due to the existing curb cuts, exterior slope, proximate drainage features, and existing trees located along the road shoulders. Based on LUO Section 21.05.020, when improvements are required to be made as a condition of approval of a tentative parcel map or tentative tract map, the standard of improvements required shall be reasonable for the parcels being created. The future subdivision would include a request to waive the requirement for road frontage improvements along Monte Road, which is a County-maintained road.

Future development of one new primary residence on Parcel A and one ADU or guesthouse on Parcel B is anticipated to require approximately 1,200 cubic yards of earthwork, with potential for some soil to be imported on-site. For the purposes of this analysis, a conservative estimate of 600 cubic yards (50% of total earthwork) was assumed to be required to be imported on-site. While no application for a parcel map or cluster subdivision has been submitted, the above subdivision and development scenario is evaluated within this document as the reasonable-case development scenario.

Future development of primary residential uses on-site would be subject to the development standards described in Chapter 22.10 of the County LUO, as shown in Table 1.

Table 1. Applicable Development Standards in Residential Land Use Categories

Development Characteristic	County Standard
Residential Density	One single-family dwelling and one ADU or Junior ADU per legal parcel or one single-family dwelling and one detached guesthouse or home office
Maximum Allowed Height	35 feet[1]
Front Setback	25 feet[2]
Side Setbacks	10% of the lot width, to a maximum of 25 feet, but not less than 3 feet, on sites of less than 1 acre in net area, and a minimum of 30 feet on sites of 1 acre or larger in net area.

Rear Setback	10 feet on sites of less than 1 acre, 30 feet on sites of 1 acre or larger in next area[3]

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

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

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

ADUs may be a maximum of 1,200 square feet in size. Detached ADUs are required to comply with the same setback requirements pertaining to distance from property lines for residential accessory buildings (County LUO Section 22.30.470). Residential accessory buildings (such as detached workshops) may have a maximum area of 40% of the floor area of the principal structure and may not be located closer than 3 feet to any property line (County LUO Section 22.10.140.E.3). Attached ADUs are required to comply with the setback requirements of the primary residential use. Junior ADUs (JADUs) are located within the primary residence and 500 square feet or less in size.

Baseline Conditions

The 15.06-acre property is characterized by relatively flat topography. The northeastern portion of the property is currently developed with a single-family residence, a mobile home, a workshop, and two agricultural accessory structures (see Appendix A). The project site also includes a ground-mounted 5.76-kilowatt (kW) solar photovoltaic (PV) system and a roof-mounted 3.64 kW solar PV system on the existing workshop. The remaining portions of the property are undeveloped and primarily support annual brome grassland and agricultural row crops with areas of arroyo willow thicket along San Luis Obispo Creek and coast live oak woodland along the northeastern property boundary. San Luis Obispo Creek runs along the western portion of the property in a north-to-south direction. Existing agricultural uses on the property include animal husbandry and grazing.

ASSESSOR PARCEL NUMBER(S): 076-251-054

Latitude: 35º 11' 26.84" N **Longitude:** 120º 41' 45.70" W **SUPERVISORIAL DISTRICT #** 5

B. Existing Setting

Plan Area: San Luis Obispo **Sub:** San Luis Bay (North) **Comm:** Rural

Land Use Category: Agriculture

Combining Designation: Flood Hazard; Renewable Energy Overaly

Parcel Size: 15.06acres

Topography: Nearly level

Vegetation: Grasses

Existing Uses: Residential; accessory structures

Surrounding Land Use Categories and Uses:

North: Agriculture; scattered residence(s) ***East:*** Residential Suburban; scattered residence(s)

South: Agriculture; scattered residence(s) ***West:*** Agriculture; undeveloped; blue line creek

C. Environmental Analysis

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

Initial Study – Environmental Checklist

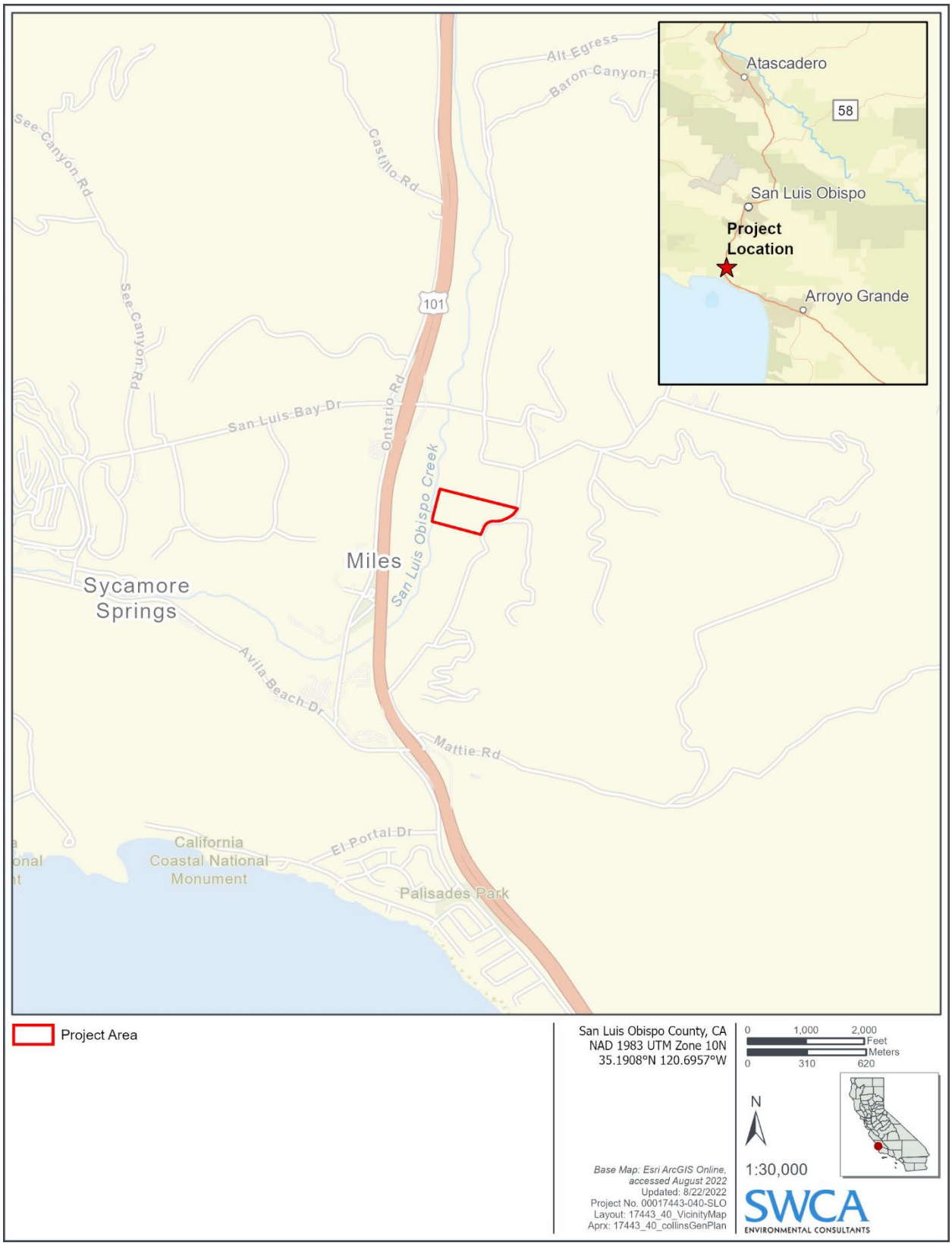

Figure 1. Project vicinity map.

Initial Study – Environmental Checklist

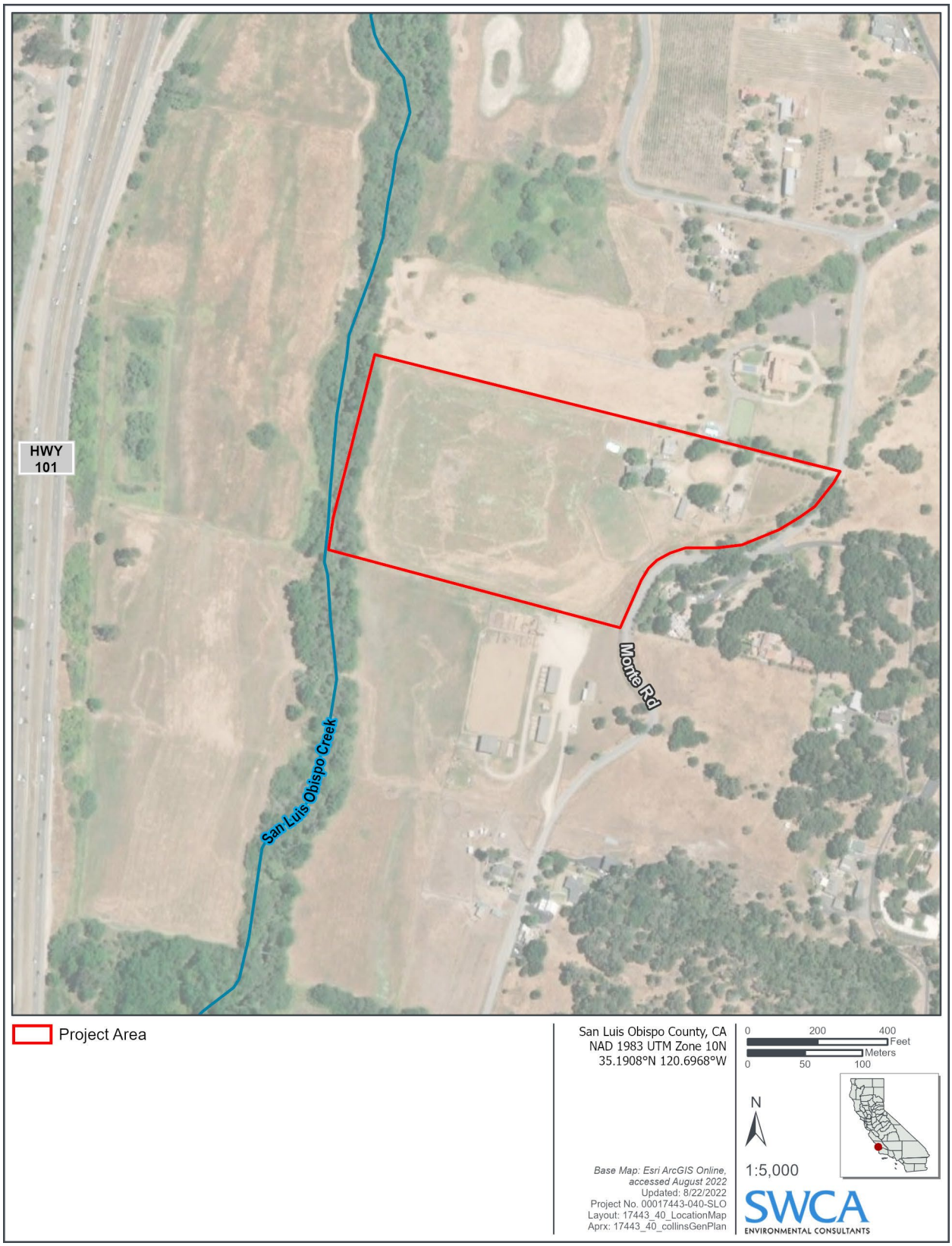

Figure 2. Project location map.

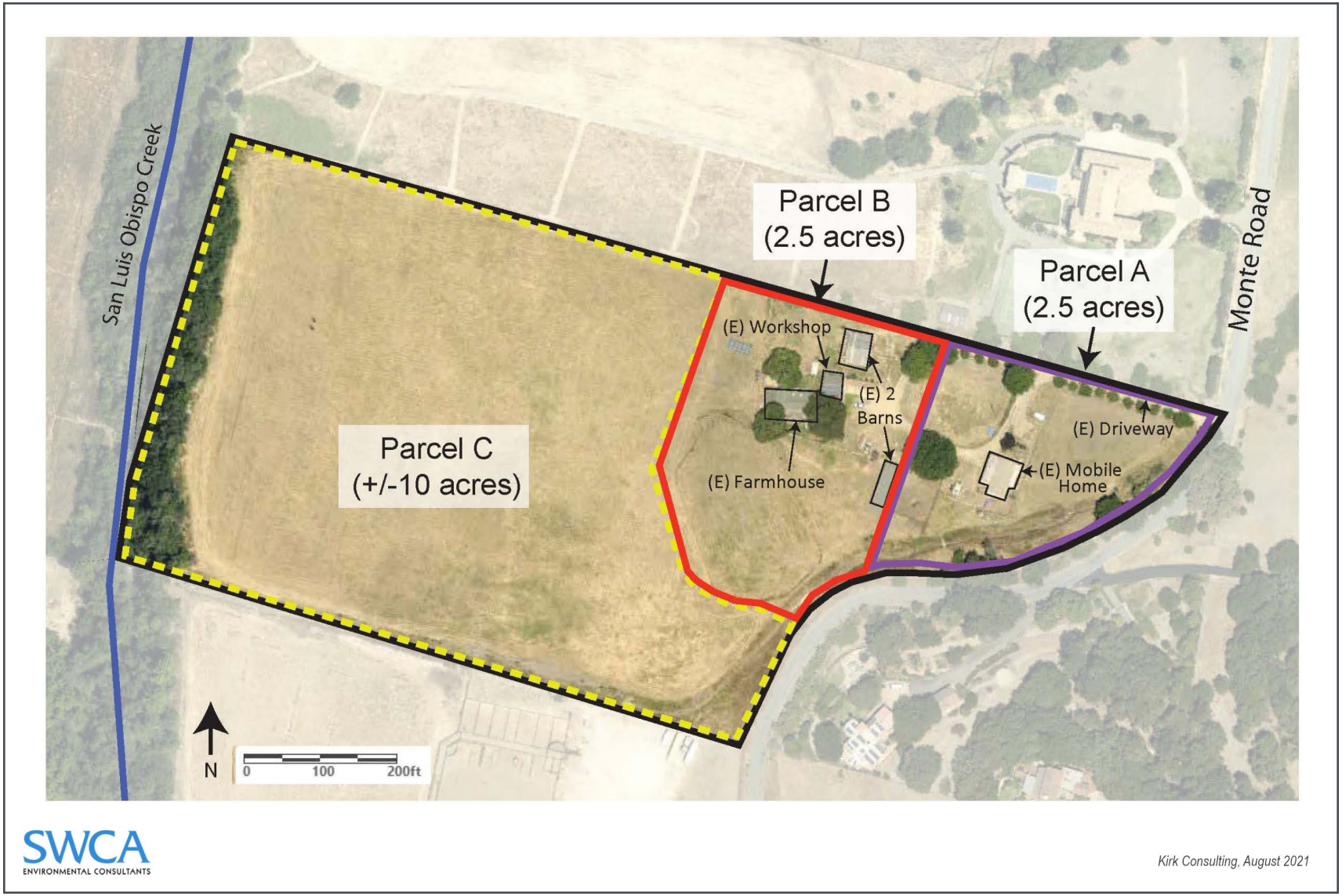

Figure 3. Future proposed subdivision map.

Initial Study – Environmental Checklist

I. AESTHETICS

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

Setting

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

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

California Scenic Highway Program

California's Scenic Highway Program was created by the State Legislature in 1963 with the intention of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors. There are several officially designated state scenic highways and several eligible state scenic highways within the county. State Route (SR) 1 is an Officially Designated State Scenic Highway and All-American Road from the

city of San Luis Obispo to the northern San Luis Obispo County boundary. A portion of Nacimiento Lake Drive is an Officially Designated County Scenic Highway. Portions of US 101, SR 46, SR 41, SR 166, and SR 33 are also classified as Eligible State Scenic Highways – Not Officially Designated. US 101 is located approximately 800 feet west of the project site, which at this location is designated as an Eligible State Scenic Highways (California Department of Transportation [Caltrans] 2018).

County Conservation and Open Space Element

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

- **Goal VR 1:** The natural and agricultural landscape will continue to be the dominant view in rural parts of the county.
- **Goal VR 2:** The natural and historic character and identity of rural areas will be preserved.
- **Goal VR 3:** The visual identities of communities will be preserved by maintaining rural separation between them.
- **Goal VR 7:** Views of the night sky and its constellation of stars will be maintained.

Some of the strategies identified to accomplish the goals listed above include encouraging project designs that emphasize native vegetation and conforming grading to existing natural forms, as well as ensuring that new development follows the Countywide Design Guidelines to protect rural visual and historical character.

County of San Luis Obispo Land Use Ordinance

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

The County LUO also defines a Sensitive Resource Area (SRA) combining designation that applies to areas having high environmental quality and special ecological or educational significance. Since these designated areas are considered visual resources by the County, the County LUO establishes specific standards for projects located within these areas. The project is not in an SRA combining district.

Existing Conditions

The 15.06-acre project property is located in a rural area and characterized by nearly level topography. The northeastern portion of the property is currently developed with a single-family residence, a mobile home, a workshop, and two agricultural accessory structures. The remaining portions of the property are undeveloped and support agricultural row crops and grassland habitat. San Luis Obispo Creek runs along the western portion of the property in a north-to-south direction. Surrounding land uses include scattered residences to the north, south, and east and undeveloped land to the west.

Discussion

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

A scenic vista is generally defined as a high-quality view displaying good aesthetic and compositional values that can be seen from public viewpoints and may be officially or informally designated by public agencies or other organizations. Vistas are inherently expansive views, usually from an open

area or an elevated point. A substantial adverse effect on a scenic vista would occur if the project would significantly degrade the scenic landscape as viewed from public roads or other public areas. The project site is not designated as an SRA by the County LUO and is not located in the view of a scenic vista; therefore, *no impacts* would occur.

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

The US 101 is located approximately 800 feet west of the project site, which at this location is designated as an eligible scenic highway (Caltrans 2018). Due to intervening vegetation along San Luis Obispo Creek, the project site would not be visible from the viewshed of US 101; therefore, implementation of the project would not result in damage to scenic resources within the viewshed of a state scenic highway, and *no impacts* would occur.

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

The project site is located in a rural area off Monte Road, approximately 3.3 miles south of the city of San Luis Obispo. The northeastern portion of the project property is currently developed with a single-family residence, a mobile home, a workshop, two agricultural accessory structures, a ground-mounted 5.76 kW solar PV system, and a roof-mounted 3.64 kW solar PV system on the existing workshop. The remaining portions of the property are undeveloped and support agricultural row crops and grassland habitat. Surrounding land uses include scattered single-family residences and accessory structures to the north, south, and east and primarily undeveloped land to the west.

Implementation of the proposed project would facilitate the future construction of a new primary residence, construction of an ADU or a guesthouse, and the conversion of the existing mobile home to an ADU. Existing structures would remain on-site. The proposed project would be consistent with the density and use of surrounding areas and would not introduce new features that would detract from the existing visual character of the project area. The proposed General Plan and LUO Amendment would limit future development to the northeastern portion of the parcel and would retain the western 10 acres of the property as open space, which would ensure low-density development on-site. In addition, the project would be required to comply with design standards established in the County LUO for development within the Residential Rural land use designation, including height limitations, setback requirements, and density requirement (see Table 1). Based on low-density development and required compliance with the County LUO, implementation of the project would be consistent with the level and scale of surrounding development and would not introduce new architectural or design features that could detract from the existing visual character of the project area; therefore, potential impacts would be *less than significant*.

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

Existing nighttime lighting within the project area consists of lighting from surrounding scattered rural residences and vehicle headlights along Monte Road and other proximate roadways. The reasonable-case development scenario includes development of a new primary residence and an ADU or a guesthouse and the conversion of an existing mobile home to an ADU, resulting in a

limited increase of nighttime lighting in the area, which would be consistent with the scale of lighting from other low-density residential development. Further, installation of exterior lighting would be required to comply with County LUO Section 22.10.060, which requires exterior lighting sources to be used for illumination purposes only and to be designed to direct light away from surrounding areas, minimize light intensity, and shield the light source from off-site areas. Adherence to County LUO Section 22.10.160 would avoid creating a substantial new source of light or glare within the project region; therefore, potential impacts would be *less than significant*.

Conclusion

The project is not located within view of a scenic vista and would not result in a substantial change to scenic resources in the area. The project would be consistent with existing policies and standards in the County LUO and COSE related to the protection of scenic resources. Potential impacts to aesthetic resources would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

II. AGRICULTURE AND FORESTRY RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
(e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Setting

San Luis Obispo County supports a unique, diverse, and valuable agricultural industry that can be attributed to its Mediterranean climate, fertile soils, and sufficient water supply. Wine grapes are regularly the top agricultural crop in the county, and fruits and nuts, vegetables, field crops, nursery products, and animals are top value agricultural products. The *County of San Luis Obispo General Plan Agriculture Element* includes policies, goals, objectives, and other requirements that apply to lands designated in the AG land use category. In addition to the Agriculture Element, in accordance with Sections 2272 and 2279 of the California Food and Agriculture Code, the County Agricultural Commissioner releases an annual report on the condition, acreage, production, pest management, and value of agricultural products within the county. The most recent annual crop report can be found on the County's website.

The California Department of Conservation (CDOC) Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and current land use. For environmental review purposes under CEQA, the FMMP categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land are considered "agricultural land." Other non-agricultural designations include Urban and Built-up Land, Other Land, and Water. Based on the FMMP, soils at the project site are designated as Farmland of Local Potential and Other Land (CDOC 2016).

Based on the Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2022), on-site soils include:

- (110) Briones-Tierra complex, 15 to 50 percent slopes: This somewhat excessive drained soil has a low runoff class and a depth to restrictive feature of 20 to 40 inches to paralithic bedrock. The typical

soil profile consists of loamy sand and weathered bedrock. This soil is not included in Table SL-2 of the COSE.

- (131) Diablo and Cibo clays, 15 to 30 percent slopes: This well-drained soil has a very high runoff class and a depth to restrictive feature of 45 to 58 inches to paralithic bedrock. The typical soil profile consists of clay and weathered bedrock. This soil is designated as Other Productive Soils and Highly Productive Rangeland Soils in Table SL-2 of the COSE.
- (135) Elder sandy loam, 2 to 5 percent slopes: This well-drained soil has a very low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of sandy loam. This soil is designated as Prime Farmland and Highly Productive Rangeland Soils in Table SL-2 of the COSE.
- (169) Marimel sandy clay loam, occasionally flooded: This somewhat poorly drained soil has a high runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of sandy clay loam, stratified loam, clay loam, and silty clay loam. This soil is designated as Prime Farmland and Highly Productive Rangeland Soils in Table SL-2 of the COSE.

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

According to PRC Section 12220(g), forest land is defined as land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Timberland is defined as land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. The project site does not support any forest land or timberland.

Discussion

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

Soils at the project site are designated as Farmland of Local Potential and Other Land by the FMMP (CDOC 2016). The project site does not contain land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the FMMP; therefore, the project would not result in the conversion of Farmland pursuant to the FMMP to a non-agricultural use, and *no impacts* would occur.

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

The project site is currently within the AG land use category but is not subject to a Williamson Act contract. Implementation of the General Plan and LUO Amendment would convert the project site from the AG land use category to the Residential Rural land use category. The project site currently

supports agricultural row crops and existing agricultural uses on the property include animal husbandry and grazing. The General Plan and LUO Amendment would facilitate the future development of a new primary residence and an ADU or a guesthouse and the conversion of an existing mobile home to an ADU, which would be limited to the northeastern portion of the project site. The western 10 acres of the project site would be retained as open space; therefore, future residential development would not interfere with existing row crops and existing agricultural uses would continue to occur on-site. Implementation of the project would not interfere with existing agricultural uses; therefore, potential impacts would be *less than significant*.

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

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

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

The project site is not zoned for forestland and is not considered forestland as defined by PRC Section 12220(g). There is arroyo willow thicket habitat along San Luis Obispo Creek, which is located along the western property boundary, and oak woodland habitat along the eastern portion of the site. Future development of residential and accessory uses would be limited to the northeastern portion of the property and would not occur within the arroyo willow thicket or oak woodland habitats, which would preclude future development from removing or otherwise impacting arroyo willow or oak trees on-site. Therefore, the project would not result in the loss of forest land or convert forest land to non-forest use, and *no impacts* would occur.

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

The majority of soils at the site are considered important agricultural soils of the county by Table SL-2 of the COSE, which is based on the NRCS soil classification system, as opposed to the FMMP, which takes into account historical agricultural practices. The project site currently supports agricultural row crops and existing agricultural uses on the property, including animal husbandry and grazing. The western 10 acres of the project site would be retained as open space; therefore, future residential development would not interfere with existing row crops and existing agricultural uses would continue to occur on-site. According to the NRCS, soils underlying the majority of the subject parcel are considered Prime Farmland if irrigated and drained and Prime Farmland if irrigated and are considered Class 2 and Class 3 soils. Class 2 soils have moderate limitations that may reduce growing operations on-site, and Class 3 soils have severe limitations that may reduce growing operations. Further, the project site is generally surrounded by existing residential development and is of a size that makes it infeasible for commercial agricultural production. Based on existing site constraints, the project would not result in a potentially significant impact associated with conversion of the project site to rural residential land uses. The project would not result in substantial long-term groundwater use, dust, or other emissions that could inadvertently reduce water availability for or damage crops within the project area. The project would not introduce incompatible land uses or result in other changes to the environment that could indirectly result in

the conversion of farmland to non-agricultural use or forestland to non-forest use; therefore, potential impacts would be *less than significant*.

Conclusion

The project would not directly or indirectly result in the conversion of farmland, forest land, or timber land to non-agricultural or non-forest uses and would not conflict with agricultural zoning or otherwise adversely affect agricultural resources or uses. Potential impacts to agricultural resources would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

III. AIR QUALITY

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

Setting

Regulatory Agencies and Standards

San Luis Obispo County is part of the South Central Coast Air Basin, (SCCAB) which also includes Santa Barbara and Ventura Counties. Air quality within the SCCAB is regulated by several jurisdictions including the U.S. Environmental Protection Agency (USEPA), California Air Resources Board (CARB), and San Luis Obispo County Air Pollution Control District (SLOAPCD). Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. The CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA) of 1988. The State Department of Public Health established California Ambient Air Quality Standards (CAAQS) in 1962 to define the maximum amount of a pollutant (averaged over a specified period of time) that can be present without any harmful

effects on people or the environment. The CARB adopted the CAAQS developed by the Department of Public Health in 1969, which had established CAAQS for 10 criteria pollutants: particulate matter (less than 10 microns in diameter [PM_{10}] and less than 2.5 microns in diameter [$PM_{2.5}$]), ozone (O_3), nitrogen dioxide (NO_2), sulfate, carbon monoxide (CO), sulfur dioxide (SO_2), visibility-reducing particles, lead (Pb), hydrogen sulfide (H_2S), and vinyl chloride.

The Federal Clean Air Act (FCAA) later required the USEPA to establish National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment, and also set deadlines for their attainment. The USEPA has established NAAQS for six criteria pollutants (all of which are also regulated by CAAQS): CO, lead, NO_2, ozone, particulate matter (PM_{10} and $PM_{2.5}$), and SO_2.

California law continues to mandate compliance with the CAAQS, which are often more stringent than the NAAQS. However, California law does not require that the CAAQS be met by specified dates as is the case with the NAAQS. Rather, it requires incremental progress toward attainment. The SLOAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions within the county are maintained.

San Luis Obispo County Clean Air Plan

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

SLOAPCD Emissions Thresholds

The SLOAPCD has developed and updated their CEQA Air Quality Handbook (SLOAPCD 2012; most recently updated with a November 2017 Clarification Memorandum [SLOAPCD 2017]) to help local agencies evaluate project-specific impacts and determine if air quality mitigation measures are needed, or if potentially significant impacts could result.

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

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

Demonstrate consistency with the most recent CAP for San Luis Obispo County;

Demonstrate consistency with a plan for the reduction of GHG emissions that has been adopted by the jurisdiction in which the project is located that complies with State CEQA Guidelines Section 15183.5;

Compare predicted ambient criteria pollutant concentrations resulting from the project to federal and state health standards, when applicable;

Compare calculated project emissions to SLOAPCD emission thresholds; and

Evaluate special conditions, which apply to certain projects.

Sensitive Receptors

Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants, such as the elderly, children, people with asthma or other respiratory illnesses, and others who are at a heightened risk of negative health outcomes due to exposure to air pollution. Some land uses are considered more sensitive to changes in air quality than others, due to the population that occupies the uses and the activities involved. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residences. The project site is generally surrounded by scattered rural residential uses and agricultural land uses. The nearest off-site sensitive receptor locations to the project site include an off-site single-family residence located approximately 120 feet to the southeast, a single-family residence located approximately 180 feet to the north, and a single-family residence located approximately 300 feet to the southeast.

Naturally Occurring Asbestos

Naturally Occurring Asbestos (NOA) is identified as a toxic air contaminant by the CARB. Serpentine and other ultramafic rocks are fairly common throughout the county and may contain NOA. If these areas are disturbed during construction, NOA-containing particles can be released into the air and have an adverse impact on local air quality and human health. The project is not located in an area with known potential for NOA to occur (SLOAPCD 2018).

Discussion

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

In order to be considered consistent with the 2001 CAP, a project must be consistent with the land use planning and transportation control measures and strategies outlined in the CAP and be generally consistent with the population projections the plan was based on (SLOAPCD 2012). Adopted land use planning strategies include, but are not limited to, planning compact communities with higher densities within the urban reserve lines of cities and unincorporated communities, providing for mixed land use, and balancing jobs and housing.

The project site is located outside of an established urban reserve line or village reserve line of a city or unincorporated community. Based on LUO Section 22.30.480 (Residential Uses in the Agriculture and Rural Land Use Categories), the project site could currently be developed with up to two primary dwellings given that the second primary dwelling would not exceed 1,200 square feet. In addition, based on LUO Section 22.30.470 (Residential – Accessory Dwellings), two ADUs or JADUs could be built on the site in addition to the two single-family dwellings. Therefore, under the project site's existing Agriculture land use designation, a total of two single-family residences and two ADUs or JADUs could be constructed. The proposed project would allow for development of one new primary residence and one new ADU or guesthouse on-site. While the proposed project would increase the density of residential uses compared to existing conditions, the future development of these uses

would be consistent with the level of residential development currently allowed to be developed on the project site under its existing land use designation. Therefore, the project would not conflict with the CAP policy stating that urban growth should occur within the urban reserve lines of cities and unincorporated communities.

The project does not include development of retail or commercial uses that would be open to the public; therefore, land use planning strategies such as mixed-use development and transportation control measures such as teleworking are generally not applicable to the project.

The project would allow for the future development of one primary residence and one ADU or guesthouse on a parcel with existing residential uses. Based on the limited scale of proposed residential development and associated marginal population increase, the project would not be anticipated to generate vehicle miles traveled (VMT) in a manner that would exceed regional thresholds and transportation control measures identified in the 2001 CAP would generally not be applicable to the project. Based on an average of 2.51 persons per household in San Luis Obispo County, and the assumption that ADUs and guesthouses would house approximately 1/3 of the average household size, the project would be estimated to generate an approximate residential population of four, which would represent a negligible population increase in the project region. Therefore, implementation of the proposed project would not result in an environmental impact related to conflict with or obstruct implementation of the 2001 CAP, and potential impacts would be *less than significant.*

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

San Luis Obispo County is currently designated as non-attainment for ozone and PM_{10} under the CAAQS (CARB 2020).

Construction Emissions

Construction activities associated with the proposed access improvements and construction of the proposed residential uses and utility improvements on-site would result in the generation of criteria air pollutants, including ozone precursors (ROGs and NO_x) and fugitive dust (PM_{10}). Fugitive dust emissions would result from grading operations and ROG and NO_x emissions would result from the use of large diesel-fueled equipment, including scrapers, loaders, bulldozers, haul trucks, compressors, and generators.

Future development of one new primary residence on Parcel A and one ADU or guesthouse on Parcel B is anticipated to require approximately 1,200 cubic yards of earthwork, with potential for some soil to be imported on-site. For the purposes of this analysis, a conservative estimate of 600 cubic yards (50% of total earthwork) was assumed to be required to be imported on-site. ADUs are limited to have a maximum area of 1,200 square feet and the average single-family residence is 2,100 square feet in size. Therefore, the analysis presented in this document conservatively assumes that construction of future residential uses would result in the maximum disturbance of 3 acres. While no application for a parcel map or cluster subdivision has been submitted, the above subdivision and development scenario is evaluated within this document as the reasonable-case development scenario.

The SLOAPCD CEQA Air Quality Handbook provides thresholds of significance for construction-related emissions. The California Emissions Estimator Model (CalEEMod; 2022) was used to estimate

the project's construction-related and operational emissions (see Appendix B for summary and quarterly CalEEMod reports). A summary of the project's estimated construction-related air pollutant emissions is provided in Tables 2 and 3. Evaluation of the project's emissions and associated impact significance is partially based on the evaluation methodology and criteria provided in the SLOAPCD CEQA Training Guided Questionnaire (SLOAPCD 2022).

Table 2. Estimated Daily Construction Emissions of Criteria Pollutants

Pollutant	Maximum Daily Emissions (pounds/day)	SLOAPCD Daily Threshold (pounds/day)	Threshold Exceeded?
ROG + NO_x (combined)	36.3	137	No

Note: The SLOAPCD does not have a significance threshold for daily PM_{10} emissions.

Table 3. Estimated Quarterly Construction Emissions of Criteria Pollutants

Pollutant	Maximum Quarterly Emissions (tons/quarter)	SLOAPCD Quarterly Tier 1 Threshold (tons/quarter)	Threshold Exceeded?
ROG + NO_x (combined)	1.13	2.5	No
Fugitive Particulate Matter (PM_{10})	0.04	2.5	No

As proposed, the project would not exceed SLOAPCD thresholds for daily or quarterly emissions of combined ROG and NO_x or PM_{10}. In addition to the daily and quarterly emissions thresholds noted above, the SLOAPCD states that projects that disturb more than 4 acres of land have the potential to exceed the 2.5-ton PM_{10} quarterly threshold. The project would have the potential to result in a total site disturbance of up to 3 acres. Therefore, the project would not have the potential to exceed the quarterly PM_{10} emissions threshold.

Operational Emissions

Operational activities associated with the project would include residential uses, landscape maintenance activities, and vehicle trips to and from the project site. CalEEMod was used to estimate the project's operational air pollutant emissions, as detailed in Table 4.

Table 4. Estimated Project Operational Emissions of Criteria Pollutants

Pollutant	Maximum Daily Emissions (pounds/day)	SLOAPCD Daily Emissions Threshold (pounds/day)	Threshold Exceeded?	Annual Emissions (tons/year)	SLOAPCD Annual Emissions Threshold (tons/year)	Threshold Exceeded?
ROG + NO_x	0.32	25	No	0.06	25	No

(combined)						
Fugitive Particulate Matter (PM_{10})	2.37	25	No	0.43	25	No

Based on the estimated operational emissions shown in Table 4, the project would not result in combined ROG and NO_x or PM_{10} emissions in excess of daily or annual thresholds set forth by the SLOAPCD, and operational emissions would be *less than significant*.

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

(c) Expose sensitive receptors to substantial pollutant concentrations?

Construction Emissions

According to the SLOAPCD *CEQA Air Quality Handbook*, projects that occur within 1,000 feet of sensitive receptors have the potential to result in adverse impacts involving construction emissions (SLOAPCD 2012). There are several sensitive receptor locations, including single-family residential dwellings, within 1,000 feet of the project site. Construction activities associated with the proposed access improvements and construction of the proposed residential uses and utility improvements on-site would result in the generation of air pollutants that can cause adverse health impacts, including ozone precursors, fugitive dust, and particulate matter emitted by exhaust from diesel vehicles less than 2.5 micrometers in size or smaller (herein referred to as Diesel Particulate Matter [$DPM_{2.5}$]; referred to in CalEEMod as Exhaust $PM_{2.5}$ [$PM_{2.5}E$]).

Based on the analysis provided under Impact Discussion III(b), the project would not have the potential to exceed SLOACPD's daily or quarterly emissions thresholds for combined ROG and NO_x or fugitive dust. However, based on the project site's location within 1,000 feet of sensitive receptor locations, the SLOAPCD states that implementation of the expanded list of fugitive dust mitigation measures is needed to reduce the potential for adverse health effects for nearby sensitive receptors. Mitigation Measure AQ-1 has been identified to require implementation of the SLOAPCD's expanded list of fugitive dust mitigation measures and for these measures to be shown on project grading and construction plans.

The SLOACPD identifies daily and quarterly emissions thresholds for $DPM_{2.5}$. CalEEMod was used to estimate the project's $DPM_{2.5}$ emissions during construction, as shown in Table 5.

Table 5. Estimated Emissions of Diesel Particulate Matter

Pollutant	Maximum Daily Emissions (pounds/day)	SLOAPCD Daily Threshold (pounds/day)	Threshold Exceeded?	Maximum Quarterly Emissions (tons/quarter)	SLOAPCD Quarterly Tier 1 Threshold (tons/quarter)	Threshold Exceeded?
Diesel Particulate Matter ($DPM_{2.5}$)	1.71	7	No	0.04	0.13	No

As shown in Table 5, the project would not exceed daily or quarterly emissions thresholds for $DPM_{2.5}$ during construction. However, based on the project site's location within 1,000 feet of sensitive receptor locations and proposed use of diesel-powered equipment, the SLOAPCD states that implementation of limits on idling during the construction phase are needed to reduce the potential for adverse health effects for nearby sensitive receptors. Mitigation Measure AQ-2 has been identified to require implementation of idling limits for diesel-powered equipment during construction activities and for these measures to be shown on project grading and construction plans. The project would not include demolishing or remodeling, sandblasting, removing paint with a heat gun, or other activities that may result in other air emissions with the potential to adversely affect surrounding sensitive receptors.

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

Operational Emissions

Operational activities associated with the project would include residential uses, landscape maintenance activities, and vehicle trips to and from the project site. Based on the evaluation of the project using CalEEMod, the project would not exceed daily or annual operational emissions thresholds for combined ROG and NO_x, fugitive dust, or $DPM_{2.5}$ (see Appendix B). Therefore, potential impacts to sensitive receptors associated with operational uses would be *less than significant*.

Based on the analysis provided above, project impacts associated with exposure of sensitive receptors to substantial pollutant concentrations would be *less than significant with mitigation*.

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

Construction activities generally have the potential to emit odors from diesel equipment, paints, solvents, fugitive dust, and adhesives. Any odors generated by construction activities would be intermittent and temporary, and generally would not extend beyond the construction area. The project is not located in an area with known potential for NOA (SLOAPCD 2018). Therefore, construction activities would not have the potential to expose workers or surrounding land use occupants to harmful levels of NOA.

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

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

Conclusion

Project impacts associated with consistency with an adopted CAP and other emissions would be less than significant. Project impacts associated with a cumulatively considerable net increase in a criteria pollutant for which the region is in nonattainment for and exposure of sensitive receptors to substantial pollutant concentrations would be reduced to less than significant with implementation of mitigation measures

identified below. Upon implementation of the identified mitigation measures, potential impacts related to air quality would be less than significant.

Mitigation

AQ-1 **San Luis Obispo County Air Pollution Control District Fugitive Dust Mitigation Measures (Expanded List).** At the time of application for grading and construction plans for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities:

1. Reduce the amount of the disturbed area where possible;
2. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour. Reclaimed (non-potable) water should be used whenever possible. When drought conditions exist and water use is a concern, the contractor or builder should consider use of a dust suppressant that is effective for the specific site conditions to reduce the amount of water used for dust control. Please refer to the following link from the San Joaquin Valley Air District for a list of potential dust suppressants: http://www.valleyair.org/busind/comply/PM10/Products%20Available%20for%20Controlling%20PM10%20Emissions.htm;
3. All dirt stockpile areas should be sprayed daily and covered with tarps or other dust barriers as needed;
4. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible, and building pads should be laid as soon as possible after grading unless seeding, soil binders, or other dust controls are used;
5. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) or otherwise comply with California Vehicle Code Section 23114;
6. "Track-Out" is defined as sand or soil that adheres to and/or agglomerates on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto any highway or street as described in California Vehicle Code Section 23113 and California Water Code 13304. To prevent track out, 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;
7. All fugitive dust mitigation measures shall be shown on grading and building plans;

8. The contractor or builder shall designate a person or persons whose responsibility is to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to minimize dust complaints and reduce visible emissions below the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress (for example, wind-blown dust could be generated on an open dirt lot). The name and telephone number of such persons shall be provided to the San Luis Obispo County Air Pollution Control District Compliance Division prior to the start of any grading, earthwork or demolition (Contact the Compliance Division at 805-781-5912).
9. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible, following completion of any soil-disturbing activities;
10. Exposed ground areas that are planned to be reworked at dates greater than 1 month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
11. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the San Luis Obispo County Air Pollution Control District;
12. Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site;
13. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers shall be used with reclaimed water where feasible. Roads shall be pre-wetted prior to sweeping when feasible; and
14. Take additional measures as needed to ensure dust from the project site is not impacting areas outside the project boundary.

AQ-2 **San Luis Obispo County Air Pollution Control District Limits on Idling During Construction.** At time of application for grading and construction plans for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B",, the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities when diesel-powered vehicles/equipment are in use:

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

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

IV. BIOLOGICAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
(b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
(c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
(d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
(f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Setting

Sensitive Resource Area Designations

The County LUO SRA combining designation applies to areas of the county with special environmental qualities, or areas containing unique or sensitive endangered vegetation or habitat resources. The combining designation standards established in the County LUO require that proposed uses be designed with consideration of the identified sensitive resources and the need for their protection.

Federal and State Endangered Species Acts

The Federal Endangered Species Act (FESA) of 1973 provides legislation to protect federally listed plant and animal species. The California Endangered Species Act (CESA) of 1984 ensures legal protection for plants listed as rare or endangered, and wildlife species formally listed as endangered or threatened, and also maintains a list of California Species of Special Concern (SSC). SSC status is assigned to species that have limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Under state law, the California Department of Fish and Wildlife (CDFW) has the authority to review projects for their potential to impact special-status species and their habitats.

Migratory Bird Treaty Act

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

Oak Woodland Ordinance

The County of San Luis Obispo Oak Woodland Ordinance was adopted in April 2017 to regulate the clear-cutting of oak woodlands. This ordinance applies to sites located outside of Urban or Village areas within the inland portions of the county (not within the Coastal Zone). "Clear-cutting" is defined as the removal of 1 acre or more of contiguous trees within an oak woodland from a site or portion of a site for any reason, including harvesting of wood, or to enable the conversion of land to other land uses. "Oak woodland" includes the following oak species: blue (*Quercus douglasii*), coast live (*Quercus agrifolia*), interior live (*Quercus wislizeni*), valley (*Quercus lobata*), and California black (*Quercus kelloggii*). The ordinance applies to

clear-cutting of oak woodland only and does not apply to the removal of other species of trees, individual oak trees (except for Heritage Oaks), or the thinning, tree trimming, or removal of oak woodland trees that are diseased, dead, or creating a hazardous condition. Heritage oaks are any individual oak species, as defined in the Oak Woodland Ordinance, of 48 inches diameter at breast height (dbh) or greater, separated from all Stands and Oak Woodlands by at least 500 feet. Minor Use Permit approval is required to remove any Heritage Oak. There are no Heritage Oaks within the project area, but the project site supports approximately 1 acre of oak woodland along the northeastern property boundary.

Clean Water Act and State Porter Cologne Water Quality Control Act

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

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

Conservation and Open Space Element

The intent of the goals, policies, and implementation strategies in the COSE is to identify and protect biological resources that are a critical component of the county's environmental, social, and economic well-being. Biological resources include major ecosystems; threatened, rare, and endangered species and their habitats; native trees and vegetation; creeks and riparian areas; wetlands; fisheries; and marine resources. Individual species, habitat areas, ecosystems, and migration patterns must be considered together in order to sustain biological resources. The COSE identifies Critical Habitat areas for sensitive species, including California condor (*Gymnogyps californianus*), California red legged frog (*Rana draytonii*), vernal pool fairy shrimp (*Branchinecta lynchi*), La Graciosa thistle (*Cirsium loncholepis*), Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*), Morro shoulderband snail (*Helminthoglypta walkeriana*), California tiger salamander (*Ambystoma californiense*), and western snowy plover (*Charadrius alexandrinus nivosus*). The COSE also identifies features of particular importance to wildlife for movement corridors, such as riparian corridors, shorelines of the coast and bay, and ridgelines.

Biological Setting

The 15.06-acre property is characterized by relatively flat topography and primarily supports annual brome grassland and agricultural row crops with areas of arroyo willow thicket along San Luis Obispo Creek and coast live oak woodland along the northeastern property boundary. The northeastern portion of the property is currently developed with a single-family residence, a mobile home, a workshop, and two agricultural accessory structures. The project site also includes a ground-mounted 5.76 kW solar PV system and a roof-mounted 3.64 kW solar PV system.

There are two surface water features located within the project area, including a portion of San Luis Obispo Creek located adjacent to the western property boundary of Parcel C and an unnamed ephemeral drainage

located within the eastern portion of the project area on Parcels A, B, and C. San Luis Obispo Creek is located outside of the project property; however, the unnamed ephemeral drainage enters the project area from a culvert in the northeastern portion of the property and flows within the eastern and southern portion where it meets San Luis Obispo Creek. Both features have a defined bed and bank and provide connectivity to other waterways within the region. As such, both features would be considered waters of the State under the jurisdiction of the CDFW and RWQCB and waters of the United States under the jurisdiction of USACE (Terra Verde 2022; Appendix C).

Special-Status Species

A Biological Resources Assessment (BRA) was prepared for the proposed project (Terra Verde 2022; see Appendix C) to evaluate potential impacts related to biological resources. The BRA includes the results of desktop-level background review, which was conducted to identify special-status species known to occur within the project region and a field survey of the project area conducted on April 21, 2022, which was conducted to identify existing habitat conditions and determine the likelihood for special-status species to occur at the site. Based on the results presented in the BRA, the following four special-status plants have the potential to occur within the project area:

- Miles' milkvetch (*Astragalus didymocarpus* var. *milesianus*; California Rare Plant Rank [CRPR] 1B.2)
- Cambria morning-glory (*Calystegia subacaulis* ssp. *episcopalis*; CRPR 4.2)
- San Luis Obispo owl's clover (*Castilleja densiflora* ssp. *obispoensis*; CRPR 1B.2)
- Pismo clarkia (*Clarkia speciosa* ssp. *immaculata*; Federally Endangered, CRPR 1B.1)

No special-status plant species were observed within the project area during the April 21, 2022, field survey, which was conducted within the appropriate blooming period for the identified special-status plant species (Terra Verde 2022).

In addition, based on the results presented in the BRA, the following eight special-status wildlife species have the potential to occur within the project area:

- California red-legged frog (CRLF) (*Rana draytonii*; Federally Threatened, California SSC)
- steelhead – south-central California coast Distinct Population Segment (DPS) (*Oncorhynchus mykiss*; Federally Threatened)
- crotch bumble bee (*Bombus crotchii*, State Candidate Endangered)
- western bumble bee (*Bombus occidentalis*, State Candidate Endangered)
- mountain lion (*Puma concolor*; State Candidate Threatened)
- pallid bat (*Antrozous pallidus*; SSC)
- southwestern pond turtle (*Actinemys marmorata*; SSC)
- Cooper's hawk (*Accipiter cooperii*; SSC)
- western yellow-billed cuckoo (*Coccyzus americanus*; Federally Threated, State Endangered)

No special-status wildlife species were observed within the project area during the April 21, 2022, field survey.

Discussion

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

Future establishment of a new primary residence and an ADU or a guesthouse would require ground-disturbing activities, which would have the potential to result in direct removal of special-status plant species if present within the project site during future construction activities. In addition, future construction activities have the potential to result in direct (e.g., take) or indirect (e.g., noise, dust, light pollution) disturbance to special-status wildlife species if present within the project area during project construction. Mitigation Measures BIO-1 and BIO-2 have been identified to require environmental awareness training prior to the initiation of construction activities on-site and to require the implementation of construction best management practices (BMPs) to avoid and/or minimize indirect disturbance to biological resources and associated habitat during future construction activities. Potential impacts to special-status plant and wildlife species are described in detail, below.

Special-Status Plants

Based on the findings presented in the BRA, there is potential for four special-status plant species to occur within the project area. There is marginally suitable habitat for Miles' milkvetch, Cambria morning glory, and San Luis Obispo owl's clover along the edge of the oak woodland habitat located in the northeastern portion of the project area. In addition, Pismo clarkia is known to occur within the project region and there is a previously documented occurrence located approximately 0.3 mile west of the site. However, during appropriately timed botanical surveys of the site, no special-status plant species were observed within the project area (Terra Verde 2022). Since these species do not occur within the project area, future construction activities would not result in adverse impacts to Miles' milkvetch, Cambria morning glory, San Luis Obispo owl's clover, or Pismo clarkia. Therefore, impacts related to special-status plant species would be *less than significant*.

Special-Status Wildlife

Based on the findings presented in the BRA, there is potential for the following seven special-status wildlife species to occur within the project area.

California Red-legged Frog

Habitat requirements for CRLF include permanent or semi-permanent bodies of water, including lakes, streams, and ponds with emergent vegetation. In addition, this species uses lowland and grassland areas for hunting and foraging. This species is known to occur within San Luis Obispo Creek, and the nearest previously recorded occurrence of this species is located approximately 1.2 miles south of the project area (Terra Verde 2022). San Luis Obispo Creek is located adjacent to the western property boundary and there is an additional ephemeral drainage located within the project area. Additionally, the project site supports grassland habitat. As such, the project area may provide suitable habitat for CRLF.

Although the project area is located in a rural area with limited development, there are several existing roadways within the vicinity of the project area, including US 101 and Monte Road, which limits habitat connectivity to natural areas. In addition, there are existing agricultural row crops and

other agricultural land uses within the vicinity of the project area that further limit habitat connectivity and wildlife movement to natural areas. Based on the limited habitat connectivity within the project area, the project area would not provide suitable dispersal habitat for CRLF; therefore, individuals of this species are not expected to occur within the project area. Further, Mitigation Measure BIO-3 has been identified to require preconstruction surveys for CRLF and details the proper protocol to be implemented in the event individuals are observed within the project area. Based on the low potential for occurrence and implementation of Mitigation Measure BIO-3, future construction activities would not adversely affect CRLF.

South-Central California Coast Steelhead

There is suitable habitat for steelhead within San Luis Obispo Creek, located adjacent to the western property boundary. San Luis Obispo Creek is known to support steelhead, and the nearest recorded occurrence of this species is located approximately 2.7 miles northwest of the project site in a tributary to San Luis Obispo Creek. Because San Luis Obispo Creek is not located within the project site, future construction activities would not result in direct disturbance to steelhead or associated habitat. Further, the unnamed ephemeral drainage located within the project site does not provide consistent flowing or pooled water that could support steelhead (Terra Verde 2022). Since steelhead is not expected to occur within the on-site drainage and future activities would avoid San Luis Obispo Creek, future construction activities would not adversely affect this south-central California coast steelhead.

Crotch Bumble Bee and Western Bumble Bee

Crotch bumble bee inhabit open grassland and scrub habitats primarily in California, from Sacramento south into Mexico, and from the coast east into Nevada. According to CNDDB records, the nearest documented occurrence of Crotch bumble bee is 6.1 miles northeast of the project site, in the city of San Luis Obispo. The occurrence also states that no individuals were detected during similar survey efforts in 2007 and 2008. Marginally suitable nesting habitat (e.g., small mammal burrows and brush piles) is present on site. However, due to frequent disturbance (i.e., mowing) throughout the site, habitat for this species is degraded. There is a low potential for Crotch bumble bee to occur in the project site.

Prior to 1998, the western bumble bee was both common and widespread throughout the western United States and western Canada. Recently, this bumble bee has undergone a drastic decline throughout some areas of its former range. While viable populations still exist in Alaska and east of the Cascades in the Canadian and U.S. Rocky Mountains, the once common populations of central California, Oregon, Washington and southern British Columbia have largely disappeared. According to CNDDB records (CDFW 2022), the nearest documented occurrence of Western bumble bee is 0.6 mile southwest of the project site, approximately 7 miles south of the city of San Luis Obispo. This historic occurrence describes one individual collected in July of 1936. Marginally suitable nesting habitat (e.g., small mammal burrows and brush piles) is present on site. However, due to frequent disturbance (i.e., mowing) throughout the site, habitat for this species is degraded. There is a low potential for Western bumble bee to occur in the project site.

Impacts to Crotch bumble bee and Western bumble bee may occur if they are present on site at the time of construction by causing the injury or mortality of adults, eggs, and larvae, burrow collapse, nest abandonment, and reduced nest success. Mitigation Measure BIO-4 has been identified to avoid potential impacts to both crotch bumble bee and western bumble bee if present on-site

during future construction activities. With implementation of Mitigation Measure BIO-4, impacts to these species would be less than significant.

Mountain Lion

The mountain lion typically inhabits the adjacent undeveloped lands and dense oak and riparian habitats near the project area; therefore, there is potential for this species to periodically occupy the project site. However, during field surveys, no mountain lion dens or other evidence of this species was observed within the project area. In addition, due to the high mobility of this species, future construction activities would not result in disturbance to individuals that may periodically occupy the site (Terra Verde 2022). Mitigation Measure BIO-2 would reduce the potential to indirectly affect mountain lion individuals and associated habitat through implementation of general construction BMPs. Based on the mobility of this species and implementation of Mitigation Measure BIO-2, potential impacts would be less than significant.

Pallid Bat

There is suitable roosting habitat for pallid bat in the cavities of mature trees and existing buildings and structures within the project area (Terra Verde 2022). If present within the project area, future construction activities may result in direct or indirect impacts to roosting bats. Mitigation Measure BIO-4 has been identified to require preconstruction roosting bat surveys and details the proper protocol to be implemented if individuals are observed on-site. With implementation of Mitigation Measure BIO-5, potential impacts to pallid bat(s) would be less than significant.

Southwestern Pond Turtle

The southwestern pond turtle inhabits many types of permanent and ephemeral aquatic habitats, including sloughs, rivers, ponds, lakes, vernal pools, and marshes, as well as human-constructed waterbodies, such as irrigation ditches and impoundments and other human-made waterbodies that provide adequate basking sites (e.g., logs, rocks, mats of floating vegetation, open mud banks), emergent vegetation, and underwater refugia (e.g., rocks, submerged vegetation). This species is known to occur within San Luis Obispo Creek, and the nearest previously recorded occurrence is located approximately 3 miles north of the project site. As such, there is potentially suitable habitat for this species along the ephemeral drainage and San Luis Obispo Creek located within and adjacent to the project area, respectively (Terra Verde 2022). Mitigation Measure BIO-6 has been identified to require preconstruction surveys for southwestern pond turtle and details the proper protocol to be implemented if individuals are observed within the project area. Based on implementation of Mitigation Measure BIO-6, potential impacts would be less than significant.

Cooper's Hawk, Western Yellow-Billed Cuckoo, and Nesting Migratory Birds

There is suitable habitat for nesting migratory birds within the oak woodland and arroyo willow thicket habitats on-site. In addition, there is potential for Cooper's hawk to nest within the oak woodland habitat and potential for western yellow-billed cuckoo to nest within the arroyo willow thicket habitat (Terra Verde 2022). If present within the project area, future construction activities may result in direct or indirect impacts to nesting birds. Mitigation Measure BIO-7 has been identified to require preconstruction nesting bird surveys and details the proper protocol to be implemented if nesting birds are observed within the project area. Based on implementation of Mitigation Measure BIO-7, potential impacts associated with Cooper's hawk, western yellow-billed cuckoo, and nesting migratory birds would be less than significant.

Based on the analysis provided above, potential impacts associated with substantial adverse effects on special-status species or their habitats would be *less than significant with mitigation*.

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

The project area primarily supports annual brome grassland and agricultural row crops with areas of arroyo willow thicket along San Luis Obispo Creek and coast live oak woodland along the northeastern property boundary. There are two surface water features located within the project area, including a portion of San Luis Obispo Creek located adjacent to the western property boundary of Parcel C and an unnamed ephemeral drainage located within the eastern portion of the project area on Parcels A, B, and C. San Luis Obispo Creek supports arroyo willow thicket habitat and the unnamed drainage supports oak woodland habitat. Both features would be considered waters of the state under the jurisdiction of the CDFW and RWQCB and waters of the United States under the jurisdiction of the USACE (Terra Verde 2022). Based on the distance and minimal amount of ground-disturbing activities, arroyo willow thicket along San Luis Obispo Creek would not be expected to be adversely affected by future construction activities, including vegetation removal and other ground-disturbing activities. However, future construction activities have the potential to result in pollutant release, which may adversely affect the oak woodland habitat within the eastern portion of the project area. Mitigation Measure BIO-2 requires the implementation of construction BMPs to avoid and/or minimize the potential for construction-related spills. In addition, Mitigation Measure BIO-8 requires the implementation of setbacks and erosion control BMPs to protect the identified surface water features and surrounding vegetation. Based on implementation of Mitigation Measures BIO-2 and BIO-8, future construction activities would not result in disturbance to the arroyo willow thicket and oak woodland habitats; therefore, impacts would be *less than significant with mitigation*.

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

There are two surface water features located within the project area, including a portion of San Luis Obispo Creek located adjacent to the western property boundary and an unnamed ephemeral drainage located within the eastern portion of the project area. San Luis Obispo Creek is located outside of the project property; however, the unnamed ephemeral drainage enters the project area from a culvert in the northeastern portion of the property and flows through the eastern and southern portion until it meets San Luis Obispo Creek. Both features have a defined bed and bank and provide connectivity to other waterways within the region. As such, both features would be considered federal and state wetlands under the jurisdiction of the CDFW, RWQCB, and USACE (Terra Verde 2022). Future construction activities, including vegetation removal and other ground-disturbing activities have the potential to result in pollutant release, which may adversely affect the jurisdictional surface water features within the project area. Mitigation Measure BIO-2 requires the implementation of construction BMPs to avoid and/or minimize the potential for construction-related spills. In addition, Mitigation Measure BIO-8 requires the implementation of setbacks and erosion control BMPs to further protect the identified jurisdictional water features. Based on implementation of Mitigation Measures BIO-2 and BIO-8, future construction activities would not

have an adverse effect on jurisdictional water features within the project area; therefore, impacts would be *less than significant with mitigation*.

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

The project site is located in a rural area with limited development; however, there are several existing roadways, including US 101 and Monte Road within the vicinity of the project area, which limit habitat connectivity to natural areas. Further, the project site and surrounding areas support scattered residences and accessory structures, agricultural row crops, and other agricultural uses that further limit habitat connectivity within the vicinity of the project area. As such, the project site would not provide adequate connectivity to natural areas and future development of additional residential and accessory uses on-site would not preclude the project site for use as a wildlife corridor. San Luis Obispo Creek is located adjacent to the western property boundary; however, the project would not result in direct disturbance to San Luis Obispo Creek and would not reduce the potential for use as a wildlife corridor by migratory fish. The unnamed drainage located within the project site is ephemeral and would not provide consistent flowing or pooled water that could support migratory fish species. Any future tree removal and/or trimming would be subject to County requirements for tree removal and necessary replanting; therefore, future development associated with the proposed project would not reduce potential nesting habitat for migratory birds within the project area. Therefore, potential impacts related to habitat connectivity would be *less than significant*.

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

The County LUO Chapter 22.58 establishes regulations for clear-cutting oak woodlands. Specific construction and grading plans are currently not known; however, any future tree removal and/or trimming would be subject to County requirements for tree removal and replanting, as applicable. Therefore, the project would be consistent with the County LUO, and impacts would 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?

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

Conclusion

Mitigation Measures BIO-1 through BIO-8 have been identified to avoid and/or minimize potential impacts related to special-status plant species, special-status wildlife species, sensitive habitats, and the jurisdictional water features. The project would not interfere with habitat connectivity. Further, the project would not conflict with the County's tree ordinance or a Habitat Conservation Plan. Upon implementation of the identified mitigation measures, potential impacts related to biological resources would be less than significant.

Mitigation

BIO-1 Prior to initiation of ground disturbance associated with the development of a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", an environmental awareness training shall be presented to all construction personnel by a qualified biologist prior to the start of any project activities. The training shall include color photographs and a description of the ecology of all special-status species known or with potential to occur, as well as other sensitive resources requiring avoidance during construction. The training shall also include a description of protection measures required by discretionary permits, an overview of the Federal and State Endangered Species Acts, and implications of noncompliance with these regulations. This shall include an overview of the required avoidance, minimization, and mitigation measures. A sign-in sheet with the name and signature of the qualified biologist who presented the training, and the names and signatures of the environmental awareness trainees shall be kept. A fact sheet conveying the information provided in the environmental awareness training shall be provided to all project personnel.

BIO-2 At the time of application for grading and construction permits for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", the following general construction best management practices shall be shown on final construction plans and implemented during all construction activities to minimize impacts to biological resources:

1. The use of heavy equipment and vehicles shall be limited to the proposed project limits and defined staging areas/access points. The boundaries of each work area shall be clearly defined and marked with high-visibility fencing. No work shall occur outside these limits.
2. Project plans, drawings, and specifications shall show the boundaries of all sensitive resource areas and the location of erosion and sediment controls, delineation of construction limits, and other pertinent measures to ensure the protection of sensitive habitats and resources.
3. Staging of equipment and materials shall occur in designated areas with appropriate demarcation and perimeter controls. No staging areas shall be located within 100 feet of sensitive habitat or aquatic resources.
4. Secondary containment, such as drip pans, shall be used to prevent leaks and spills of potential contaminants.
5. Washing of concrete, paint, or equipment, and refueling and maintenance of equipment shall occur only in designated staging areas. These activities will occur at a minimum of 25 feet from sensitive habitat or aquatic resources, including drainages. Sandbags and/or absorbent pads and spill control kits shall always be available on-site to clean up and contain fuel spills and other contaminants.
6. Construction equipment shall be inspected by the operator daily to ensure that equipment is in good working order and no fuel or lubricant leaks are present.
7. Plastic monofilament netting (erosion control matting) or similar material will not be used on-site due to the potential to entangle special-status wildlife species.

Acceptable substitutes are coconut coir matting, biodegradable fiber rolls, or tackified hydroseeding compounds.

8. The use of pesticides (including rodenticides) and herbicides on the project shall be in compliance with all federal, state, and local regulations to avoid primary and secondary poisoning of sensitive species that may be using the site.
9. During project activities, all trash that may attract predators or scavengers shall be properly contained, removed from the work site, and disposed of at the end of each work week. Following construction, all trash and debris shall be removed from work areas.
10. After completion of the project's construction, all protective fencing/flagging used to delineate sensitive biological resources shall be removed from the project area and disposed of in appropriate waste receptacles or reused.

BIO-3 Future construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B" shall be completed during the dry period (May 1–August 30) to the extent feasible to avoid potential direct impacts to dispersing California red-legged frog individuals.

If ground disturbance occurs during the wet season (September 1–April 30), the applicant shall employ the following measures:

1. A temporary exclusion fence approved by the County of San Luis Obispo (i.e., ERTEC E-Fence with a lip) shall be established along the boundaries of the development envelopes between the riparian corridor and the development envelopes on the proposed lots to prevent frogs from entering proposed disturbance areas. The exclusions fence shall be installed by a County of San Luis Obispo-qualified biologist prior to the start of construction activities to ensure proper installation.
2. Within 48 hours prior to the start of construction activities, a preconstruction California red-legged frog survey shall be conducted in proposed disturbance areas by a County of San Luis Obispo-qualified biologist. A report documenting the results of the survey shall be provided to the County of San Luis Obispo Planning and Building Department. If no California red-legged frog are found, work can proceed. If any California red-legged frog are found, the County of San Luis Obispo shall be notified, and all work shall stop work until the California red-legged frog leave the site of their own accord. If the California red-legged frog do not move off the site on their own, the applicant shall comply with all relevant requirements of the Federal Endangered Species Act prior to resuming project activities as follows:
    a. Prior to initiation of any other protective measures, a biologist approved by the U.S. Fish and Wildlife Service to translocate California red-legged frog shall, in consultation with the U.S. Fish and Wildlife Service as applicable, identify appropriate relocation sites for California red-legged frog that may be observed during the preconstruction survey or monitoring activities described below and need to be moved from within the limits of direct impact disturbance.
    b. Relocation or other take (e.g., entrapment, etc.) of California red-legged frog can only be conducted by an authorized biologist and the project applicant

must have been issued the requisite take authorizations from the U.S. Fish and Wildlife Service before any relocation activity can commence.

c. If the U.S. Fish and Wildlife Service does not authorize the relocation of California red-legged frog occurring within the project site, no work activities shall occur on-site until the California red-legged frog has left the project site on its own.

BIO-4 Within 48 hours prior to the start of future construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", a qualified biologist shall conduct a pre-construction survey to ensure crotch and/or western bumble bees are not present within the proposed work areas. If bumble bees of any species are observed, they shall be photographed for identification following the USFWS guidance in *Appendix A - Standardized Bee Photography* in the *Survey Protocols for the Rusty Patched Bumble Bee (Bombus affinis)* (2019). If individual crotch or western bumble bees are observed, they shall be avoided to ensure no "take" occurs. If crotch or western bumble bee colonies are identified, the qualified biologist shall implement a minimum 50-feet no-disturbance buffer to avoid take and potentially significant impacts until it has been determined that the colony is no longer active. All sightings of crotch or western bumble bee shall be reported to the California Natural Diversity Database.

BIO-5 Prior to the start of future construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", all suitable roosting habitat for pallid bats (e.g., mature oak trees, existing structures) within 100 feet of work areas shall be surveyed to determine if bats are roosting in these areas. If bats are detected and impacts are deemed unavoidable, a bat exclusion plan shall be developed and submitted to California Department of Fish and Wildlife for approval prior to implementing any exclusion methods. If no bats are detected, no further action is required.

BIO-6 Within 48-hours prior to the start of future construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", a qualified biologist shall conduct a preconstruction survey to ensure special-status amphibians and reptiles are not present within proposed work areas. In the event southwestern pond turtle are identified, all work shall be halted until appropriate resource agencies are contacted for further guidance. All measures identified by appropriate resource agencies shall be implemented and evidence of compliance shall be sent to the County of San Luis Obispo Planning and Building Department.

BIO-7 Prior to initiation of any construction activities for future construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", if work is planned to occur between February 1 and September 15, a County of San Luis Obispo-qualified biologist shall survey the area for nesting birds within 10 days prior to initial project activity beginning, including ground disturbance and/or vegetation removal/trimming. If nesting birds are located on or near the proposed project site, they shall be avoided until they have successfully fledged, or the nest is no longer deemed active, as detailed below.

1. A 250-foot exclusion zone shall be placed around non-listed, passerine species, and a 500-foot exclusion zone will be implemented for non-listed raptor species. Exclusion zones shall be maintained until all exterior construction activities have been terminated for the current phase of work (e.g., if initial site improvements are completed, exclusion zones may be removed until initiation of site preparation for residence construction begins), or it has been determined by a qualified biologist that the young have fledged or that proposed project activities would not cause adverse impacts to the nest, adults, eggs, or young.
2. Variance from the no-disturbance buffers described above may be allowable when there is a compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. Any variance from the no-disturbance buffers shall be advised and supported by a qualified biologist and CDFW shall be notified in advance of implementing a variance.
3. If special-status avian species are identified and nesting within the work area, no work will begin until an appropriate exclusion zone is determined in consultation with the County of San Luis Obispo and any relevant resource agencies.

The results of the survey shall be provided to the County of San Luis Obispo Planning and Building Department prior to initial project activities. The results shall detail appropriate fencing or flagging of exclusion zones and include recommendations for additional monitoring requirements. A map of the project site and nest locations shall be included with the results.

If 2 weeks lapse between different phases of project activities (e.g., vegetation trimming, the start of grading), during which no or minimal work activity occurs, the nesting bird survey shall be repeated, and a separate survey report shall be prepared and submitted to the County of San Luis Obispo Planning and Building Department.

BIO-8 At the time of application for grading and construction permits for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", the following erosion control best management practices shall be shown on final construction plans and implemented during all construction activities to avoid/minimize impacts to jurisdictional water features:

1. The limits of the jurisdictional drainages, as well as appropriate setbacks (i.e., 25 feet), shall be shown on project site plans. All construction activities shall remain outside of the jurisdictional limits and equipment and vehicle staging, refueling, washing of concrete, and soil stockpiles shall remain outside the 25-foot setback.
2. To prevent erosion and sedimentation into drainages during construction, an Erosion and Sedimentation Control Plan shall be developed and implemented. It shall outline best management practices for short-term, temporary stabilization. Acceptable stabilization methods include the use of weed-free, natural fiber (i.e., non-monofilament) rolls, jute or coir netting, and/or other industry standards. Erosion control devices shall be installed and maintained for the duration of the project.

V. CULTURAL RESOURCES

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

Setting

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

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

As defined by CEQA, a historical resource includes:

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

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

A Cultural Resources Survey was prepared for the proposed project (Central Coast Archaeological Research Consultants [CCARC] 2022) to determine the presence and likelihood of presence of cultural resources within the project area. The Cultural Resources Survey includes the results and findings of background review and a pedestrian survey of the project area. A records search was conducted at the Central Coast

Information Center (CCIC), located at the Santa Barbara Museum of Natural History, to identify any previously recorded cultural resources within the project area. The records search was negative for previously recorded resources. Additionally, a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search was conducted, which also produced negative results. A pedestrian field survey was conducted within the project area, and no cultural resources or evidence of cultural resources were observed (CCARC 2022).

Discussion

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

The northeastern portion of the property is currently developed with a single-family residence, a mobile home, a workshop, and two agricultural accessory structures. The remaining portions of the property are undeveloped and support grassland habitat. The Cultural Resources Survey did not identify the existing structures as historical resources that could be eligible for listing in the CRHR (CCARC 2022). Because there are no historical resources within or directly adjacent to the project site, future development facilitated by implementation of the proposed General Plan and LUO Amendment would not cause a substantial adverse change in the significance of a historical resource; therefore, *no impacts* would occur.

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

A CCIC records search was conducted in order to determine whether any previously recorded cultural resources have been recorded on or near the project area. The records search did not identify any known previously recorded archaeological resources within the project area. A field survey of the project site was conducted, and no visible surface archaeological resources were found. Based on the results of the Cultural Resources Survey, there are no known cultural archaeological resources within the project area (CCARC 2022).

Specific construction and grading plans are currently not known; however, future development of additional residential land uses would be expected to require some level of ground-disturbing activities. Because there are no known archaeological resources within the project area, future development facilitated by implementation of the proposed General Plan and LUO Amendment would not result in adverse changes to known archaeological resources. However, there is still some potential for inadvertent discovery of unknown cultural resources if present within the proposed work area during future construction activities. The project would be required to comply with County LUO Section 22.10.040 for the protection of unknown cultural resources as a result of inadvertent discovery. Per County LUO Section 22.10.040, in the event an unknown cultural resource site is encountered, all work within the vicinity of the find must be halted until a qualified archaeologist is retained to evaluate the nature, integrity, and significance of the find. Based on required compliance with the County LUO, future construction activities would not result in adverse impacts to known or unknown cultural archaeological resources; therefore, impacts would be *less than significant.*

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

The Cultural Resources Survey did not identify any human remains within the project area (CCARC 2022). Although unlikely, in the event of an accidental discovery or recognition of any human

remains, California Health and Safety Code (HSC) Section 7050.5 and County LUO 22.10.040 (Archaeological Resources) require that no further disturbances shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. With adherence to HSC Section 7050.5 and the County LUO, impacts related to the unanticipated disturbance of archaeological resources and human remains would be reduced to less than significant; therefore, potential impacts would be *less than significant.*

Conclusion

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

Mitigation

Mitigation is not necessary.

VI. ENERGY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
(b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Setting

Pacific Gas & Electric Company (PG&E) is the primary electricity provider for urban and rural communities within San Luis Obispo County. PG&E utilizes clean energy sources, including 50% from renewable energy sources and 43% from other GHG-free energy sources (PG&E 2021).

The COSE establishes goals and policies that aim to reduce VMT, conserve water, increase energy efficiency and the use of renewable energy, and reduce GHG emissions. The COSE provides the basis and direction for the development of the County's EnergyWise Plan (EWP), which outlines in greater detail the County's strategy to reduce government and community-wide GHG emissions through a number of goals, measures, and actions, including energy efficiency and development and use of renewable energy resources.

In 2010 the EWP established a goal to reduce community-wide GHG emissions to 15% below 2006 baseline levels by 2020. Two of the six community-wide goals identified to accomplish this were to "[a]ddress future

energy needs through increased conservation and efficiency in all sectors" and "[i]ncrease the production of renewable energy from small-scale and commercial-scale renewable energy installations to account for 10% of local energy use by 2020." In addition, the County has published an EWP 2016 Update to summarize progress towards implementing measures established in the EWP and outline overall trends in energy use and emissions since the baseline year of the EWP inventory (2006).

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC includes mandatory green building standards for residential and non-residential structures, the most recent version of which are referred to as the *2019 Building Energy Efficiency Standards*. These standards focus on four key areas: smart residential PV systems, updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and non-residential ventilation requirements, and non-residential lighting requirements.

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

Discussion

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

The project would require the use of fossil fuels, electricity, and natural gas for construction vehicles and equipment during future construction of new residential and accessory uses. Proposed energy use during construction would be short term and limited in scale and would not result in unnecessary, wasteful, or inefficient energy consumption; therefore, energy consumed during construction would be temporary and would not represent a significant or wasteful demand on available resources.

Implementation of the project would result in the future operation of an additional single-family residence and an ADU or a guesthouse. The project's operational electricity needs would be supplied by PG&E, which utilizes clean energy sources, including 50% from renewable energy sources and 43% from other GHG-free energy sources (PG&E 2021). Additionally, natural gas service would be provided by Southern California Gas Company (SoCalGas), which has committed to replacing 20% of its traditional natural gas supply with renewable natural gas by 2030 (Sempra Energy 2019). By using electricity from PG&E and natural gas from SoCalGas, future residential uses would reduce the long-term use of non-renewable energy resources.

Future building design would be required to adhere to Title 24 of the California Energy Code (CEC) and the most recent CBC Building Energy Efficiency Standards to further reduce operational energy use through implementation of green building and energy-efficient building design features. Based on the use of clean energy sources and required compliance with the CEC and CBC, future operation of the residential uses facilitated by the proposed General Plan and LUO Amendment would not

result in potentially significant environmental impacts due to wasteful or otherwise inefficient use of energy resources during operation. Therefore, the project would not result in unnecessary, wasteful, or inefficient energy use during project construction or operation, and impacts would be *less than significant.*

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

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

In order to be compliant with the COSE and EWP, the project would be required to reduce GHG emissions where feasible in energy consumption. Future residential uses would be provided electricity by PG&E, which sources energy from clean energy resources, including 50% renewable energy sources and 43% GHG-free energy sources (PG&E 2021). By utilizing PG&E for electricity, 93% of the project's electricity demand would be sourced from renewable or GHG-free energy sources, which is consistent with the COSE and EWP. Further, Future residential uses would be required to comply with Title 24 of the CEC and the most recent CBC Building Energy Efficiency Standards to ensure compliance with energy-efficient building design to reduce operational energy use.

The project site is located within the Renewable Energy Overlay (RE) combining designation. The project does not include the construction of SEFs or other renewable energy facilities that would be applicable to permit streamlining or development standards included in County LUO Section 22.14.100. The RE combining designation does not include development standards that would limit development within this designation to only renewable energy facilities, but rather identifies areas within the county where renewable energy production may be favorable. There is an existing ground-mounted 5.76 kW solar PV system and a roof-mounted 3.64 kW solar PV system on the existing workshop, which would remain on-site.

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

Conclusion

The project would not result in a significant energy demand during short-term construction or long-term operations and would not conflict with state or local renewable energy or energy efficiency plans. Therefore, potential impacts related to energy would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

VII. GEOLOGY AND SOILS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
	(ii) Strong seismic ground shaking?	☐	☐	☒	☐
	(iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
	(iv) Landslides?	☐	☐	☒	☐
(b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
(c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
(d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Setting

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) is a California state law that was developed to regulate development near active faults and mitigate the surface fault rupture potential and other hazards. The Alquist-Priolo Act identifies active earthquake fault zones and restricts the construction of habitable structures over known active or potentially active faults. San Luis Obispo County is located in a geologically complex and seismically active region. The *County of San Luis Obispo General Plan Safety Element* identifies three active faults that traverse through the county and that are currently zoned under the Alquist-Priolo Act: the San Andreas, the Hosgri-San Simeon, and the Los Osos. The San Andreas Fault zone is located along the eastern border of San Luis Obispo County and has a length of over 600 miles. The Hosgri-San Simeon Fault system generally consists of two fault zones: the Hosgri Fault zone, which is mapped off the San Luis Obispo County coast, and the San Simeon Fault zone, which appears to be associated with the Hosgri and comes onshore near San Simeon Point. Lastly, the Los Osos Fault zone has been mapped generally in an east/west orientation along the northern flank of the Irish Hills. The nearest active fault is the Los Osos Fault, located approximately 1.5 miles northeast of the project site (CDOC 2015). The Safety Element also identifies 17 other faults that are considered potentially active or have uncertain fault activity in the county. The Safety Element establishes policies that require new development be located away from active and potentially active faults. The Safety Element also requires that the County enforce applicable building codes relating to seismic design of structures and require design professionals to evaluate the potential for liquefaction or seismic settlement to impact structures in accordance with the Uniform Building Code. Other nearby faults include the San Miguelito Fault, approximately 1.2 miles southwest of the project site, and the Edna Fault, approximately 1.5 miles north of the project site.

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

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

Landslides and slope instability can occur as a result of wet weather, weak soils, improper grading, improper drainage, steep slopes, adverse geologic structure, earthquakes, or a combination of these factors. Despite current codes and policies that discourage development in areas of known landslide activity or high risk of landslide, there is a considerable amount of development that is impacted by landslide activity in the County

each year. The Safety Element identifies several policies to reduce risk from landslides and slope instability. These policies include the requirement for slope stability evaluations for development in areas of moderate or high landslide risk, and restrictions on new development in areas of known landslide activity unless development plans indicate that the hazard can be reduced to a less-than-significant level prior to beginning development. According to the Safety Element Maps, the project site is primarily located in an area with low potential for landslide, with the exception of the area along the southeastern property boundary, which has a moderate potential for landslide.

Shrink/swell potential is the extent to which the soil shrinks as it dries out or swells when it gets wet. Extent of shrinking and swelling is influenced by the amount and kind of clay in the soil. Shrinking and swelling of soils can cause damage to building foundations, roads, and other structures. A high shrink/swell potential indicates a hazard to maintenance of structures built in, on, or with material having this rating. Moderate and low ratings lessen the hazard accordingly. Soils at the project site consist of clay materials and would have some potential for expansion to occur.

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

Paleontological resources are fossilized remains of ancient environments, including fossilized bone, shell, and plant parts; impressions of plant, insect, or animal parts preserved in stone; and preserved tracks of insects and animals. Paleontological resources are considered nonrenewable resources under federal and state law. Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils, as determined by rock type, past history of the rock unit in producing fossil materials, and fossil sites that have been recorded in the unit. Paleontological resources are generally found below ground surface in sedimentary rock units. The boundaries of the sedimentary rock unit are used to define the limits of paleontological sensitivity in a given region.

In the county, the Coastal Franciscan domain generally lies along the mountains and hills associated with the Santa Lucia Range. Fossils recorded from the Coastal Franciscan formation include trace fossils (preserved tracks or other signs of the behaviors of animals), mollusks, and marine reptiles. Nonmarine or continental deposits are more likely to contain vertebrate fossil sites. Occasionally vertebrate marine fossils such as whale, porpoise, seal, or sea lion can be found in marine rock units such as the Miocene Monterey Formation and the Pliocene Sisquoc Formations known to occur throughout central and southern California. Vertebrate fossils of continental material are usually rare, sporadic, and localized. The project site is underlain by surficial sediments (Qa) from the Holocene era (U.S. Geological Survey [USGS] 2006).

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

Discussion

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

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

The nearest active fault is the Los Osos fault located approximately 1.5 miles northeast of the project site (CDOC 2015). The project site is not underlain by an Alquist-Priolo fault zone; therefore, rupture of a known Alquist-Priolo fault would not occur under the project site, and *no impacts* would occur.

(a-ii) Strong seismic ground shaking?

San Luis Obispo County is located in a seismically active region and there is always a potential for seismic ground shaking. The nearest active fault is the Los Osos Fault located approximately 1.5 miles northeast of the project site. Other nearby faults include the San Miguelito Fault approximately 1.2 miles southwest of the project site and the Edna Fault approximately 1.5 miles north of the project site (CDOC 2015). Future residential development and associated structures would be required to comply with seismic design criteria included in the most recent CBC and other applicable engineering and design standards to ensure the effects of a potential seismic event would be minimized through compliance with current engineering practices and techniques. The project does not include unique components that would be particularly sensitive to seismic ground shaking or result in an increased risk of injury or damage as a result of ground shaking. Implementation of the project would not expose people or structures to significant increased risks associated with seismic ground shaking; therefore, impacts would be *less than significant.*

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

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

(a-iv) Landslides?

According to the Safety Element Maps, the project site is primarily located in an area with low potential for landslide, with the exception of the area along the southeastern property boundary, which has a moderate potential for landslide. The project site is located on relatively flat land and future development would not require extensive cut and fill activity or deep cuts into hilly areas, which further reduces the risk for landslides to occur. Further, future residences and occupiable structures would be constructed in accordance with the most recent CBC to adequately withstand and minimize risk associated with landslides. Based on existing site conditions and required compliance with the CBC, new development would not result in the risk of loss, injury, or death associated with landslides; therefore, impacts would be *less than significant.*

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

Specific construction and grading plans are currently not known; however, future development of additional residential land uses would be expected to require some level of ground disturbance (e.g., grading, excavation, vegetation removal). Future ground disturbance has the potential to increase erosion and loss of topsoil at the project site that could runoff into the San Luis Obispo Creek, the unnamed ephemeral drainage, and surrounding areas. Preparation and approval of an Erosion and Sedimentation Control Plan is required for all construction and grading projects (County LUO Section 22.52.120) to minimize potential impacts related to erosion, sedimentation, and siltation. The plan would be prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. In the event more than 1 acre of ground disturbance would be required for future development of additional residential land uses, the project would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) with BMPs in accordance with the RWQCB General Construction Permit requirements to reduce the potential for erosion and other pollutant release from the project site. Further, as identified in Section IV, *Biological Resources*, implementation of Mitigation Measure BIO-8 would further reduce potential impacts related to an increase in erosion during future construction activities. Based on required compliance with existing County and RWQCB regulations, implementation of the project would not result in a substantial increase in erosion or loss of topsoil; therefore, impacts would be *less than significant.*

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

As previously described, the project site is located in an area with low potential for landslide and moderate potential for liquefaction to occur. Additionally, the project site is not located in an area with known land subsidence (USGS 2022). Future residences and occupiable structures would be required to be constructed in accordance with the most recent CBC to adequately withstand and minimize risk associated with potential ground-failure events; therefore, potential impacts related to ground failure would be *less than significant*.

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

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

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

The proposed project does not include the installation of new septic tanks or other on-site wastewater disposal systems; therefore, *no impacts would occur.*

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

Specific construction and grading plans are currently not known; however, future development of additional residential land uses would be expected to require some level of ground disturbance. The project site is underlain by surficial sediments (Qa) from the Holocene era (USGS 2006). Significant paleontological resources are unlikely to occur at the project site due to the relatively young age of the underlying geologic unit. In addition, no known paleontological resources are known to exist in the project area, and the project site does not contain any unique geologic features. Therefore, implementation of the project would not disturb paleontological resources or unique geologic features potential, and impacts would be *less than significant.*

Conclusion

The project site is not within the GSA combining designation or an area of high risk of landslide, liquefaction, subsidence, or other unstable geologic conditions. Future development would be required to comply with the most recent CBC, standard engineering practices, and standard County LUO requirements to properly safeguard against seismic and geologic hazards. Based on required compliance with existing County and RWQCB regulations, implementation of the project would not result in a substantial increase in erosion or loss of topsoil. Therefore, potential impacts related to geology and soils would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

VIII. GREENHOUSE GAS EMISSIONS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
(b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Setting

GHGs are any gases that absorb infrared radiation in the atmosphere, and are different from the criteria pollutants discussed in Section III, *Air Quality*, above. The primary GHGs that are emitted into the atmosphere as a result of human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. These are most commonly emitted through the burning of fossil fuels (oil, natural gas, and coal), agricultural practices, decay of organic waste in landfills, and a variety of other chemical reactions and industrial processes (e.g., the manufacturing of cement). Carbon dioxide is the most abundant GHG and

is estimated to represent approximately 80% to 90% of the principal GHGs that are currently affecting the earth's climate. According to the CARB, transportation (vehicle exhaust) and electricity generation are the main sources of GHGs in the state.

The CARB *Draft 2022 Scoping Plan Update*, dated May 10, 2022, identifies a plan to reach carbon neutrality by 2045 or earlier. The Draft 2022 Scoping Plan is the first plan that adds carbon neutrality as a science-based guide beyond established emission reduction targets. It identifies a feasible path to achieve carbon neutrality by 2045, or earlier, while also assessing the progress the state is making towards reducing its GHG emissions by at least 40% below 1990 levels by 2030, as called for in Senate Bill (SB) 32 and laid out in the 2017 Scoping Plan. Specifically, this plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40% below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 or earlier.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as a driving principle throughout the document.
- Incorporates the contribution of natural and working lands to the state's GHG emissions, as well as its role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration as well a direct air capture.
- Evaluates multiple options for achieving our GHG and carbon neutrality targets, as well as the public health benefits and economic impacts associated with each.

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

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

The initial Scoping Plan was first approved by the CARB on December 11, 2008, and is updated every 5 years. The first update of the Scoping Plan was approved by the CARB on May 22, 2014, which looked past 2020 to set mid-term goals (2030–2035) toward reaching the 2050 goals. The most recent update released by the CARB is the 2017 Climate Change Scoping Plan, which was released in November 2017. The 2017 Climate Change Scoping Plan incorporates strategies for achieving the 2030 GHG-reduction target established in SB 32 and EO S-3-05.

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

impact. Projects that have GHG emissions above the noted thresholds may be considered cumulatively considerable and require mitigation.

In March 2012, the SLOAPCD approved thresholds for GHG impacts, which were incorporated into their 2012 *CEQA Air Quality Handbook*. The handbook recommended applying a 1,150 metric tons of CO_2 equivalent ($MTCO_2e$) per year Bright Line Threshold for commercial and residential projects and included a list of general land uses and estimated sizes or capacities of uses expected to exceed this threshold. According to the SLOAPCD, this threshold was based on a "gap analysis" and was used for CEQA compliance evaluations to demonstrate consistency with the state's GHG emission reduction goals associated with Assembly Bill (AB) 32 and the 2008 Climate Change Scoping Plan, which have a target year of 2020. However, in 2015, the California Supreme Court issued an opinion in the case of *Center for Biological Diversity vs California Department of Fish and Wildlife* ("Newhall Ranch") that determined that AB 32-based thresholds derived from a gap analysis are invalid for projects with a planning horizon beyond 2020. Since the bright-line and service population GHG thresholds in the handbook are AB 32-based, and project horizons are now beyond 2020, the SLOAPCD no longer recommends the use of these thresholds in CEQA evaluations. Instead, the following threshold options are recommended for consideration by the lead agency:

- **No-net Increase:** The 2017 Scoping Plan states that no-net increase in GHG emissions relative to baseline conditions "is an appropriate overall objective for new development" consistent with the Court's direction provided by the Newhall Ranch case. Although a desirable goal, the application of this threshold may not be appropriate for a small project where it can be clearly shown that it will not generate significant GHG emissions (i.e., de minimus: too trivial or minor to merit consideration).
- **Carbon Neutrality:** The Draft 2022 Scoping Plan Update identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40% below 1990 emissions by 2030. Multiple legal tools are open to local jurisdictions to support this approach, including a climate action plan, sustainability plan, or inclusion of a plan for reduction of GHG emissions and climate actions within a jurisdiction's general plan. Any of these can help align zoning, permitting, and other local tools with climate action.
- **Lead Agency Adopted Defensible GHG CEQA Thresholds:** Under this approach, a lead agency may establish SB 32-based local operational thresholds. As discussed above, SB 32 requires the state to reduce GHG levels by 40 below 1990 levels by the year 2030. According to the California Greenhouse Gas Emissions for 2000 to 2017, Trends of Emissions and Other Indicators published by the CARB, emissions of GHGs statewide in 2017 were 424 million $MTCO_2e$, which was 7 million $MTCO_2e$ below the 2020 GHG target of 431 million $MTCO_2e$ established by AB 32. Therefore, application of the 1,150 $MTCO_2e$ Bright Line Threshold in San Luis Obispo County, together with other statewide and local efforts to reduce GHG emissions, proved to be an effective approach for achieving the reduction targets set forth by AB 32 for the year 2020. It should be noted that the 1,150 $MTCO_2e$ per year Bright Line Threshold was based on the assumption that a project with the potential to emit less than 1,150 $MTCO_2e$ per year would result in impacts that are less than significant and less than cumulatively considerable impacts and would be consistent with state and local GHG reduction goals.

Because SB 32 requires the state to reduce GHG levels by 40% below 1990 levels by the year 2030, the application of an interim "bright line" SB 32-based working threshold that is 40% below the 1,150 $MTCO_2e$ Bright Line threshold (1,150 x 0.6 = 690 $MTCO_2e$) would be expected to produce comparable GHG reductions "in the spirit of" the targets established by SB 32. Therefore, for the purpose of evaluating the significance of GHG emissions for a project after 2020, GHG emissions estimated to be less than

690 $MTCO_2e$ per year are considered *de minimis* (too trivial or minor to merit consideration) and would have a less-than-significant impact that is less than cumulatively considerable and consistent with state and local GHG reduction goals. This threshold is herein referred to as the County's interim GHG threshold.

Discussion

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

During construction, fossil fuels and natural gas would be used by construction equipment and worker vehicles, which would result in a short-term increase in GHG emissions. Project GHG emissions generated during construction were estimated using CalEEMod version 2020. Based on the results of the CalEEMod calculations, total project construction emissions are estimated to be approximately 121 $MTCO_2e$ (see Appendix B). Amortized over the estimated 30-year lifespan of the project, the project's annual construction GHG emissions would be 4.03 $MTCO_2e$ per year.

Operational GHG emissions would primarily be generated by vehicle trips (mobile sources) and residential energy use, with smaller amounts generated by area uses (such as landscaping equipment exhaust, paint fumes, etc.), water use, and solid waste. Operational GHG emissions generated by the project were estimated using CalEEMod and are summarized with amortized construction emissions in Table 6 (see Appendix B).

Table 6. Estimated Annual Project GHG Emissions

Source	$MTCO_2e$ per year
Area	0.05
Energy	5.38
Mobile	16.9
Waste	0.13
Water	0.25
Amortized construction emissions	4.03
Total	**26.74**

The project would result in approximately 26.74 $MTCO_2e$ per year. The project's annual GHG emissions would not exceed the County's interim GHG threshold of 690 $MTCO_2e$ per year and would therefore not generate GHG that would have a significant impact on the environment, and potential impacts would be *less than significant*.

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

As described under Impact Discussion VIII(a), the project would result in a small quantity of annual GHG emissions over the life of the project and would not exceed the County's interim GHG emissions significance threshold, which was calculated to be consistent with the statewide GHG reduction goals identified in SB 32. Residential development associated with the project would also be required to be constructed in accordance with Title 24 of the CEC and CBC 2019 Building Energy Efficiency Standards to reduce operational energy use, which would minimize operational GHG

emissions from building energy use. Overall project consistency with the EWP and the Regional Transportation Plan/Sustainable Communities' Strategy (RTP/SCS) prepared by the San Luis Obispo Council of Governments (SLOCOG) is evaluated below.

EnergyWise Plan Consistency

As discussed in Section VI. *Energy*, above, the EWP, adopted in 2011, serves as the County's GHG reduction strategy. The GHG-reducing policy provisions contained in the EWP were prepared for the purpose of complying with the requirements of AB 32 and achieving the goals of the AB 32 Scoping Plan, which have a horizon year of 2020. While the horizon year for the EWP goals has passed, the policies within the EWP are generally still useful in evaluating a project's consistency with the County's GHG reduction strategies.

The GHG reduction measures contained in the EWP are generally programmatic and intended to be implemented at the community level. Measure No. 7 encourages energy efficient new development and provides incentives for new development to exceed California's Green Building Standards Code (CALGreen) energy efficiency standards. A summary of the project's consistency with the relevant supporting actions identified in Measure No. 7 for promoting energy efficiency in new development is provided in Table 7, below.

Table 7. EnergyWise Plan Measure 7 Consistency Analysis

Supporting Action	Project Consistency
Require the use of energy-efficient equipment in all new development, including but not limited to Energy Star appliances, high-energy efficiency equipment, heat recovery equipment, and building energy management systems.	Specific design features of future residential development are currently not known; however, the project would be required to be consistent with all 2019 CBC Energy Efficiency Standards, CEC, and 2019 Green Building Code standards to ensure new development is energy efficient.
Encourage new projects to provide ample daylight within the structure through the use of lighting shelves, exterior fins, skylights, atriums, courtyards, or other features to enhance natural light penetration.	Specific design features of future residential development are currently not known; however, the project would be required to be constructed in accordance with all 2019 CBC Energy Efficiency Standards, CEC, and 2019 Green Building Code standards to ensure new development is energy efficient.
Minimize the use of dark materials on roofs by requiring roofs to achieve a minimum solar reflectivity index (SRI) of 10 for high-slope roofs and 64 for low-slope roofs (CALGreen 5.1 Planning and Design).	
Minimize heat gain from surface parking lots.	The project does not propose new parking lots.
Use light-colored aggregate in new road construction and repaving projects adjacent to existing cities and in some of the communities north of the Cuesta Grade.	The project site is not located north of the Cuesta Grade.

2019 Regional Transportation Plan/Sustainable Communities Strategy

The 2019 RTP, which was adopted by the SLOCOG Board in June 2019, includes the region's SCS, and outlines how the region will meet or exceed its GHG reduction targets by creating more compact,

walkable, bike-friendly, and transit-oriented communities; preserving important habitat and agricultural areas; and promoting a variety of transportation demand management and system management tools and techniques to maximize the efficiency of the transportation network. The project does not include development of retail, business, or commercial uses that would be open to the public; therefore, land use planning strategies, such as mixed-use development and planning compact communities, are generally not applicable. The project would result in the establishment of activities that are residential in nature and would not result in employment opportunities or a substantial population increase in the project area. However, as discussed in Section XVII, *Transportation*, the project is not expected to exceed existing VMT thresholds during construction or operation, which is consistent with the 2019 RTP.

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

Conclusion

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

Mitigation

Mitigation is not necessary.

IX. HAZARDS AND HAZARDOUS MATERIALS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
(b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

Initial Study – Environmental Checklist

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
(e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
(f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
(g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Setting

The Hazardous Waste and Substances Site (Cortese) List is a planning document used by the state, local agencies, and developers to comply with CEQA requirements related to the disclosure of information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Cortese List. Various state and local government agencies are required to track and document hazardous material release information for the Cortese List. The California Department of Toxic Substance Control (DTSC) maintains the EnviroStor database, which tracks DTSC cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination, such as federal superfund sites, state response sites, voluntary cleanup sites, school cleanup sites, school investigation sites, and military evaluation sites. The SWRCB maintains the GeoTracker database, which contains records for sites that impact, or have the potential to impact, water in California, such as Leaking Underground Storage Tank (LUST) sites, Department of Defense sites, and Cleanup Program Sites. The remaining data regarding facilities or sites identified as meeting the "Cortese List" requirements can be located on the CalEPA website: https://calepa.ca.gov/sitecleanup/corteselist/. Based on a query of the DTSC EnviroStor and SWRCB GeoTracker databases, there are no previously recorded hazardous materials sites located within or adjacent to the project site (DTSC 2022; SWRCB 2022).

The HSC provides regulations pertaining to the abatement of fire-related hazards and requires that local jurisdictions enforce the CBC, which provides standards for fire resistive building and roofing materials and

other fire-related construction methods. The Safety Element provides a Fire Hazard Zones Map that indicates unincorporated areas in the county within moderate, high, and very high fire hazard severity zones (FHSZs). The project site is primarily located within a moderate FHSZ in a State Responsibility Area, with the exception of the northeastern portion of the property, which is located in a very high FHSZ (California Department of Forestry and Fire Protection [CAL FIRE] 2022). For more information about fire-related hazards and risk assessment, see Section XX, *Wildfire*.

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

The project site is not located within an airport review area and the nearest airport is San Luis Obispo County Regional Airport, located approximately 4.4 miles northeast of the project site. The nearest school is Bellevue-Santa Fe Charter School, located approximately 1 mile west of the project site.

Discussion

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

Future construction activities facilitated by the proposed project are anticipated to require limited quantities of hazardous substances (e.g., gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc.). Future use of these materials during construction activities has the potential to result in an accidental spill or release. Construction contractors would be required to comply with applicable federal and state environmental and workplace safety laws for the handling, transport, and storage of hazardous materials, including California Code of Regulations (CCR) Title 22 Division 4.5. Although not necessary to reduce impacts, Mitigation Measure BIO-2 requires the implementation of construction BMPs to further avoid and/or minimize the potential for construction-related spills to occur and runoff into surrounding areas and Mitigation Measure BIO-8 requires the implementation of setbacks to further protect the identified surface water features from accidental spills. Following completion of future construction activities, the project would be limited to residential and accessory uses, which may include the transport, use, or disposal of limited quantities of household cleaners, paints, fuel, fertilizers, or other common potentially hazardous substances, which would be consistent with existing on-site uses. Disposal of household hazardous substances would be subject to the County's Household Hazardous Waste Program and would be properly disposed of at Cold Canyon Landfill. Therefore, potential impacts associated with routine transport, use, or disposal of hazardous materials would be *less than significant.*

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

As evaluated above, implementation of the proposed General Plan and LUO Amendment would not facilitate the handling or use of hazardous materials or volatile substances that would result in a significant risk of upset or accidental release conditions. Future construction activities are anticipated to require use of limited quantities of hazardous substances, including gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc. and construction contractors would be required to comply with construction-related BMPs and applicable federal and state environmental and workplace safety laws and for the handling of hazardous materials, including response and clean-up requirements for any minor spills.

Additional future residential uses facilitated by the proposed project would likely utilize limited quantities of household cleaners, paints, fuel, fertilizers, and other common potentially hazardous substances, which would be consistent with existing on-site uses. Storage, use, and disposal of these materials would be subject to County requirements, including the County's Household Hazardous Waste Program. Based on the limited quantities anticipated to be stored/used on-site and required compliance with County requirements, use of common household chemicals and substances would not result in potentially significant impacts associated with upset or accident conditions.

The project does not require soil disturbance within or adjacent to existing major roadways (i.e., US 101) that could release aerially deposited lead (ADL) if present within the soil. The project site is not located in an area with the potential for NOA to occur; therefore, future ground-disturbing activities would not release NOA. In addition, the reasonable-case development scenario includes the construction of an additional primary residence, construction of an ADU or a guesthouse, and conversion of the mobile home to an ADU and does not include the demolition of existing structures on-site; therefore, implementation of the proposed project would not disturb asbestos-containing material (ACM). Based on required compliance with CCR Title 22 and the County's Household Hazardous Waste Program, the project would not create significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment; therefore, impacts would be *less than significant.*

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

The nearest school is Bellevue-Santa Fe Charter School, located approximately 1 mile west of the project site; therefore, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school and *no impacts would occur.*

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

Based on a query of the DTSC EnviroStor and the SWRCB GeoTracker databases, there are no previously recorded hazardous materials sites located within or adjacent to the project site (DTSC 2022; SWRCB 2022). The project site is not located on or adjacent to a site that is on a list of hazardous materials site pursuant to California Government Code Section 65962.5; therefore, the project would not create a significant hazard to the public or the environment related to disturbance in a hazardous materials site and *no impacts* would occur.

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

The project site is not located within an airport review area and the nearest airport is San Luis Obispo County Regional Airport, located approximately 4.4 miles northeast of the project site; therefore, *no impacts would occur.*

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

The project site is accessed via an existing driveway from Monte Road from the northeast. Future construction activities are not anticipated to require any long-term road closures or traffic controls that could result in permanent impacts to traffic circulation in the area. The specific future development plan is currently not known; however, if construction of additional access or other roadways is required, the project would be required to comply with County Public Works Department and CAL FIRE standards to ensure adequate emergency vehicle and other access to and from the site. In addition, implementation of the proposed General Plan and LUO Amendment would result in a very limited increase in population and vehicle trips and would not increase traffic congestion and otherwise impede vehicle circulation within the area. Based on required compliance with County and CAL FIRE requirements and limited growth, implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; therefore, impacts would be *less than significant*.

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

The project site is primarily located within a moderate FHSZ in a State Responsibility Area, with the exception of the northeastern portion of the property, which is located in a very high FHSZ (CAL FIRE 2022). The reasonable-case development scenario includes the construction of an additional primary residence, construction of an ADU or a guesthouse, and conversion of the mobile home to an ADU. Future development would be required to be designed and constructed in accordance with California Fire Code (CFC) requirements to reduce risk associated with wildfire at the site. In addition, future development would be subject to CAL FIRE review and approval and would be required to implement recommendations identified by CAL FIRE to reduce wildfire risk at the project site. Based on required compliance with CAL FIRE recommendations, impacts related to wildfires would be *less than significant*.

Conclusion

Based on required compliance with state and local regulations, the project would not result in significant hazards related to the routine transport, use, or disposal of hazardous materials. The project is not located within 0.25 mile of a school, within close proximity of an airport, or within or adjacent to a previously recorded hazardous materials site. Based on required compliance with County Public Works Department, CAL FIRE/County Fire, and CFC standards and regulations, the project would not result in risk associated with inadequate emergency access or wildfire. Therefore, potential impacts related to hazards and hazardous materials would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

X. HYDROLOGY AND WATER QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
(b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
(c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	(i) Result in substantial erosion or siltation on- or off-site;	☐	☒	☐	☐
	(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
	(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
	(iv) Impede or redirect flood flows?	☐	☐	☒	☐
(d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☒	☐	☐
(e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

Setting

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

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

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

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

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

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

For planning purposes, the flood event most often used to delineate areas subject to flooding is the 100-year flood. The Safety Element establishes policies to reduce flood hazards and reduce flood damage, including, but not limited to, prohibition of development in areas of high flood hazard potential, discouragement of single road access into remote areas that could be closed during floods, and review of plans for construction in low-lying areas. All development located in a 100-year flood zone is subject to Federal Emergency Management Act (FEMA) regulations. The County LUO designates a Flood Hazard (FH) combining designation for areas of the county that could be subject to inundation by a 100-year flood or within coastal high hazard areas. Development projects within this combining designation are subject to FH permit and processing requirements, including, but not limited to, the preparation of a drainage plan, implementation of additional construction standards, and additional materials storage and processing requirements for substances that could be injurious to human, animal, or plant life in the event of flooding. The project site is located within an FH combining designation (Figure 4). According to FEMA Flood Insurance Rate Map (FIRM) 06079C1329H (effective date 5/16/2017), the majority of the western portion of the subject parcel is located with Zone A, an area with a 1%-annual-chance flood event (i.e., a 100-year flood zone).

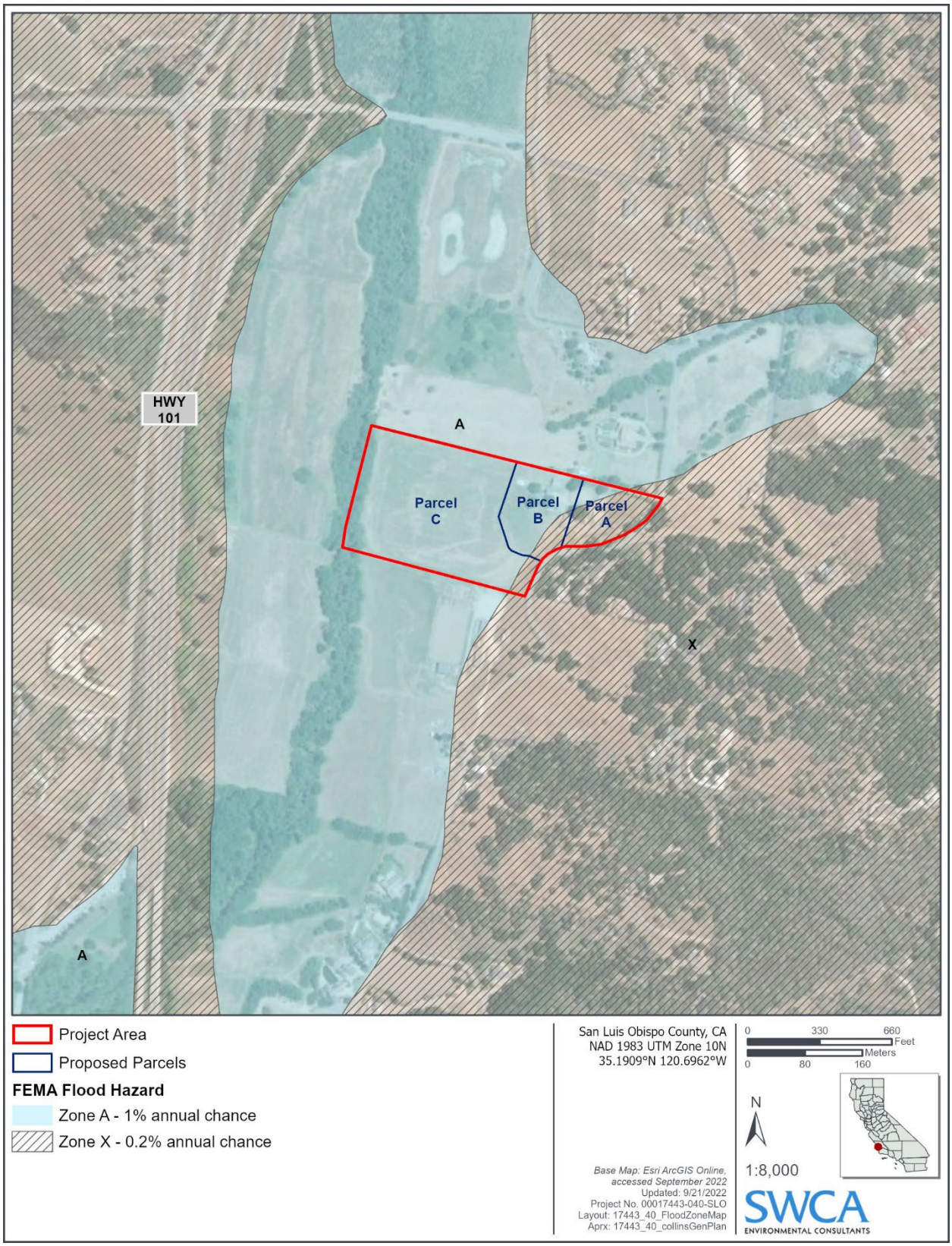

Figure 4. FEMA flood zone map.

There are two surface water features located within the project area, including a portion of San Luis Obispo Creek located adjacent to the western property boundary and an unnamed ephemeral drainage located within the eastern portion of the project area. San Luis Obispo Creek is located outside of the project property; however, the unnamed ephemeral drainage enters the project area from a culvert in the northeastern portion of the property and flows within the eastern and southern portion where it meets San Luis Obispo Creek.

Discussion

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

A portion of San Luis Obispo Creek is located adjacent to the western property boundary and an unnamed ephemeral drainage is located within the eastern portion of the project area. Future development of additional residential and accessory uses would require the use of construction vehicles and equipment and would result in ground disturbance, which could increase erosion and other pollutants at the site that could runoff into the identified surface water features and surrounding areas. Mitigation Measure BIO-2 requires the implementation of construction BMPs to avoid and/or minimize the potential for construction-related spills to occur and Mitigation Measure BIO-8 requires the implementation of setbacks and erosion control BMPs to further protect the identified surface water features from construction-related pollutants. Further, preparation and approval of an Erosion and Sedimentation Control Plan is required for all construction and grading projects (County LUO Section 22.52.120) to minimize potential impacts related to erosion, sedimentation, and siltation. The plan would be prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. In the event more than 1 acre of ground disturbance would be required for future development of additional residential land uses, the project would be required to prepare and implement a SWPPP with BMPs in accordance with the RWQCB General Construction Permit requirements to reduce the potential for erosion and other pollutant release from the project site. Based on implementation of Mitigation Measures BIO-2 and BIO-8 and required compliance with existing County and RWQCB regulations, implementation of the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; therefore, impacts would be *less than significant with mitigation.*

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

The project site is not located within a high-priority basin. There is an existing well on the property that is shared between the two existing residences on-site, which has a pump depth of 94 feet and pumps between 10 and 25 gallons per minute (gpm) (Farm Supply Company 2022). Implementation of the proposed project would result in the future operation of an additional primary residence and an ADU or a guesthouse and would not substantially increase water demand on-site in a manner that could substantially decrease groundwater supplies. Additionally, future development of the site would marginally increase the amount of impervious surface area on the 15.06-acre site; however, the western 10 acres of the property would remain undeveloped and would allow for natural infiltration of surface flows. Further, future construction activities would avoid alteration to San Luis Obispo Creek and the on-site drainage, which would maintain existing groundwater recharge conditions at the site. Based on limited growth and maintenance of open space area,

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

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

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

Specific construction and grading plans are currently not known; however, future development of additional residential land uses would be expected to require some level of ground disturbance as a result of grading, excavation, and/or vegetation removal. Future ground disturbance has the potential to increase erosion at the project site that could runoff into San Luis Obispo Creek and the on-site drainage. Preparation and approval of an Erosion and Sedimentation Control Plan is required for all construction and grading projects (County LUO Section 22.52.120) to minimize potential impacts related to erosion, sedimentation, and siltation. The plan would be prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. In the event more than 1 acre of ground disturbance would be required for future development of additional residential land uses, the project would be required to prepare and implement a SWPPP with BMPs in accordance with the RWQCB General Construction Permit requirements to reduce the potential for erosion and other pollutant release from the project site. Further, future construction of additional residential uses would be sited within the northeastern portion of the property and would not result in disturbance to San Luis Obispo Creek or the on-site drainage. As identified in Section IV, *Biological Resources*, implementation of Mitigation Measure BIO-8 would further reduce the potential for erosion to runoff into the identified surface water features. Based on required compliance with existing County and RWQCB regulations, implementation of the project would not result in a substantial increase in erosion or loss of topsoil; therefore, impacts would be *less than significant.*

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

The project site is not located within a Municipal Separate Storm Sewer System (MS4) stormwater area. The reasonable-case development scenario includes the construction of an additional primary residence, construction of an ADU or a guesthouse, and conversion of the mobile home to an ADU, which would increase the amount of impervious surface area onsite. However, the western 10 acres of the property would remain undeveloped and would allow for natural infiltration of surface flows. Future construction activities and development would avoid alteration to San Luis Obispo Creek and the on-site drainage, which would maintain existing drainage conditions at the project site. Based on avoidance of surface water features and maintenance of undeveloped land, implementation of the project would not increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site; therefore, impacts would be *less than significant with mitigation.*

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

As previously evaluated, future development would result in a limited increase in the amount of impervious surface area that could marginally increase runoff from the project site. The project site is not located in an MS4 stormwater management area. As previously evaluated, existing drainage

conditions and open space areas would be maintained on-site; therefore, future development would not substantially increase the rate of surface water flows at the project site. In addition, in accordance with County LUO Section 22.52.120, future construction activities would be subject to preparation and approval of an Erosion and Sedimentation Control Plan to minimize the amount of erosion at the site that could runoff and contribute to polluted runoff within stormwater drainage systems. In the event more than 1 acre of ground disturbance would be required for future development of additional residential land uses, the project would be required to prepare and implement a SWPPP with BMPs in accordance with the RWQCB General Construction Permit requirements to reduce the potential for erosion and other pollutant runoff from the project site. Although not required to reduce impacts, Mitigation Measures BIO-2 and BIO-8 requires the implementation of BMPs to further avoid and/or reduce potential impacts related to polluted runoff during future construction activities. Based on required compliance with County LUO Section 22.52.120 and RWQCB requirements, implementation of the project would not contribute runoff water that could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; therefore, impacts would be *less than significant*.

(c-iv) Impede or redirect flood flows?

According to FEMA FIRM 06079C1329H (effective date 5/16/2017), the majority of the western portion of the subject parcel is located within Zone A, an area with a 1%-annual-chance flood event (i.e., a 100-year flood zone). According to a letter from FEMA, the 1%-chance flood elevation is 35.9 feet, whereas the existing farmhouse (residence) has a finished floor elevation of 41.4 feet and the barn has a finished floor elevation of 38.6 feet (FEMA 2011). The project includes preservation of approximately 10 acres of the western portion of the project property for an open space easement, which would limit future development within that area to agricultural accessory structures only. Future development would be clustered on the northeastern portion of the parcel and would either be located outside of the mapped floodplain or would be required to be built above the established flood elevation. Therefore, future development would not impede or redirect potential flood flows on-site. Further, future construction activities and development would avoid alteration to San Luis Obispo Creek and the on-site drainage, which would further ensure future project activities do not interfere with existing drainage patterns on-site in a manner that could impede or redirect flood flows. Therefore, impacts would be *less than significant*.

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

Based on the San Luis Obispo County Tsunami Inundation Maps, the project site is not located in an area with potential for inundation by a tsunami (CDOC 2020). The project site is not located within close proximity to a standing body of water with the potential for a seiche to occur. As evaluated above, the project site is located within a 100-year flood zone and future development would be clustered on the northeastern portion of the parcel and would either be located outside of the mapped floodplain or required to be built above the established flood elevation. Implementation of Mitigation Measures BIO-2 and BIO-8 would require the implementation of BMPs and setbacks during future construction activities to reduce the potential for construction-related erosion and other pollutant release to occur as a result of potential project inundation. In accordance with County LUO Section 22.52.120, future development would be subject to preparation and approval of an Erosion and Sedimentation Control Plan to minimize the amount of short- and long-term erosion at the site that could runoff as a result of potential project inundation. Further, in the event more than 1 acre of ground disturbance would be required for future development of additional

residential land uses, the project would be required to prepare and implement a SWPPP with BMPs in accordance with the RWQCB General Construction Permit requirements to reduce the potential for erosion and other pollutant release from the project site. Since the proposed project would be located outside of or above the 100-year flood zone and implementation of the identified mitigation measures and required compliance with County and RWQCB requirements would reduce the potential for pollutants to be released from the site, implementation of the project would not result in the release of pollutants due to project inundation; therefore, impacts would be *less than significant with mitigation*.

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

The project is not located within a groundwater basin designated as Level of Severity III per the County's Resource Management System or in severe decline by Sustainable Groundwater Management Act (SGMA). The project would not substantially increase water demand, deplete groundwater supplies, or interfere substantially with groundwater recharge. The project site is under the jurisdiction of the Central Coast RWQCB and would be subject to the Basin Plan, which sets water quality objectives and criteria to protect water quality in the Central Coast region (RWQCB 2019). The project would be required to comply with County LUO Section 22.52.120 and RWQCB requirements to reduce the potential for polluted runoff from the site. Further, Mitigation Measures BIO-2 and BIO-8 have been identified to reduce the potential for polluted runoff to enter the on-site drainages or surrounding area. Based on implementation of the identified mitigation and required compliance with RWQCB and County regulations, the project would not conflict with the Basin Plan, the SGMA, or other local or regional plans or policies intended to manage water quality or groundwater supplies; therefore, impacts would be *less than significant with mitigation.*

Conclusion

With implementation of Mitigation Measures BIO-2 and BIO-8 and required compliance with the RWQCB and County LUO, the project would not result in adverse impacts related to water quality, groundwater quality, or stormwater runoff and would not risk release of pollutants due to project inundation as a result of flooding. The project is not within a tsunami or seiche zone. The project would be consistent with the RWQCB Basin Plan. Therefore, with implementation of the identified mitigation, impacts related to hydrology and water quality would be less than significant.

Mitigation

Implement Mitigation Measures BIO-2 and BIO-8.

XI. LAND USE AND PLANNING

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Physically divide an established community?	☐	☐	☐	☒

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(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?	☐	☒	☐	☐

Setting

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

Discussion

(a) Physically divide an established community?

Implementation of the project would result in the future construction of a new primary residence, construction of an ADU or a guesthouse, and the conversion of an existing mobile home to an ADU. The proposed project would be limited to development on an existing parcel and would not result in the removal or blockage of existing public roadways or other circulation paths and would not otherwise include any features that would physically divide an established community; therefore, *no impacts* would occur.

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

The project site is located within the AG land use category in the San Luis Bay Inland Sub Area of the San Luis Obispo planning area. As evaluated throughout this Initial Study, the project would be consistent with the property's land use designation and the guidelines and policies for development within the San Luis Obispo Area Plan, County LUO, and COSE. Further, the project was found to be consistent with standards and policies set forth in the General Plan, the 2001 CAP, and other land use policies for this area. The project would also be required to be consistent with standards set forth by County Fire/CAL FIRE and the County Public Works Department. The project would be required to implement Mitigation Measures AQ-1 and AQ-2 and BIO-1 through BIO-8 to mitigate potential impacts associated with Air Quality, Biological Resources, and Hydrology and Water Quality, which is consistent with the identified plans and policies intended to avoid or mitigate adverse environmental effects. Upon implementation of the identified mitigation, the project would not conflict with other local policies or regulations adopted for the purpose of avoiding or mitigating environmental effects; therefore, impacts would be *less than significant with mitigation*.

Conclusion

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

Mitigation

Implement Mitigation Measures AQ-1 and AQ-2 and BIO-1 through BIO-8.

XII. MINERAL RESOURCES

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

Setting

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

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

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

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

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

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

Discussion

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

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

The project site is not located within the EX or EX1 combining designation and there are no known mineral resources in the project area. The project would not be located on land that is zoned or designated for mineral extraction; therefore, the project would not result in the loss of availability of a known mineral resource or result in the loss of availability of a locally-important mineral resource recovery site, and *no impacts* would occur.

Conclusion

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

Mitigation

Mitigation is not necessary.

XIII. NOISE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

Initial Study – Environmental Checklist

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(b)	Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
(c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Setting

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

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

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

All sound levels referred to in the Noise Element are expressed in A-weighted decibels (dBA). A-weighting deemphasizes the very low and very high frequencies of sound in a manner similar to the human ear. There is an on-site residence and a mobile home located within the northeastern corner of the project parcel and

the project site is surrounded by several off-site residences to the north, east, and south with the nearest off-site residence occurring approximately 90 feet southeast of the project site.

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

Table 8. Maximum allowable exterior noise level standards[1]

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

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

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

Discussion

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

Existing ambient noise levels in the project area are primarily dominated by vehicle traffic along US 101 and Monte Road as well as noise from surrounding agricultural and scattered residential land uses. During project construction, noise from construction activities may intermittently dominate the noise environment in the immediate project area. The project would require the use of typical construction equipment (e.g., dozers, excavators, etc.) during proposed construction activities. According to the Federal Highway Administration (FHWA), noise from standard construction equipment generally range from 80 dBA to 85 dBA at 50 feet from the source, as shown in Table 9.

Table 9. Construction Equipment Noise Emission Levels

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

Source: FHWA (2018)

There is an on-site residence and a mobile home located within the northeastern corner of the project parcel and the project site is surrounded by several off-site residences to the north, east, and south, with the nearest off-site residence occurring approximately 90 feet southeast of the project site. Construction-related noise would be short-term and intermittent and would not result in a permanent increase in ambient noise within the project area. According to County LUO Section 22.10.120.A.4, construction noise is exempt from the County's noise standards between the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on weekends. Proposed construction activities would be limited to the hours specified in the County LUO.

The project would not include the development of new incompatible land uses that would generate noise in excess of surrounding residential land uses or the County's noise standards. Therefore, following development of future residential development, operational noise generated by the project would be consistent with the level and scale of surrounding residential land uses. The project would not generate a substantial increase in temporary or permanent ambient noise levels; therefore, potential impacts would be *less than significant*.

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

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

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

The project site is not located within or adjacent to an airport land use plan or within 2 miles of a public airport or private airstrip; therefore, *no impacts* related to excessive airport-related noise would occur.

Conclusion

Short-term construction activities would be limited in nature and duration and conducted during daytime periods per County LUO standards. No long-term operational noise or ground vibration would occur as a result of the project. Therefore, potential impacts related to noise would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

XIV. POPULATION AND HOUSING

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

Setting

The County's current Housing Element (2020–2028) is intended to facilitate the provision of needed housing in the context of the Land Use Element and related ordinance. It is also intended to meet the requirements of State law. It contains a number of relevant goals, objectives, policies, and implementation programs to ensure the County meets its goals of meeting the housing needs while remaining consistent with State law.

The northeastern portion of the property is currently developed with a single-family residence, a mobile home, a workshop, and two agricultural accessory structures.

Discussion

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

Implementation of the proposed project would amend the land use designation of the project parcel from AG to RR and create a planning area standard to regulate future development on the property. The proposed planning area standard would require any future subdivisions to utilize the cluster subdivision standards set forth in County LUO Section 22.22.140 and would require future development to be limited to the northeastern portion of the parcel, where there is existing development. The reasonable-case development scenario includes the construction of an additional primary residence, construction of an ADU or a guesthouse, and conversion of the mobile home to an ADU. Based on the reasonable-case development scenario and an average of 2.51 persons per household within the county and the assumption that ADUs have approximately 1/3 the household size of a standard dwelling unit, the project has the potential to result in a marginal population increase of approximately four people (U.S. Census Bureau 2021). Therefore, implementation of the proposed project would result in a very limited increase in population and residential density, which would be consistent with surrounding residential uses and the RR category.

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

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

The reasonable-case development scenario includes the construction of an additional primary residence, construction of an ADU or a guesthouse, and conversion of the mobile home to an ADU and does not include the demolition of the existing primary residence or other structures in a manner that would displace any existing housing on-site. Therefore, the project would not displace existing people or housing or necessitate the construction of replacement housing elsewhere, and *no impacts* would occur.

Conclusion

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

Mitigation

Mitigation is not necessary.

XV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

Setting

Fire protection services in unincorporated San Luis Obispo County are provided by CAL FIRE, which has been under contract with the County to provide full-service fire protection since 1930. Approximately 180 full-time state employees operate the County Fire Department, supplemented by as many as 100 state seasonal fire fighters, 300 County paid-call and reserve fire fighters, and 120 state inmate fire fighters. CAL FIRE responds to emergencies and other requests for assistance, plans for and takes action to prevent emergencies and to reduce their impact, coordinates regional emergency response efforts, and provides public education and training in local communities. CAL FIRE has 24 fire stations located throughout the county, and the nearest CAL FIRE station is Avila Valley Station 62, located approximately 1.3 miles west of the project site.

Police protection and emergency services in the unincorporated portions of the county are provided by the San Luis Obispo County Sheriff's Office. The Sheriff's Office Patrol Division responds to calls for service, conducts proactive law enforcement activities, and performs initial investigations of crimes. Patrol personnel are deployed from three stations throughout the county—the Coast Station in Los Osos, the North Station in Templeton, and the South Station in Oceano. The nearest sheriff's station is the South Station, located approximately 7.7 miles southeast of the project site.

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

Within the County's unincorporated areas, there are currently 23 parks, three golf courses, four trails/staging areas, and eight Special Areas that include natural areas, coastal access, and historic facilities currently operated and maintained by the County. The Bob Jones Trailhead is located 0.5 mile southwest of the project site.

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

Discussion

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

Fire protection?

The reasonable-case development scenario includes the construction of an additional primary residence, construction of an ADU or a guesthouse, and conversion of the mobile home to an ADU, which would facilitate a population increase of approximately four people. Based on the limited scale of proposed development and associated population growth, the project would result in a limited increase in demand on fire protection services. The project would be subject to standard Public Facilities Fees to offset the project's demand on existing fire protection services. Based on the limited population increase and payment of Public Facilities Fees, the project would not require or otherwise facilitate the need for additional or expanded fire protection services, and impacts would be *less than significant*.

Police protection?

Implementation of the proposed project has the potential to facilitate the future development of an additional primary residence, development of an ADU or a guesthouse, and conversion of the existing mobile home to an ADU, which would facilitate a population increase of approximately four people. Due to the limited scale of proposed development and associated growth, the project would result in a limited increase in demand on police protection services. The project would be subject to standard Public Facilities Fees to offset the project's demand on existing police protection services. Based on the limited population increase and payment of Public Facilities Fees, the project would not require or otherwise facilitate the need for additional or expanded police protection services; therefore, impacts would be *less than significant*.

Schools?

Implementation of the proposed project would result in the future development of a very limited number of new residential units that may marginally increase the number of school-aged children in the area. Therefore, implementation of the project has the potential to result in a slight increase in demand on the SLCUSD. The project would be required to pay Public Facilities Fees to offset its demand on the SLCUSD. Based on the marginal increase of school-aged children and payment of Public Facilities Fees, the project would not require or otherwise facilitate the need for additional or expanded SLCUSD facilities; therefore, impacts would be *less than significant*.

Parks?

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

Other public facilities?

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

Conclusion

The project does not propose development that would substantially increase demands on public services and would not induce population growth that would substantially increase demands on public services. The project would be subject to payment of development impact fees to reduce the project's negligible contribution to increased demands on public services and facilities. Therefore, potential impacts related to public services would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

XVI. RECREATION

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
(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?	☐	☐	☐	☒

Setting

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

Public facilities fees, Quimby fees, and developer conditions are several ways the County currently funds public parks and recreational facilities. Public facility fees are collected upon construction of new residential units and currently provide funding for new community-serving recreation facilities. Quimby Fees are collected when new residential lots are created and can be used to expand, acquire, rehabilitate, or develop

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

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

Discussion

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

The reasonable-case development scenario includes the construction of an additional primary residence, construction of an ADU or a guesthouse, and conversion of the mobile home to an ADU. Based on the reasonable-case development scenario, an average of 2.51 persons per household within the county, and the assumption that ADUs have approximately 1/3 the household size of a standard dwelling unit, the project has the potential to result in a marginal population increase of approximately four people (U.S. Census Bureau 2021). Therefore, implementation of the proposed project would result in a very limited increase in population and would not result in a substantial increase in demand on existing recreational facilities. Further, the project would be subject to the payment of standard Public Facilities Fees to offset its demand on existing public recreation facilities. Based on the limited population increase and payment of Public Facilities Fees, implementation of the project would not increase the use of existing recreational facilities in a manner that would result in substantial physical deterioration of the facility; therefore, impacts would be *less than significant*.

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

The project does not include the construction of new recreational facilities and would not result in a substantial increase in demand or use of parks and recreational facilities. Implementation of the project would not require the construction or expansion of recreational facilities; therefore, *no impacts would occur.*

Conclusion

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

Mitigation

Mitigation is not necessary.

XVII. TRANSPORTATION

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

Setting

The County Public Works Department maintains updated traffic count data for all County-maintained roadways. In addition, Traffic Circulation Studies have been conducted within several community areas using traffic models to reasonably simulate current traffic flow patterns and forecast future travel demands and traffic flow patterns. These community traffic studies include the South County, Los Osos, Templeton, San Miguel, Avila, and North Coast Circulation Studies. Caltrans maintains annual traffic data on state highways and interchanges within the county. The project site is located off Monte Road, which is a County-maintained roadway.

In 2013 SB 743 was signed into law with the intent to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions" and required the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. As a result, in December 2018, the California Natural Resources Agency certified and adopted updates to the State CEQA Guidelines. The revisions included new requirements related to the implementation of Senate Bill 743 and identified VMT per capita, VMT per employee, and net VMT as new metrics for transportation analysis under CEQA (as detailed in Section 15064.3(b)). Beginning July 1, 2020, the newly adopted VMT criteria for determining significance of transportation impacts must be implemented statewide.

SLOCOG holds several key roles in transportation planning within the county. As the Regional Transportation Planning Agency (RTPA), SLOCOG is responsible for conducting a comprehensive, coordinated transportation program, preparation of an RTP, programming of state funds for transportation projects, and the administration and allocation of transportation development act funds required by state

statutes. As the Metropolitan Planning Organization (MPO), SLOCOG is also responsible for all transportation planning and programming activities required under federal law. This includes development of long-range transportation plans and funding programs, and the approval of transportation projects using federal funds.

The 2019 RTP, adopted June 5, 2019, is a long-term blueprint of San Luis Obispo County's transportation system. The plan identifies and analyzes transportation needs of the region and creates a framework for project priorities. SLOCOG represents and works with the County and the Cities within the county in facilitating the development of the RTP.

The County Public Works Department establishes bicycle paths and lanes in coordination with the RTP, which outlines how the region can establish an extensive bikeway network. County bikeway facilities are funded by state grants, local general funds, and developer contributions. The RTP also establishes goals and recommendations to develop, promote, and invest in the public transit systems, rail systems, air services, harbor improvements, and commodity movements within the county in order to meet the needs of transit-dependent individuals and encourage the increasing use of alternative modes by all travelers that choose public transportation. Local transit systems are presently in operation in the cities of Morro Bay and San Luis Obispo, and South County services are offered to Grover Beach, Arroyo Grande, Pismo Beach, and Oceano. Dial-a-ride systems provide intra-community transit in Morro Bay, Atascadero, and Los Osos. Inter-urban systems operate between the city of San Luis Obispo and South County, Los Osos, and the North Coast.

The County's Framework for Planning (Inland) includes the Land Use and Circulation Elements of the County's General Plan. The Framework establishes goals and strategies to meet pedestrian circulation needs by providing usable and attractive sidewalks, pathways, and trails to establish maximum access and connectivity between land use designations. The project site is located in a rural area, and the nearest Class II bicycle lanes are located approximately 0.3 mile west along Ontario Road and 0.8 mile west along Avila beach Drive. The Bob Jones Trailhead is located 0.5 mile southwest.

Discussion

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

The subject property is located in a rural area and would not be applicable to existing mixed-land use development or pedestrian and bicycle accessibility standards included in the 2019 RTP, 2016 Bikeways Plan, and Circulation Element. The reasonable-case development scenario includes the construction of an additional primary residence, construction of an ADU or a guesthouse, and conversion of the mobile home to an ADU, which would facilitate a population growth of approximately five people. Based on the limited scale of proposed development and associated population growth, the project is not anticipated to generate a substantial number of additional vehicle trips along existing roadways. In addition, the project site is located in the Avila Beach Road Fee Area and would be subject to the payment of applicable fees for the maintenance of other public roadways in the area. Therefore, impacts would be *less than significant*.

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

Based on the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018), projects that do not indicate substantial evidence that a project would generate a potentially significant level

of VMT, that are consistent with an SCS or general plan, or that would generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

The County has developed a VMT Program (*Transportation Impact Analysis Guidelines*; Rincon Consultants, October 2020; *VMT Thresholds Study*; GHD, March 2021). The program provides interim operating thresholds and includes a screening tool for evaluating VMT impacts. The reasonable-case development scenario includes the construction of an additional primary residence, construction of an ADU or a guesthouse, and conversion of the mobile home to an ADU, which would facilitate a population growth of approximately five people. Based on the County VMT Program, the project would be expected to generate a limited increase in vehicle trips that would fall below the suggested screening threshold of 110 trips/day identified in the State guidance; therefore, impacts would be *less than significant*.

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

The specific future development plan is currently not known; however, if construction of additional access or other roadways is required, the project would be required to comply with County Public Works Department requirements to avoid hazardous roadway design. In addition, implementation of the project would facilitate a very limited increase in population and associated vehicle trips and would not otherwise increase roadway hazards due to traffic congestion along existing roadways. Based on required compliance with County requirements and limited growth, implementation of the proposed project would not substantially increase roadway hazards, and impacts would be *less than significant*.

(d) Result in inadequate emergency access?

The project site is accessed via an existing driveway from Monte Road from the northeast. Future construction activities are not anticipated to require any long-term road closures or traffic controls that could impede emergency access in the area. If construction of additional access roads or other roadway improvements is required, the project would be required to comply with County Public Works Department and CAL FIRE/County Fire standards to ensure adequate emergency vehicle access to the site. Based on required compliance with County Public Works Department and CAL FIRE/County Fire requirements, implementation of the proposed project would not result in inadequate emergency access, and impacts would be *less than significant*.

Conclusion

The project would be consistent with the 2019 RTP, 2016 Bikeways Plan, and Circulation Element and would not generate vehicle trips that would exceed existing VMT thresholds. In addition, the project would be consistent with County Public Works Department and CAL FIRE/County Fire standards for site access and driveway design; therefore, impacts related to transportation would be less than significant, and no mitigation measures are necessary.

Mitigation

Mitigation is not necessary.

XVIII. TRIBAL CULTURAL RESOURCES

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

Setting

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

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

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

Discussion

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

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

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

Pursuant to AB 52, the County provided notice to local California native tribes with geographic and/or cultural ties to the project region. Referral letters were sent to tribal representatives on [DATE]. No tribes requested consultation or provided information regarding significant tribal cultural resources to date.

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

Conclusion

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

Mitigation

Mitigation is not necessary.

XIX. UTILITIES AND SERVICE SYSTEMS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
(a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☒	☐	☐
(b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
(c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
(d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
(e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Setting

The County Public Works Department provides water and wastewater services for specific County Service Areas (CSAs) that are managed through issuance of water/wastewater "will serve" letters. The County Public Works Department currently maintains CSAs for the communities of Nipomo, Oak Shores, Cayucos, Avila Beach, Shandon, San Luis Obispo County Club, and Santa Margarita. Other unincorporated areas in the County rely on on-site wells and individual wastewater systems. Regulatory standards and design criteria for on-site wastewater treatment systems are provided by the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (California OWTS Policy).

Per the County's Stormwater Program, the County Public Works Department is responsible for ensuring that new construction sites implement BMPs during construction, and that site plans incorporate appropriate post-construction stormwater runoff controls. Construction sites that disturb 1 acre or more must obtain coverage under the SWRCB's Construction General Permit. PG&E is the primary electricity provider and both PG&E and SoCalGas provide natural gas services for urban and rural communities within San Luis Obispo County. Potable water is provided by an existing on-site well, which produces 25 gpm. Sewage disposal is provided by an on-site septic system.

There are three landfills in San Luis Obispo County: Cold Canyon Landfill, located south of the city of San Luis Obispo; Chicago Grade Landfill, located near the community of Templeton; and Paso Robles Landfill, located east of the city of Paso Robles. The project's solid waste would be hauled off-site to the Cold Canyon Landfill.

Discussion

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

Future development may require the construction of utility infrastructure, which would be installed within the footprint of the proposed project. As evaluated throughout this Initial Study, the project has the potential to result in adverse impacts related to Air Quality, Biological Resources, and Hydrology and Water Quality. Mitigation Measures AQ-1 and AQ-2 and BIO-1 through BIO-8 have been included to avoid and/or minimize adverse impacts to less-than-significant levels. Therefore, upon implementation of the identified mitigation measures, installation of utility infrastructure is not anticipated to result in adverse impacts to the environment; therefore, potential impacts would be *less than significant with mitigation*.

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

The project site is not located within a high-priority basin. There is an existing well on the property that is shared between the two existing residences on-site. Based on a 4-hour pump test conducted for the project, the on-site well has a pump depth of 94 feet and pumps between 10 and 25 gpm (Farm Supply Company 2022). Implementation of the proposed project would result in the future operation of an additional primary residence and an ADU or a guesthouse and would not substantially increase water demand on-site. Based on limited development, the project would have sufficient available water supply; therefore, potential impacts would be *less than significant*.

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

Sewage disposal is provided by an on-site septic system and the project would not require connection to any local wastewater treatment providers; therefore, *no impacts* would occur.

(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?

Future residential development would generate solid waste that would be hauled to Cold Canyon Landfill. According to the California Department of Resources Recycling and Recovery (CalRecycle), Cold Canyon Landfill has a maximum permitted capacity of 23,900,000 cubic yards and maximum capacity of 1,650 tons of solid waste per day. The estimated closure date of Cold Canyon Landfill is December 2040 (CalRecycle 2020).

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

The project would facilitate the development of a new single-family residence and a workshop with an attached ADU. According to the CalRecycle Estimated Solid Waste Generation Rates, future operation of two residential units would result in approximately 24.46 pounds of solid waste per day (CalRecycle 2019). Proposed solid waste calculations are shown in Table 10.

Table 10.Estimated Solid Waste Generation Rates

Waste Generation Source	Generation Rate	Unit of Measure	Proposed Development	Total
Residential	12.23	pounds/household/day	2 residential units	24.46 pounds
			Total	**24.46 pounds**

Source: CalRecycle Estimated Solid Waste Generation Rates (2019)

Implementation of the project would result in a long-term increase in operational solid waste generation. In addition, the project would be required to comply with County-implemented recycling and organic waste disposal programs during operation, which would reduce the amount of solid waste taken to Cold Canyon Landfill. Cold Canyon Landfill would have adequate available capacity to support the increase of solid waste; therefore, impacts would be *less than significant*.

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

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

Conclusion

Future development may require the expansion and installation of utility infrastructure to support proposed development. Implementation of Mitigation Measures AQ-1 and AQ-2 and BIO-1 through BIO-8 would

reduce potential adverse environmental impacts to less-than-significant levels. The on-site well would have adequate capacity to serve future development and the project does not require connection to a local wastewater provider. The project would not generate solid waste in exceedance of state or County regulations. Therefore, upon implementation of the identified mitigation measures, potential impacts would be less than significant.

Mitigation

Implement Mitigation Measure AQ-1 and AQ-2 and BIO-1 through BIO-8.

XX. WILDFIRE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
(b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
(c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
(d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Setting

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

CAL FIRE Hazard Severity Zones

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

County Emergency Operations Plan

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

- Identifies the departments and agencies designated to perform response and recovery activities and specifies tasks they must accomplish;
- Outlines the integration of assistance that is available to local jurisdictions during disaster situations that generate emergency response and recovery needs beyond what the local jurisdiction can satisfy;
- Specifies the direction, control, and communications procedures and systems that will be relied on to alert, notify, recall, and dispatch emergency response personnel; alert the public; protect residents and property; and request aid/support from other jurisdictions and/or the federal government;
- Identifies key continuity of government operations; and
- Describes the overall logistical support process for planned operations.

County Safety Element

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

California Fire Code

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

Discussion

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

The project site is located in a moderate and very high FHSZ and is accessed via an existing driveway from Monte Road from the northeast. Future construction activities are not expected to require any long-term road closures or traffic controls that could result in permanent impacts to traffic circulation in the area. The specific future development plan is currently not known; however, if construction of additional access or other roadways is required, future development would be required to comply with County Public Works Department and CAL FIRE/County Fire standards to ensure adequate emergency vehicle and other access to and from the site. In addition, future development would result in a very limited increase in population and associated vehicle trips and would not increase traffic congestion and otherwise impede circulation within the area. Based on required compliance with County Public Works Department and CAL FIRE/County Fire requirements and limited growth, implementation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; therefore, impacts would be *less than significant*.

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

The 15.06-acre project property is located in a moderate and very high FHSZ and is characterized by nearly level topography. The northeastern portion of the property is currently developed with a single-family residence, a mobile home, a workshop, and two agricultural accessory structures and the remaining portions of the property are undeveloped and support agricultural row crops and grassland habitat. Implementation of the project would result in the future development of a new primary residence and an ADU or a guesthouse, which would be required to be constructed in accordance with the most recent CFC and CBC requirements to reduce risk associated with wildfire ignition. In addition, the project would be required to implement design recommendations identified by CAL FIRE/County Fire to ensure adequate ability to provide fire protection services to the proposed project. Based on required compliance with CFC, CBC, and CAL FIRE/County Fire requirements, the project is not anticipated to significantly exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; therefore, impacts would be *less than significant*.

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

The project site is located within a moderate and very high FHSZ (CAL FIRE 2022). The specific future development plan is currently not known; however, if construction of additional access roadways and/or utility infrastructure is required, the project would be required to comply with County Public Works Department and CAL FIRE/County Fire standards to reduce the risk of accidental wildfire ignition at the project site. Based on required compliance with applicable CAL FIRE/County Fire and County Public Works Department requirements, proposed utility expansions and installation of a new driveway would not exacerbate wildfire risk at the site; therefore, potential impacts would be *less than significant*.

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

The project site is located in a moderate and very high FHSZ within a State Responsibility Area and would be sited in an area with low to moderate potential for landslide and high potential for flooding to occur. As such, there is potential for post-fire ground failure and/or downhill flooding to occur. Future buildings and occupiable structures would be constructed in accordance with CBC, CFC, and County LUO regulations to reduce risk associated with wildfire and post-wildfire events. Based on required compliance with CFC, CBC, and County LUO requirements, future development would not increase the potential for post-fire risks to occur; therefore, impacts would be *less than significant*.

Conclusion

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

Mitigation

Mitigation is not necessary.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
(c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

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

Based on the analysis provided in individual resource sections above, the project has the potential to disturb sensitive biological resources and unknown cultural and/or tribal cultural resources. Mitigation Measures BIO-1 through BIO-8 have been identified and would reduce potential impacts related to sensitive biological resources to less than significant. Additionally, adherence to County LUO Section 22.10.040 and HSC Section 7050.5 would reduce impacts to unknown cultural and/or tribal cultural resources if present within the project area. Therefore, potential impacts would be *less than significant with mitigation*.

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

Based on the nature of proposed development and the analysis provided in resource sections above, the project would have the potential to result in environmental impacts associated with air quality, biological resources, geology and soils, hazards and hazardous materials, and hydrology and water quality that could have a cumulative effect with other development projects in the project region. Mitigation Measures AQ-1 and AQ-2 and BIO-1 through BIO-78 have been identified to reduce potential environmental impacts associated with the project to a less-than-significant level. Other past and future development projects requiring a discretionary permit in the project region would also be subject to applicable mitigation measures to reduce potential impacts associated with these impact issue areas. Therefore, based on the implementation of project-level mitigation

measures and discretionary review and CEQA review of other projects within the project area, potential impacts would be *less than cumulatively considerable with mitigation*.

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

Based on the nature and scale of proposed development and the analysis provided in individual resource areas sections above, the project has the potential to have environmental effects that could result in substantial adverse effects on human beings. Potential impacts associated with air quality and hazards and hazardous materials would be reduced to less-than-significant levels with the implementation of Mitigation Measures AQ-1 and AQ-2 and BIO-2 and BIO-8. Therefore, potential impacts associated with environmental effects that would cause substantial adverse effects on human beings would be *less than significant with mitigation*.

Conclusion

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

Mitigation

Implement Mitigation Measures AQ-1 and AQ-2 and BIO-1 through BIO-8.

Exhibit A - Initial Study References and Agency Contacts

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

Contacted	Agency	Response
☒	County Public Works Department	**In File****
☒	County Environmental Health Services	**In File****
☒	County Agricultural Commissioner's Office	**None**
☐	County Airport Manager	**Not Applicable**
☐	Airport Land Use Commission	**Not Applicable**
☒	Air Pollution Control District	**In File****
☐	County Sheriff's Department	**Not Applicable**
☐	Regional Water Quality Control Board	**Not Applicable**
☐	CA Coastal Commission	**Not Applicable**
☒	CA Department of Fish and Wildlife	**In File****
☒	CA Department of Forestry (Cal Fire)	**None**
☐	CA Department of Transportation	**Not Applicable**
☐	Community Services District	**Not Applicable**
☒	Other AB 52/SB 18 Tribal Consultation	**None**
☒	Other County Parks and Recreation Department	**In File****

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

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

- ☒ Project File for the Subject Application

County Documents

- ☐ Coastal Plan Policies
- ☒ Framework for Planning (Coastal/Inland)
- ☒ General Plan (Inland/Coastal), includes all maps/elements; more pertinent elements:
  - ☒ Agriculture Element
  - ☒ Conservation & Open Space Element
  - ☐ Economic Element
  - ☒ Housing Element
  - ☒ Noise Element
  - ☒ Parks & Recreation Element/Project List
  - ☒ Safety Element
- ☒ Land Use Ordinance (Inland/Coastal)
- ☐ Building and Construction Ordinance
- ☒ Public Facilities Fee Ordinance
- ☐ Real Property Division Ordinance
- ☐ Affordable Housing Fund
- ☐ Airport Land Use Plan
- ☒ Energy Wise Plan
- ☒ SLO Area Plan/San Luis Bay Inland SA
- ☐ Design Plan
- ☐ Specific Plan
- ☐ Annual Resource Summary Report
- ☐ Circulation Study

Other Documents

- ☒ Clean Air Plan/APCD Handbook
- ☒ Regional Transportation Plan
- ☒ Uniform Fire Code
- ☒ Water Quality Control Plan (Central Coast Basin – Region 3)
- ☐ Archaeological Resources Map
- ☐ Area of Critical Concerns Map
- ☐ Special Biological Importance Map
- ☐ CA Natural Species Diversity Database
- ☒ Fire Hazard Severity Map
- ☒ Flood Hazard Maps
- ☒ Natural Resources Conservation Service Soil Survey for SLO County
- ☐ GIS mapping layers (e.g., habitat, streams, contours, etc.)
- ☐ Other

Initial Study – Environmental Checklist

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

California Air Resources Board (CARB). 2020. Maps of State and Federal Area Designations. Available at: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed on August 9, 2022.

———. 2022. Advanced Clean Cars Program. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program. Accessed August 9, 2022.

California Department of Conservation (CDOC). 2015. Fault Activity Map of California. Available at: https://maps.conservation.ca.gov/cgs/fam/. Accessed August 9, 2022.

———. 2016. California Important Farmland Finder. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed August 9, 2022.

———. 2020. San Luis Obispo County Tsunami Inundation Maps. Available at: https://www.conservation.ca.gov/cgs/tsunami/maps/san-luis-obispo. Accessed August 9, 2022.

California Department of Fish and Wildlife (CDFW). 2022. California Natural Diversity Database. Available at: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data#43018408-cnddb-in-bios. Accessed August 8, 2022.

California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fire Hazard Severity Zone Viewer. Available at: https://egis.fire.ca.gov/FHSZ/. Accessed August 8, 2022.

California Department of Resources Recycling and Recovery (CalRecycle). 2019. Estimated Solid Waste Generation Rates. Available at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates#:~:text=Residential%20Sector%20Generation%20Rates%20%20%20%20Waste,%20Cor%20...%20%208%20more%20rows%20. Accessed August 9, 2022.

———. 2020. SWIS Facility/Site Inspection Details – Cold Canyon Landfill. Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1509?siteID=3171. Accessed August 9, 2022.

California Department of Toxic Substance Control (DTSC). 2022. EnviroStor Database. Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed August 9, 2022.

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Exhibit B - Mitigation Summary

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

DATE: May 10, 2023

DEVELOPER'S STATEMENT & MITIGATION MONITORING PROGRAM FOR COLLINS GENERAL PLAN AMENDMENT (LRP2021-00005)

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

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

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

AIR QUALITY (AQ)

AQ-1 **San Luis Obispo County Air Pollution Control District Fugitive Dust Mitigation Measures (Expanded List).** At the time of application for grading and construction plans for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities:

1. Reduce the amount of the disturbed area where possible;
2. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour. Reclaimed (non-potable) water should be used whenever possible. When drought conditions exist and water use is a concern, the contractor or builder should consider use of a dust suppressant that is effective for the specific site conditions to reduce the amount of water used for dust control. Please refer to the following link from the San Joaquin Valley Air District for a list of potential dust suppressants: {HYPERLINK "http://www.valleyair.org/busind/comply/PM10/Products%20Available%20for%20Controlling%20PM10%20Emissions.htm"};
3. All dirt stockpile areas should be sprayed daily and covered with tarps or other dust barriers as needed;

4. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible, and building pads should be laid as soon as possible after grading unless seeding, soil binders, or other dust controls are used;
5. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) or otherwise comply with California Vehicle Code Section 23114;
6. "Track-Out" is defined as sand or soil that adheres to and/or agglomerates on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto any highway or street as described in California Vehicle Code Section 23113 and California Water Code 13304. To prevent track out, 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;
7. All fugitive dust mitigation measures shall be shown on grading and building plans;
8. The contractor or builder shall designate a person or persons whose responsibility is to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to minimize dust complaints and reduce visible emissions below the San Luis Obispo County Air Pollution Control District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress (for example, wind-blown dust could be generated on an open dirt lot). The name and telephone number of such persons shall be provided to the San Luis Obispo County Air Pollution Control District Compliance Division prior to the start of any grading, earthwork or demolition (Contact the Compliance Division at 805-781-5912).
9. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible, following completion of any soil-disturbing activities;
10. Exposed ground areas that are planned to be reworked at dates greater than 1 month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
11. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods

approved in advance by the San Luis Obispo County Air Pollution Control District;

12. Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site;
13. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers shall be used with reclaimed water where feasible. Roads shall be pre-wetted prior to sweeping when feasible; and
14. Take additional measures as needed to ensure dust from the project site is not impacting areas outside the project boundary.

AQ-2 **San Luis Obispo County Air Pollution Control District Limits on Idling During Construction.** At time of application for grading and construction plans for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", the following measures shall be provided on project grading and construction plans and shall be implemented throughout the duration of project grading and construction activities when diesel-powered vehicles/equipment are in use:

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

Monitoring: Required with construction or grading permits. Must be attained for life of the project. Compliance will be verified by the County Department of Planning and Building and SLOAPCD.

BIOLOGICAL RESOURCES (BIO)

BIO-1 Prior to initiation of ground disturbance associated with the development of a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", an environmental awareness training shall be presented to all construction personnel by a qualified biologist prior to the start of any project activities. The training shall include color photographs and a description of the ecology of all special-status species known or with potential to occur, as well as other sensitive resources requiring avoidance during construction. The training shall also include a description of protection measures required by discretionary permits, an overview of the Federal and State Endangered Species Acts, and implications of noncompliance with these regulations. This shall include an overview of the required avoidance, minimization, and mitigation measures. A sign-in sheet with the name and signature of the qualified biologist who presented the training, and the names and signatures of the environmental awareness trainees shall be kept. A fact sheet conveying the information provided in the environmental awareness training shall be provided to all project personnel.

BIO-2 At the time of application for grading and construction permits for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", the following general construction best management practices shall be shown on final construction plans and implemented during all construction activities to minimize impacts to biological resources:

1. The use of heavy equipment and vehicles shall be limited to the proposed project limits and defined staging areas/access points. The boundaries of each work area shall be clearly defined and marked with high-visibility fencing. No work shall occur outside these limits.
2. Project plans, drawings, and specifications shall show the boundaries of all sensitive resource areas and the location of erosion and sediment controls, delineation of construction limits, and other pertinent measures to ensure the protection of sensitive habitats and resources.
3. Staging of equipment and materials shall occur in designated areas with appropriate demarcation and perimeter controls. No staging areas shall be located within 100 feet of sensitive habitat or aquatic resources.
4. Secondary containment, such as drip pans, shall be used to prevent leaks and spills of potential contaminants.
5. Washing of concrete, paint, or equipment, and refueling and maintenance of equipment shall occur only in designated staging areas. These activities will occur at a minimum of 25 feet from sensitive habitat or aquatic resources, including drainages. Sandbags and/or absorbent pads and spill control kits shall always be available on-site to clean up and contain fuel spills and other contaminants.

6. Construction equipment shall be inspected by the operator daily to ensure that equipment is in good working order and no fuel or lubricant leaks are present.
7. Plastic monofilament netting (erosion control matting) or similar material will not be used on-site due to the potential to entangle special-status wildlife species. Acceptable substitutes are coconut coir matting, biodegradable fiber rolls, or tackified hydroseeding compounds.
8. The use of pesticides (including rodenticides) and herbicides on the project shall be in compliance with all federal, state, and local regulations to avoid primary and secondary poisoning of sensitive species that may be using the site.
9. During project activities, all trash that may attract predators or scavengers shall be properly contained, removed from the work site, and disposed of at the end of each work week. Following construction, all trash and debris shall be removed from work areas.
10. After completion of the project's construction, all protective fencing/flagging used to delineate sensitive biological resources shall be removed from the project area and disposed of in appropriate waste receptacles or reused.

BIO-3 Future construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B" shall be completed during the dry period (May 1–August 30) to the extent feasible to avoid potential direct impacts to dispersing California red-legged frog individuals.

If ground disturbance occurs during the wet season (September 1–April 30), the applicant shall employ the following measures:

1. A temporary exclusion fence approved by the County of San Luis Obispo (i.e., ERTEC E-Fence with a lip) shall be established along the boundaries of the development envelopes between the riparian corridor and the development envelopes on the proposed lots to prevent frogs from entering proposed disturbance areas. The exclusions fence shall be installed by a County of San Luis Obispo-qualified biologist prior to the start of construction activities to ensure proper installation.
2. Within 48 hours prior to the start of construction activities, a preconstruction California red-legged frog survey shall be conducted in proposed disturbance areas by a County of San Luis Obispo-qualified biologist. A report documenting the results of the survey shall be provided to the County of San Luis Obispo Planning and Building Department. If no California red-legged frog are found, work can proceed. If any California red-legged frog are found, the County of San Luis Obispo shall be notified, and all work shall stop work until the California red-legged frog leave the site of their own accord. If the California red-legged frog do not move off the site on their own, the

applicant shall comply with all relevant requirements of the Federal Endangered Species Act prior to resuming project activities as follows:

a. Prior to initiation of any other protective measures, a biologist approved by the U.S. Fish and Wildlife Service to translocate California red-legged frog shall, in consultation with the U.S. Fish and Wildlife Service as applicable, identify appropriate relocation sites for California red-legged frog that may be observed during the preconstruction survey or monitoring activities described below and need to be moved from within the limits of direct impact disturbance.
b. Relocation or other take (e.g., entrapment, etc.) of California red-legged frog can only be conducted by an authorized biologist and the project applicant must have been issued the requisite take authorizations from the U.S. Fish and Wildlife Service before any relocation activity can commence.
c. If the U.S. Fish and Wildlife Service does not authorize the relocation of California red-legged frog occurring within the project site, no work activities shall occur on-site until the California red-legged frog has left the project site on its own.

BIO-4 Within 48 hours prior to the start of construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", a qualified biologist shall conduct a pre-construction survey to ensure crotch and/or western bumble bees are not present within the proposed work areas. If bumble bees of any species are observed, they shall be photographed for identification following the USFWS guidance in *Appendix A - Standardized Bee Photography* in the *Survey Protocols for the Rusty Patched Bumble Bee (Bombus affinis)* (2019). If individual crotch or western bumble bees are observed, they shall be avoided to ensure no "take" occurs. If crotch or western bumble bee colonies are identified, the qualified biologist shall implement a minimum 50-feet no-disturbance buffer to avoid take and potentially significant impacts until it has been determined that the colony is no longer active. All sightings of crotch or western bumble bee shall be reported to the California Natural Diversity Database.

BIO-5 Prior to the start of future construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", all suitable roosting habitat for pallid bats (e.g., mature oak trees, existing structures) within 100 feet of work areas shall be surveyed to determine if bats are roosting in these areas. If bats are detected and impacts are deemed unavoidable, a bat exclusion plan shall be developed and submitted to California Department of Fish and Wildlife for approval prior to implementing any exclusion methods. If no bats are detected, no further action is required.

BIO-6 Within 48-hours prior to the start of construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", a qualified biologist shall conduct a preconstruction survey to ensure special-status amphibians and reptiles are not present within proposed work areas. In the event southwestern

pond turtle are identified, all work shall be halted until appropriate resource agencies are contacted for further guidance. All measures identified by appropriate resource agencies shall be implemented and evidence of compliance shall be sent to the County of San Luis Obispo Planning and Building Department.

BIO-7 Prior to initiation of construction activities for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", if work is planned to occur between February 1 and September 15, a County of San Luis Obispo-qualified biologist shall survey the area for nesting birds within 10 days prior to initial project activity beginning, including ground disturbance and/or vegetation removal/trimming. If nesting birds are located on or near the proposed project site, they shall be avoided until they have successfully fledged, or the nest is no longer deemed active, as detailed below.

1. A 250-foot exclusion zone shall be placed around non-listed, passerine species, and a 500-foot exclusion zone will be implemented for non-listed raptor species. Exclusion zones shall be maintained until all exterior construction activities have been terminated for the current phase of work (e.g., if initial site improvements are completed, exclusion zones may be removed until initiation of site preparation for residence construction begins), or it has been determined by a qualified biologist that the young have fledged or that proposed project activities would not cause adverse impacts to the nest, adults, eggs, or young.
2. Variance from the no-disturbance buffers described above may be allowable when there is a compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. Any variance from the no-disturbance buffers shall be advised and supported by a qualified biologist and CDFW shall be notified in advance of implementing a variance.
3. If special-status avian species are identified and nesting within the work area, no work will begin until an appropriate exclusion zone is determined in consultation with the County of San Luis Obispo and any relevant resource agencies.

The results of the survey shall be provided to the County of San Luis Obispo Planning and Building Department prior to initial project activities. The results shall detail appropriate fencing or flagging of exclusion zones and include recommendations for additional monitoring requirements. A map of the project site and nest locations shall be included with the results.

If 2 weeks lapse between different phases of project activities (e.g., vegetation trimming, the start of grading), during which no or minimal work activity occurs, the nesting bird survey shall be repeated, and a separate survey report shall be prepared and submitted to the County of San Luis Obispo Planning and Building Department.

BIO-8 At the time of application for grading and construction permits for a single-family residence on future "Parcel A" and development of either an accessory dwelling unit or guesthouse on future "Parcel B", the following erosion control

May 10, 2023

best management practices shall be shown on final construction plans and implemented during all construction activities to avoid/minimize impacts to jurisdictional water features:

1. The limits of the jurisdictional drainages, as well as appropriate setbacks (i.e., 25 feet), shall be shown on project site plans. All construction activities shall remain outside of the jurisdictional limits and equipment and vehicle staging, refueling, washing of concrete, and soil stockpiles shall remain outside the 25-foot setback.
2. To prevent erosion and sedimentation into drainages during construction, an Erosion and Sedimentation Control Plan shall be developed and implemented. It shall outline best management practices for short-term, temporary stabilization. Acceptable stabilization methods include the use of weed-free, natural fiber (i.e., non-monofilament) rolls, jute or coir netting, and/or other industry standards. Erosion control devices shall be installed and maintained for the duration of the project.

Monitoring: Require prior to issuance of construction or grading permits or prior to any site disturbance for Parcels A and B. Compliance will be verified by the County Department of Planning and Building.

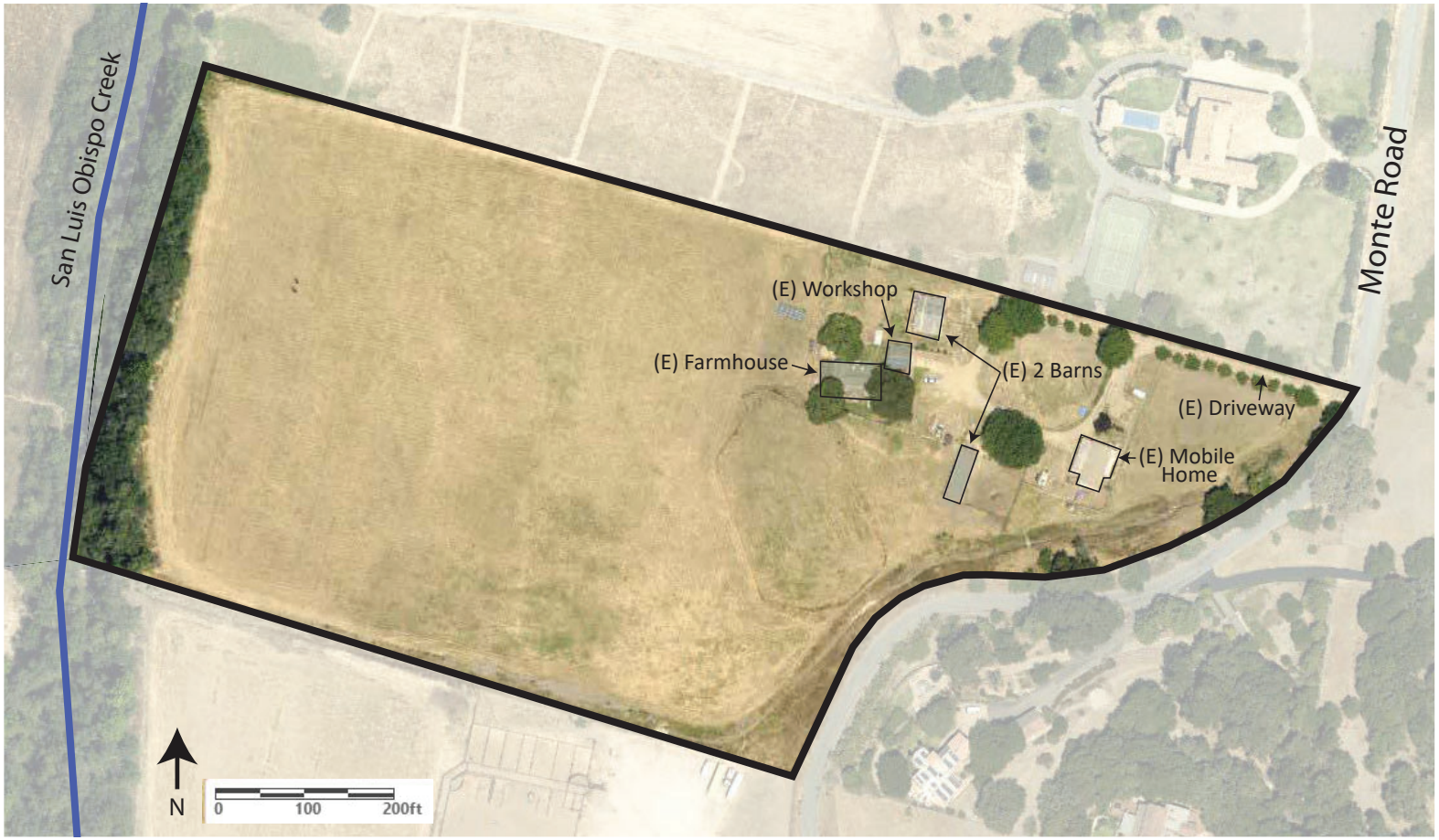
The applicant understands that any changes made to the project description subsequent to this environmental determination must be reviewed by the Environmental Coordinator and may require a new environmental determination for the project. By signing this agreement, the owner(s) agrees to and accepts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

Signature of Applicant	Name (Print)	Date
Kirt Collins	Kirt Collins	5/19/2023

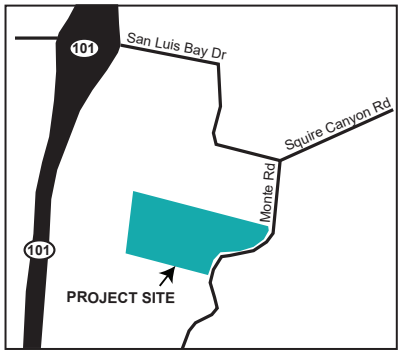
APPENDIX A

PROJECT SITE PLANS

EXISTING SITE LAYOUT



Vicinity Map



SCOPE OF WORK

General Plan Amendment to amend the land use designation of a +/-15-acre parcel from Agriculture to Rural Residential and an Ordinance Amendment to create a Planning Area Standard intended to regulate future density and development on the property. The Planning Area Standard will require any future subdivision to utilize the cluster subdivision standards set forth in the County's Land Use Ordinance (LUO) Section 22.22.140 and require future development to be limited to the portion of the parcel with existing development.

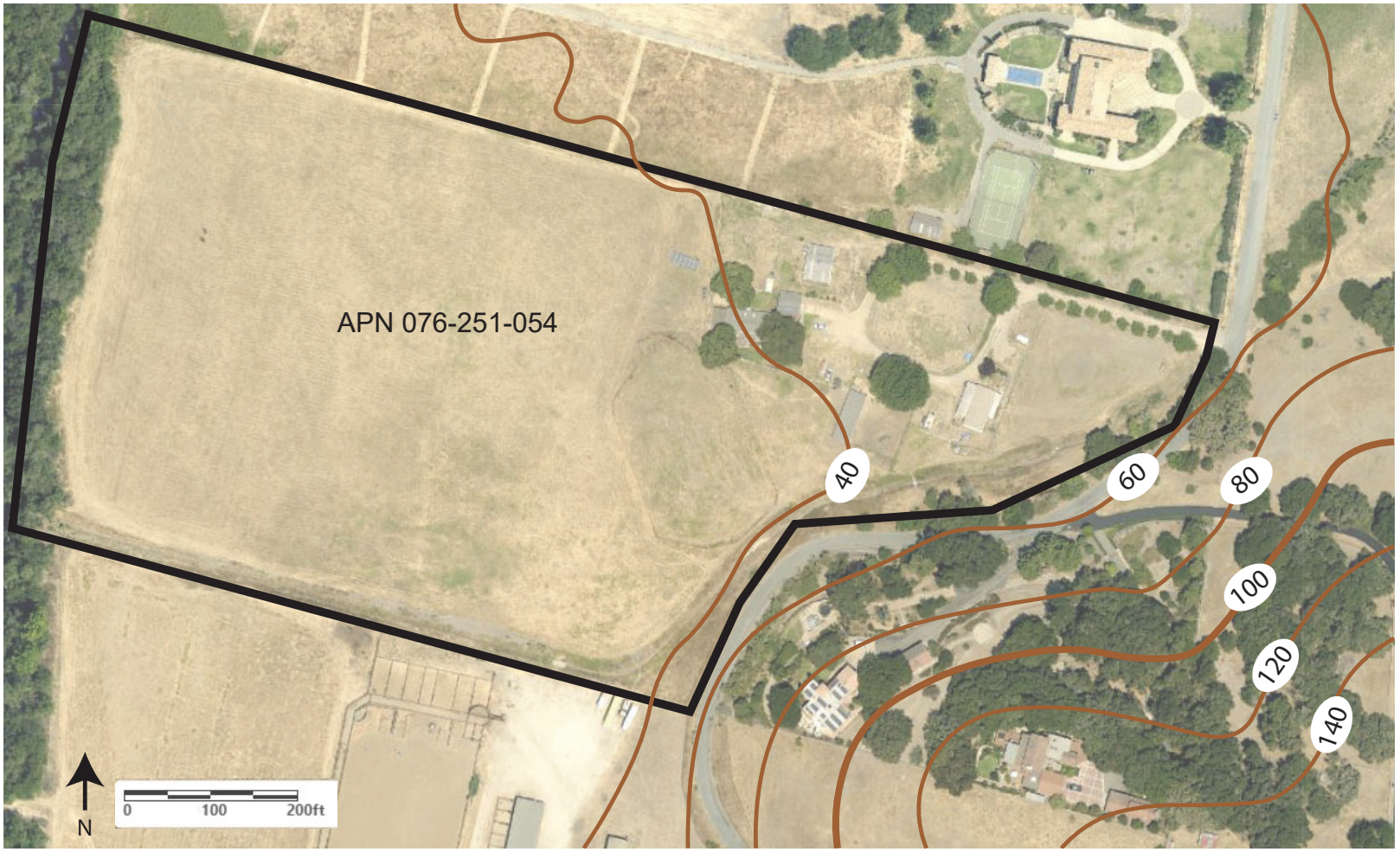
Sheet Index

Kirk Consulting

Sheet 1: Existing Site Layout
Kirt Collins
6686 Monte Road
San Luis Obispo, CA 93401
APN: 076-251-054

DATE: August 2021
Kirt Collins
Sheet
1 of 5

CONTOUR MAP

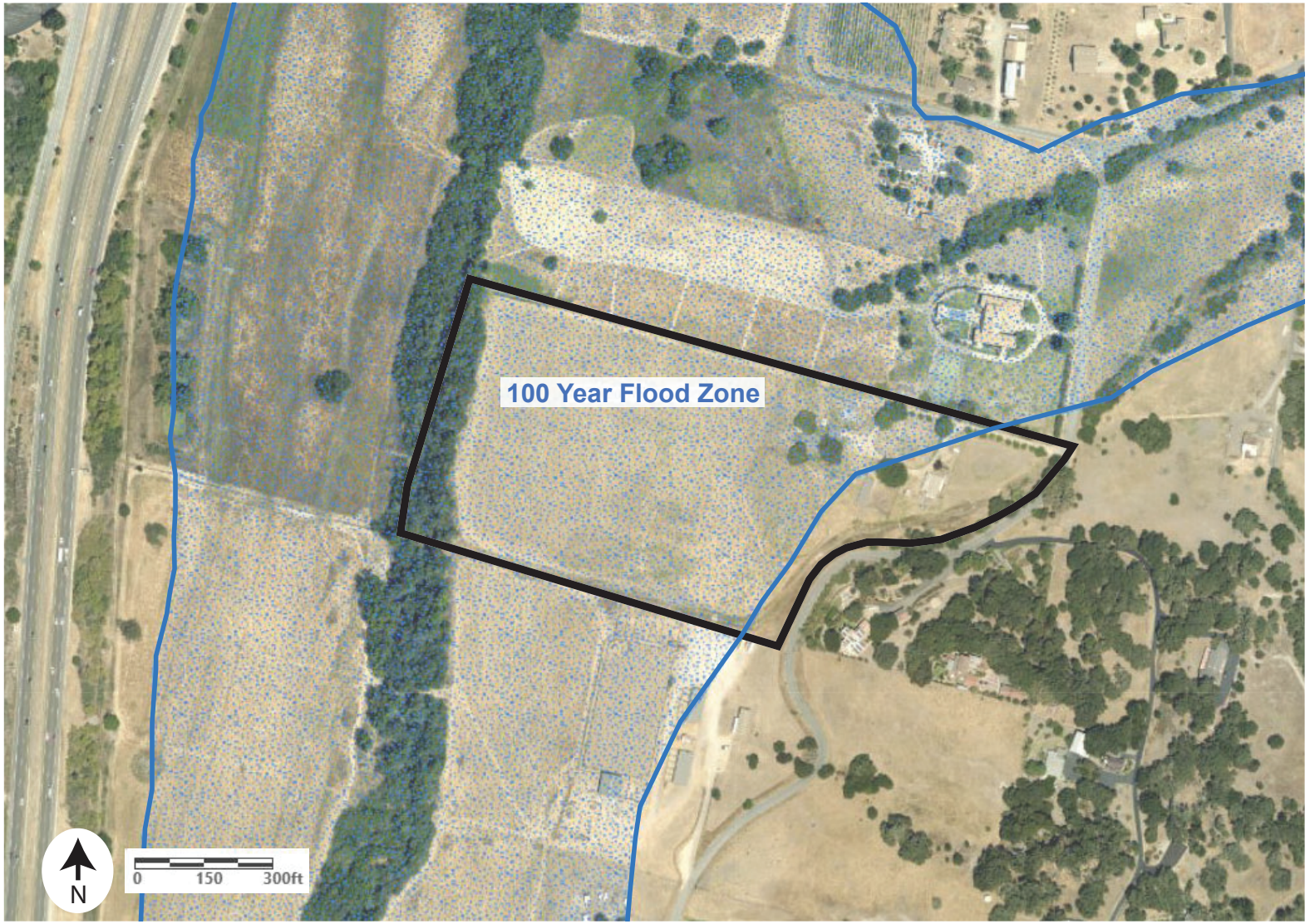


Kirk Consulting

Sheet 2: Contour Map
Kirt Collins
6686 Monte Road
San Luis Obispo, CA 93401
APN: 076-251-054

DATE: August 2021	
Kirt Collins	
Sheet 2 of 5	

100-YEAR FLOOD ZONE MAP



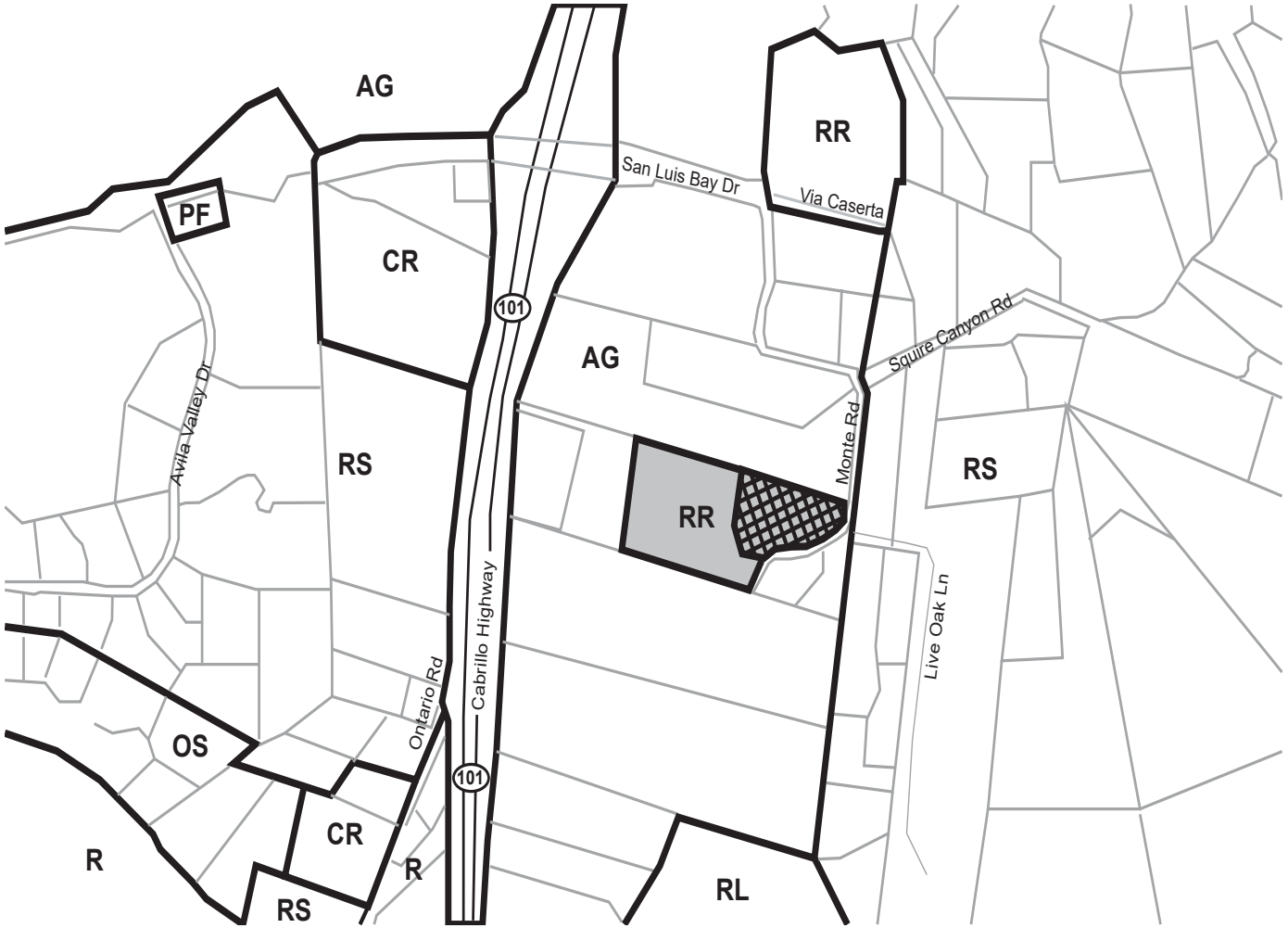
Kirt Consulting

Sheet 3: 100-Year Flood Zone Map
Kirt Collins
6686 Monte Road
San Luis Obispo, CA 93401
APN: 076-251-054

DATE: August 2021
Kirt Collins
Sheet 3 of 5

MONTE ROAD WEST AREA EXHIBIT

PROPOSED FIGURE 96-16

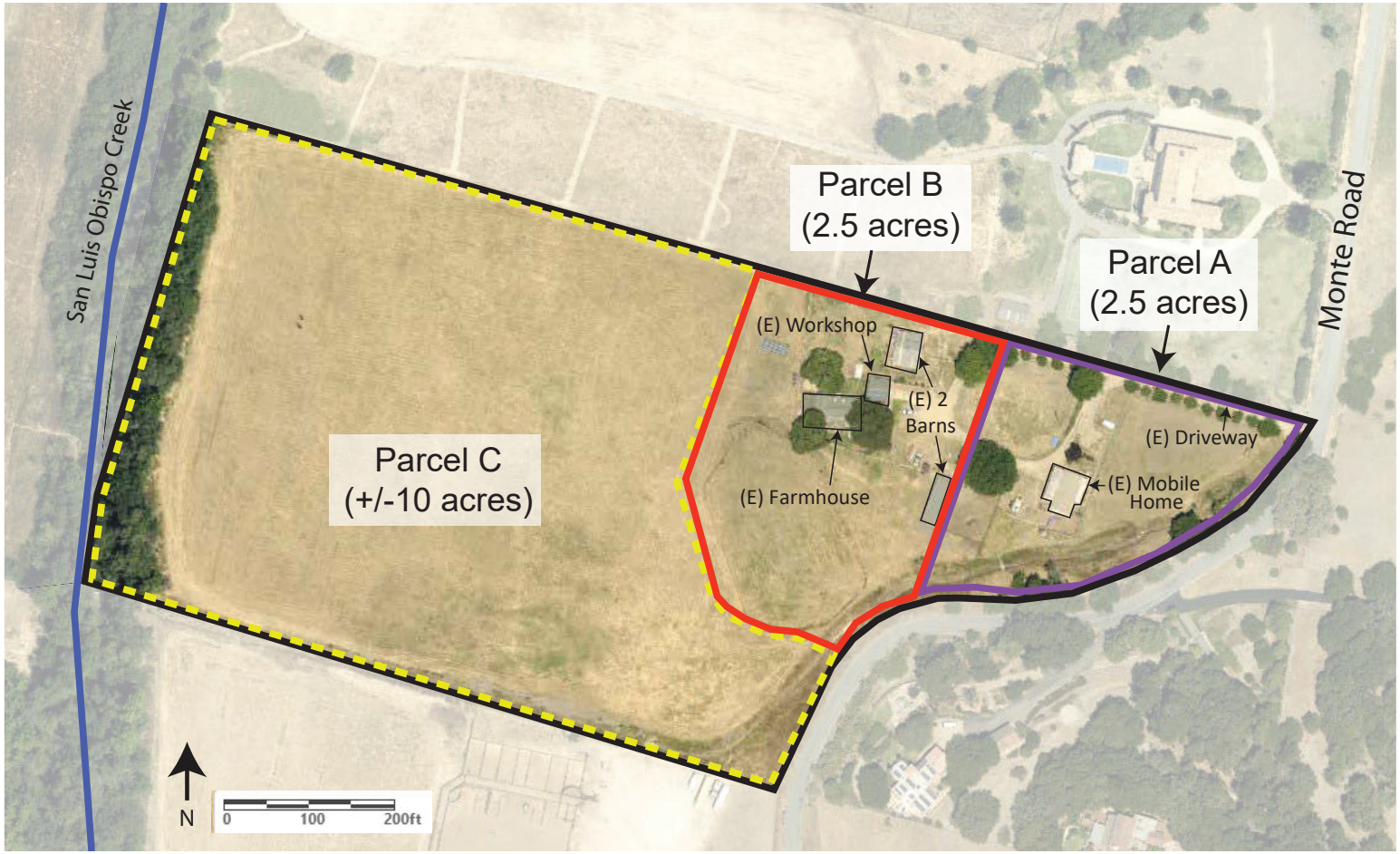


Kirk Consulting

Sheet 4: Monte Road West Area Exhibit
Kirt Collins
6686 Monte Road
San Luis Obispo, CA 93401
APN: 076-251-054

DATE: August 2021	
Kirt Collins	
Sheet	
4 of 5	

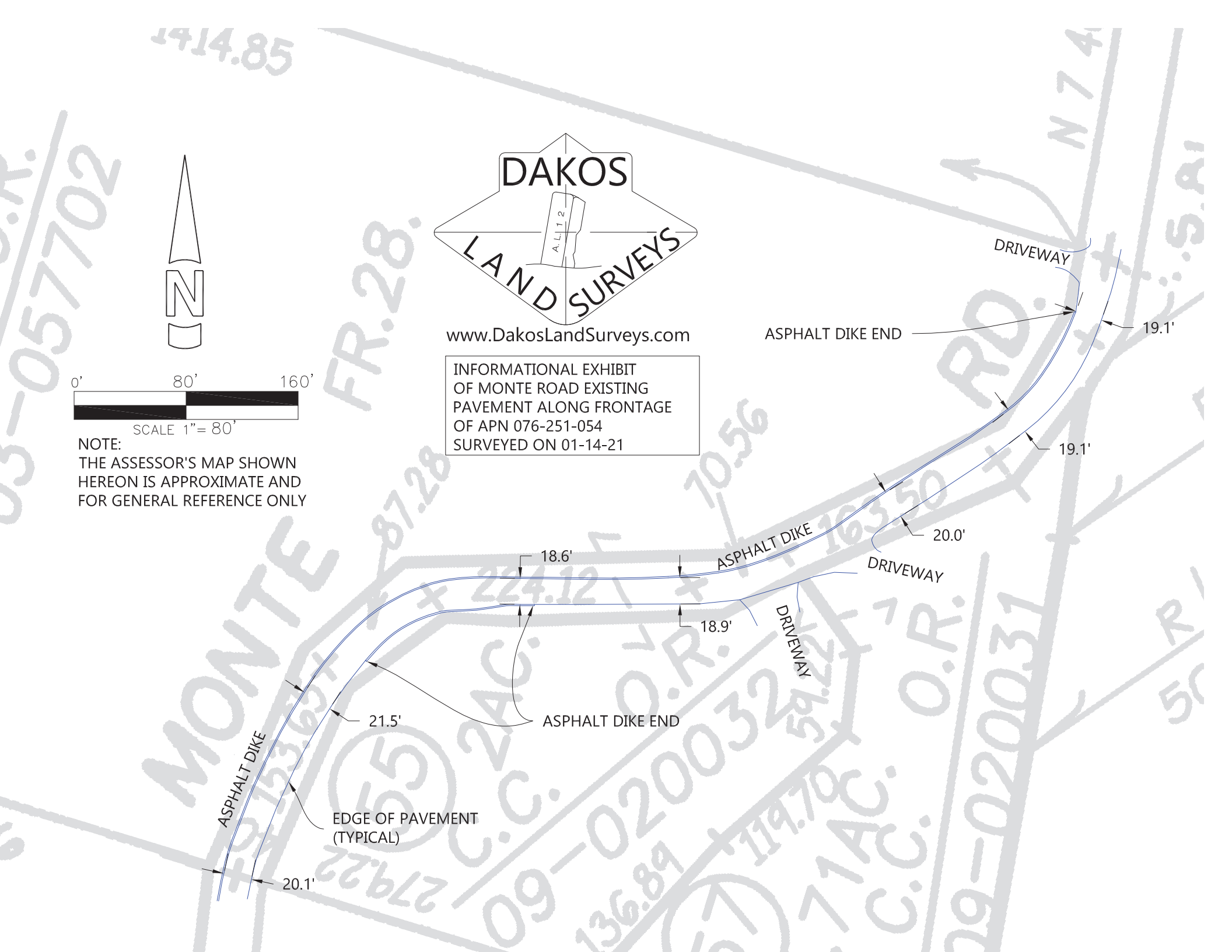
PARCELS CREATED THROUGH CLUSTER DIVISION



Kirk Consulting

Sheet 5: Parcels Created Through Cluster Division
Kirt Collins
6686 Monte Road
San Luis Obispo, CA 93401
APN: 076-251-054

DATE: August 2021	
Kirt Collins	
Sheet	
5 of 5	


DAKOS
LAND SURVEYS
A.L.T.S.
www.DakosLandSurveys.com
INFORMATIONAL EXHIBIT
OF MONTE ROAD EXISTING
PAVEMENT ALONG FRONTAGE
OF APN 076-251-054
SURVEYED ON 01-14-21
N
0'
80'
160'
SCALE 1"= 80'
NOTE:
THE ASSESSOR'S MAP SHOWN
HEREON IS APPROXIMATE AND
FOR GENERAL REFERENCE ONLY
DRIVEWAY
ASPHALT DIKE END
19.1'
19.1'
20.0'
ASPHALT DIKE
18.6'
DRIVEWAY
18.9'
DRIVEWAY
21.5'
ASPHALT DIKE END
ASPHALT DIKE
EDGE OF PAVEMENT
(TYPICAL)
20.1'

APPENDIX B

CALEEMOD RESULTS

Collins GPA Summary Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Collins GPA
Lead Agency	County of San Luis Obispo
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.20
Precipitation (days)	16.0
Location	6686 Monte Rd, San Luis Obispo, CA 93401, USA
County	San Luis Obispo
City	Unincorporated
Air District	San Luis Obispo County APCD
Air Basin	South Central Coast
TAZ	3302
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	2.00	Dwelling Unit	5.00	3,900	23,426	—	5.00	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.01	4.09	44.0	37.5	0.08	1.86	20.5	22.3	1.71	10.3	12.0	—	8,283	8,283	0.37	0.51	5.98	8,450
Mit.	5.01	4.09	44.0	37.5	0.08	1.86	8.46	10.3	1.71	4.16	5.87	—	8,283	8,283	0.37	0.51	5.98	8,450
% Reduced	—	—	—	—	—	—	59%	54%	—	60%	51%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.51	24.6	11.8	13.2	0.02	0.55	0.11	0.56	0.51	0.03	0.51	—	2,407	2,407	0.10	0.02	0.02	2,415
Mit.	1.51	24.6	11.8	13.2	0.02	0.55	0.11	0.56	0.51	0.03	0.51	—	2,407	2,407	0.10	0.02	0.02	2,415
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	0.72	3.59	3.98	0.01	0.17	0.10	0.27	0.15	0.05	0.20	—	729	729	0.03	0.01	0.02	732

Mit.	0.46	0.72	3.59	3.98	0.01	0.17	0.04	0.21	0.15	0.02	0.17	—	729	729	0.03	0.01	0.02	732
% Reduced	—	—	—	—	—	—	56%	21%	—	59%	14%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.13	0.66	0.73	< 0.005	0.03	0.02	0.05	0.03	0.01	0.04	—	121	121	< 0.005	< 0.005	< 0.005	121
Mit.	0.08	0.13	0.66	0.73	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	121	121	< 0.005	< 0.005	< 0.005	121
% Reduced	—	—	—	—	—	—	56%	21%	—	59%	14%	—	—	—	—	—	—	—

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.23	0.10	0.67	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	0.34	139	139	0.04	0.01	0.50	142
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.22	0.11	0.57	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	0.34	135	136	0.04	0.01	0.04	139
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.22	0.10	0.65	< 0.005	< 0.005	2.37	2.37	< 0.005	0.36	0.36	0.34	134	134	0.04	0.01	0.23	137
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.04	0.02	0.12	< 0.005	< 0.005	0.43	0.43	< 0.005	0.07	0.07	0.06	22.1	22.2	0.01	< 0.005	0.04	22.7

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	2	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	5	3	0	N/A
Flooding	5	2	0	N/A
Drought	1	3	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	2	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	5	3	1	5
Flooding	5	2	1	5
Drought	1	3	1	3
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	22.0
Healthy Places Index Score for Project Location (b)	81.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

Collins GPA Quarterly Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Collins GPA
Lead Agency	County of San Luis Obispo
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.20
Precipitation (days)	16.0
Location	6686 Monte Rd, San Luis Obispo, CA 93401, USA
County	San Luis Obispo
City	Unincorporated
Air District	San Luis Obispo County APCD
Air Basin	South Central Coast
TAZ	3302
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	2.00	Dwelling Unit	5.00	3,900	23,426	—	5.00	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions

2.1.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (ton/quarter) and GHGs (MT/quarter)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Q1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.11	1.02	1.13	< 0.005	0.05	0.02	0.05	0.04	0.01	0.04	—	187	187	0.01	< 0.005	0.01	188
Mit.	0.13	0.11	1.02	1.13	< 0.005	0.05	0.01	0.05	0.04	< 0.005	0.04	—	187	187	0.01	< 0.005	0.01	188
% Reduced	—	—	—	—	—	—	61%	—	—	61%	—	—	—	—	—	—	—	—
Q2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.10	0.65	0.72	< 0.005	0.03	< 0.005	0.03	0.03	< 0.005	0.03	—	120	120	< 0.005	< 0.005	< 0.005	120
Mit.	0.08	0.10	0.65	0.72	< 0.005	0.03	< 0.005	0.03	0.03	< 0.005	0.03	—	120	120	< 0.005	< 0.005	< 0.005	120
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quarterly (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.11	1.02	1.13	< 0.005	0.05	0.02	0.05	0.04	0.01	0.04	—	187	187	0.01	< 0.005	0.01	188
Mit.	0.13	0.11	1.02	1.13	< 0.005	0.05	0.01	0.05	0.04	< 0.005	0.04	—	187	187	0.01	< 0.005	0.01	188

% Reduced	—	—	—	—	—	—	61%	—	—	61%	—	—	—	—	—	—	—	—

2.1.2. Construction Quarters

Quarter	Start Date	End Date	Length (days)
Q1	7/16/2023	10/14/2023	91
Q2	10/15/2023	12/24/2023	71

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (ton/quarter) and GHGs (MT/quarter)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Quarterly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	0.11	0.11	< 0.005	0.02	0.02	0.01	4.00	4.00	< 0.005	< 0.005	0.01	4.06

Collins GPA Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Collins GPA
Lead Agency	County of San Luis Obispo
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.20
Precipitation (days)	16.0
Location	6686 Monte Rd, San Luis Obispo, CA 93401, USA
County	San Luis Obispo
City	Unincorporated
Air District	San Luis Obispo County APCD
Air Basin	South Central Coast
TAZ	3302
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	2.00	Dwelling Unit	5.00	3,900	23,426	—	5.00	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.01	4.09	44.0	37.5	0.08	1.86	20.5	22.3	1.71	10.3	12.0	—	8,283	8,283	0.37	0.51	5.98	8,450
Mit.	5.01	4.09	44.0	37.5	0.08	1.86	8.46	10.3	1.71	4.16	5.87	—	8,283	8,283	0.37	0.51	5.98	8,450
% Reduced	—	—	—	—	—	—	59%	54%	—	60%	51%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.51	24.6	11.8	13.2	0.02	0.55	0.11	0.56	0.51	0.03	0.51	—	2,407	2,407	0.10	0.02	0.02	2,415
Mit.	1.51	24.6	11.8	13.2	0.02	0.55	0.11	0.56	0.51	0.03	0.51	—	2,407	2,407	0.10	0.02	0.02	2,415
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	0.72	3.59	3.98	0.01	0.17	0.10	0.27	0.15	0.05	0.20	—	729	729	0.03	0.01	0.02	732

Mit.	0.46	0.72	3.59	3.98	0.01	0.17	0.04	0.21	0.15	0.02	0.17	—	729	729	0.03	0.01	0.02	732
% Reduced	—	—	—	—	—	—	56%	21%	—	59%	14%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.13	0.66	0.73	< 0.005	0.03	0.02	0.05	0.03	0.01	0.04	—	121	121	< 0.005	< 0.005	< 0.005	121
Mit.	0.08	0.13	0.66	0.73	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	121	121	< 0.005	< 0.005	< 0.005	121
% Reduced	—	—	—	—	—	—	56%	21%	—	59%	14%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	5.01	4.09	44.0	37.5	0.08	1.86	20.5	22.3	1.71	10.3	12.0	—	8,283	8,283	0.37	0.51	5.98	8,450
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.51	24.6	11.8	13.2	0.02	0.55	0.11	0.56	0.51	0.03	0.51	—	2,407	2,407	0.10	0.02	0.02	2,415
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.46	0.72	3.59	3.98	0.01	0.17	0.10	0.27	0.15	0.05	0.20	—	729	729	0.03	0.01	0.02	732
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.08	0.13	0.66	0.73	< 0.005	0.03	0.02	0.05	0.03	0.01	0.04	—	121	121	< 0.005	< 0.005	< 0.005	121

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	5.01	4.09	44.0	37.5	0.08	1.86	8.46	10.3	1.71	4.16	5.87	—	8,283	8,283	0.37	0.51	5.98	8,450
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.51	24.6	11.8	13.2	0.02	0.55	0.11	0.56	0.51	0.03	0.51	—	2,407	2,407	0.10	0.02	0.02	2,415
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.46	0.72	3.59	3.98	0.01	0.17	0.04	0.21	0.15	0.02	0.17	—	729	729	0.03	0.01	0.02	732
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.08	0.13	0.66	0.73	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	121	121	< 0.005	< 0.005	< 0.005	121

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.23	0.10	0.67	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	0.34	139	139	0.04	0.01	0.50	142
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.22	0.11	0.57	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	0.34	135	136	0.04	0.01	0.04	139
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.22	0.10	0.65	< 0.005	< 0.005	2.37	2.37	< 0.005	0.36	0.36	0.34	134	134	0.04	0.01	0.23	137
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.04	0.02	0.12	< 0.005	< 0.005	0.43	0.43	< 0.005	0.07	0.07	0.06	22.1	22.2	0.01	< 0.005	0.04	22.7

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.08	0.55	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	—	105	105	0.01	0.01	0.48	107
Area	0.01	0.13	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.30	0.30	< 0.005	< 0.005	—	0.30
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.4	32.4	< 0.005	< 0.005	—	32.5
Water	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Waste	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	0.12	0.23	0.10	0.67	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	0.34	139	139	0.04	0.01	0.50	142
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.08	0.56	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	—	102	102	0.01	0.01	0.01	104
Area	0.00	0.12	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
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.4	32.4	< 0.005	< 0.005	—	32.5
Water	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Waste	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	0.11	0.22	0.11	0.57	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	0.34	135	136	0.04	0.01	0.04	139
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.10	0.10	0.08	0.54	< 0.005	< 0.005	2.37	2.37	< 0.005	0.36	0.36	—	100	100	0.01	0.01	0.20	102
Area	0.01	0.13	< 0.005	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.27	0.27	< 0.005	< 0.005	—	0.28
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.4	32.4	< 0.005	< 0.005	—	32.5
Water	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53

Waste	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	0.11	0.22	0.10	0.65	< 0.005	< 0.005	2.37	2.37	< 0.005	0.36	0.36	0.34	134	134	0.04	0.01	0.23	137
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02	0.02	0.02	0.10	< 0.005	< 0.005	0.43	0.43	< 0.005	0.07	0.07	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9
Area	< 0.005	0.02	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.05	0.05	< 0.005	< 0.005	—	0.05
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.36	5.36	< 0.005	< 0.005	—	5.38
Water	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.19	< 0.005	< 0.005	—	0.25
Waste	—	—	—	—	—	—	—	—	—	—	—	0.04	0.00	0.04	< 0.005	0.00	—	0.13
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	0.02	0.04	0.02	0.12	< 0.005	< 0.005	0.43	0.43	< 0.005	0.07	0.07	0.06	22.1	22.2	0.01	< 0.005	0.04	22.7

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.08	0.55	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	—	105	105	0.01	0.01	0.48	107
Area	0.01	0.13	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.30	0.30	< 0.005	< 0.005	—	0.30
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.4	32.4	< 0.005	< 0.005	—	32.5
Water	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Waste	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	0.12	0.23	0.10	0.67	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	0.34	139	139	0.04	0.01	0.50	142
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.08	0.56	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	—	102	102	0.01	0.01	0.01	104

Area	0.00	0.12	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
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.4	32.4	< 0.005	< 0.005	—	32.5
Water	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Waste	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	0.11	0.22	0.11	0.57	< 0.005	< 0.005	2.42	2.42	< 0.005	0.37	0.37	0.34	135	136	0.04	0.01	0.04	139
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.10	0.10	0.08	0.54	< 0.005	< 0.005	2.37	2.37	< 0.005	0.36	0.36	—	100	100	0.01	0.01	0.20	102
Area	0.01	0.13	< 0.005	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.27	0.27	< 0.005	< 0.005	—	0.28
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.4	32.4	< 0.005	< 0.005	—	32.5
Water	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Waste	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	0.11	0.22	0.10	0.65	< 0.005	< 0.005	2.37	2.37	< 0.005	0.36	0.36	0.34	134	134	0.04	0.01	0.23	137
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02	0.02	0.02	0.10	< 0.005	< 0.005	0.43	0.43	< 0.005	0.07	0.07	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9
Area	< 0.005	0.02	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.05	0.05	< 0.005	< 0.005	—	0.05
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.36	5.36	< 0.005	< 0.005	—	5.38
Water	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.19	< 0.005	< 0.005	—	0.25
Waste	—	—	—	—	—	—	—	—	—	—	—	0.04	0.00	0.04	< 0.005	0.00	—	0.13
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	0.02	0.04	0.02	0.12	< 0.005	< 0.005	0.43	0.43	< 0.005	0.07	0.07	0.06	22.1	22.2	0.01	< 0.005	0.04	22.7

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.5	14.5	< 0.005	< 0.005	—	14.6
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.40	2.40	< 0.005	< 0.005	—	2.41
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.66	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	111	111	0.01	< 0.005	0.52	113
Vendor	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	0.00	0.00
Hauling	0.22	0.06	4.23	1.38	0.03	0.05	0.18	0.23	0.05	0.07	0.12	—	2,877	2,877	0.15	0.46	5.46	3,024
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.88	7.88	< 0.005	< 0.005	0.01	8.28
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	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	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.37

3.2. Site Preparation (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.5	14.5	< 0.005	< 0.005	—	14.6
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.40	2.40	< 0.005	< 0.005	—	2.41
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.66	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	111	111	0.01	< 0.005	0.52	113

Vendor	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	0.00	0.00
Hauling	0.22	0.06	4.23	1.38	0.03	0.05	0.18	0.23	0.05	0.07	0.12	—	2,877	2,877	0.15	0.46	5.46	3,024
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.88	7.88	< 0.005	< 0.005	0.01	8.28
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	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	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.37

3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.43	2.04	20.0	19.7	0.03	0.94	—	0.94	0.87	—	0.87	—	2,958	2,958	0.12	0.02	—	2,968
Dust From Material Movement	—	—	—	—	—	—	7.09	7.09	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.11	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	16.2	16.2	< 0.005	< 0.005	—	16.3
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.68	2.68	< 0.005	< 0.005	—	2.69
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.56	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	94.8	94.8	0.01	< 0.005	0.44	96.6
Vendor	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	0.00	0.00
Hauling	0.11	0.03	2.12	0.69	0.02	0.03	0.09	0.12	0.03	0.03	0.06	—	1,438	1,438	0.07	0.23	2.73	1,512
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.51
Vendor	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	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.88	7.88	< 0.005	< 0.005	0.01	8.28
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Vendor	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	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.37

3.4. Grading (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.43	2.04	20.0	19.7	0.03	0.94	—	0.94	0.87	—	0.87	—	2,958	2,958	0.12	0.02	—	2,968
Dust From Material Movemen	—	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.11	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	16.2	16.2	< 0.005	< 0.005	—	16.3

Dust From Material Movemen	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.68	2.68	< 0.005	< 0.005	—	2.69
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.56	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	94.8	94.8	0.01	< 0.005	0.44	96.6
Vendor	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	0.00	0.00
Hauling	0.11	0.03	2.12	0.69	0.02	0.03	0.09	0.12	0.03	0.03	0.06	—	1,438	1,438	0.07	0.23	2.73	1,512
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.51
Vendor	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	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.88	7.88	< 0.005	< 0.005	0.01	8.28
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Vendor	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	0.00	0.00

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.37

3.5. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.8	13.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.8	13.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	3.24	3.61	0.01	0.15	—	0.15	0.14	—	0.14	—	657	657	0.03	0.01	—	659
Onsite truck	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.59	0.66	< 0.005	0.03	—	0.03	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Onsite truck	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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.55	4.55	< 0.005	< 0.005	0.02	4.64
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	0.01	5.19
Hauling	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.36	4.36	< 0.005	< 0.005	< 0.005	4.43
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.18
Hauling	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.20	1.20	< 0.005	< 0.005	< 0.005	1.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.36	1.36	< 0.005	< 0.005	< 0.005	1.42
Hauling	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.20
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.24
Hauling	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	0.00	0.00

3.6. Building Construction (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.50	1.26	11.8	13.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.8	13.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	3.24	3.61	0.01	0.15	—	0.15	0.14	—	0.14	—	657	657	0.03	0.01	—	659
Onsite truck	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.59	0.66	< 0.005	0.03	—	0.03	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Onsite truck	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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.55	4.55	< 0.005	< 0.005	0.02	4.64
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	0.01	5.19
Hauling	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.36	4.36	< 0.005	< 0.005	< 0.005	4.43

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.96	4.96	< 0.005	< 0.005	< 0.005	5.18
Hauling	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.20	1.20	< 0.005	< 0.005	< 0.005	1.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.36	1.36	< 0.005	< 0.005	< 0.005	1.42
Hauling	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.20
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.24
Hauling	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	0.00	0.00

3.7. Paving (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	7.13	8.89	0.01	0.35	—	0.35	0.32	—	0.32	—	1,351	1,351	0.05	0.01	—	1,356
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.5	18.5	< 0.005	< 0.005	—	18.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.06	3.06	< 0.005	< 0.005	—	3.07
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	0.73	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	121	121	0.01	0.01	0.02	123
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.67	1.67	< 0.005	< 0.005	< 0.005	1.70
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Paving (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	7.13	8.89	0.01	0.35	—	0.35	0.32	—	0.32	—	1,351	1,351	0.05	0.01	—	1,356
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.5	18.5	< 0.005	< 0.005	—	18.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.06	3.06	< 0.005	< 0.005	—	3.07
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	0.73	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	121	121	0.01	0.01	0.02	123
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.67	1.67	< 0.005	< 0.005	< 0.005	1.70
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.28
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	0.93	1.15	< 0.005	0.04	—	0.04	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	24.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.89
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	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	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Architectural Coating (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	0.93	1.15	< 0.005	0.04	—	0.04	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	24.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.89
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	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	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.11	0.10	0.08	0.55	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	105	105	0.01	0.01	0.48	107
Total	0.11	0.10	0.08	0.55	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	105	105	0.01	0.01	0.48	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.11	0.10	0.08	0.56	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	102	102	0.01	0.01	0.01	104
Total	0.11	0.10	0.08	0.56	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	102	102	0.01	0.01	0.01	104
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.02	0.02	0.02	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9
Total	0.02	0.02	0.02	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.11	0.10	0.08	0.55	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	105	105	0.01	0.01	0.48	107
Total	0.11	0.10	0.08	0.55	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	105	105	0.01	0.01	0.48	107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.11	0.10	0.08	0.56	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	102	102	0.01	0.01	0.01	104
Total	0.11	0.10	0.08	0.56	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	102	102	0.01	0.01	0.01	104
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.02	0.02	0.02	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9
Total	0.02	0.02	0.02	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	6.78	6.78	< 0.005	< 0.005	—	6.84
Total	—	—	—	—	—	—	—	—	—	—	—	—	6.78	6.78	< 0.005	< 0.005	—	6.84

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	6.78	6.78	< 0.005	< 0.005	—	6.84
Total	—	—	—	—	—	—	—	—	—	—	—	—	6.78	6.78	< 0.005	< 0.005	—	6.84
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12	< 0.005	< 0.005	—	1.13
Total	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12	< 0.005	< 0.005	—	1.13

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	6.78	6.78	< 0.005	< 0.005	—	6.84
Total	—	—	—	—	—	—	—	—	—	—	—	—	6.78	6.78	< 0.005	< 0.005	—	6.84
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	6.78	6.78	< 0.005	< 0.005	—	6.84
Total	—	—	—	—	—	—	—	—	—	—	—	—	6.78	6.78	< 0.005	< 0.005	—	6.84
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12	< 0.005	< 0.005	—	1.13
Total	—	—	—	—	—	—	—	—	—	—	—	—	1.12	1.12	< 0.005	< 0.005	—	1.13

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.6	25.6	< 0.005	< 0.005	—	25.6
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.6	25.6	< 0.005	< 0.005	—	25.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.6	25.6	< 0.005	< 0.005	—	25.6
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.6	25.6	< 0.005	< 0.005	—	25.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.23	4.23	< 0.005	< 0.005	—	4.25
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.23	4.23	< 0.005	< 0.005	—	4.25

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.6	25.6	< 0.005	< 0.005	—	25.6
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.6	25.6	< 0.005	< 0.005	—	25.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.6	25.6	< 0.005	< 0.005	—	25.6
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.6	25.6	< 0.005	< 0.005	—	25.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.23	4.23	< 0.005	< 0.005	—	4.25
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.23	4.23	< 0.005	< 0.005	—	4.25

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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

Consumer Products	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Total	0.01	0.13	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.30	0.30	< 0.005	< 0.005	—	0.30
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	24.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	24.5	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.05	0.05	< 0.005	< 0.005	—	0.05
Total	< 0.005	0.08	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.05	0.05	< 0.005	< 0.005	—	0.05

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Total	0.01	0.13	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.30	0.30	< 0.005	< 0.005	—	0.30
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	24.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	24.5	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	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
Consumer Products	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.05	0.05	< 0.005	< 0.005	—	0.05
Total	< 0.005	0.08	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.05	0.05	< 0.005	< 0.005	—	0.05

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Total	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Total	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.19	< 0.005	< 0.005	—	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.19	< 0.005	< 0.005	—	0.25

4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Total	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Total	—	—	—	—	—	—	—	—	—	—	—	0.12	1.02	1.14	0.01	< 0.005	—	1.53
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.19	< 0.005	< 0.005	—	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.19	< 0.005	< 0.005	—	0.25

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Total	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Total	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.04	0.00	0.04	< 0.005	0.00	—	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	0.04	0.00	0.04	< 0.005	0.00	—	0.13

4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78

Total	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Total	—	—	—	—	—	—	—	—	—	—	—	0.22	0.00	0.22	0.02	0.00	—	0.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.04	0.00	0.04	< 0.005	0.00	—	0.13
Total	—	—	—	—	—	—	—	—	—	—	—	0.04	0.00	0.04	< 0.005	0.00	—	0.13

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	7/16/2023	7/17/2023	5.00	1.00	—
Grading	Grading	7/18/2023	7/20/2023	5.00	2.00	—

Building Construction	Building Construction	7/21/2023	12/8/2023	5.00	100	—
Paving	Paving	12/9/2023	12/16/2023	5.00	5.00	—
Architectural Coating	Architectural Coating	12/17/2023	12/24/2023	5.00	5.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45

Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	8.10	LDA,LDT1,LDT2
Site Preparation	Vendor	—	6.90	HHDT,MHDT
Site Preparation	Hauling	38.0	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	8.10	LDA,LDT1,LDT2
Grading	Vendor	—	6.90	HHDT,MHDT
Grading	Hauling	19.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.72	8.10	LDA,LDT1,LDT2
Building Construction	Vendor	0.21	6.90	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	8.10	LDA,LDT1,LDT2
Paving	Vendor	—	6.90	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.14	8.10	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	6.90	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	8.10	LDA,LDT1,LDT2
Site Preparation	Vendor	—	6.90	HHDT,MHDT
Site Preparation	Hauling	38.0	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	8.10	LDA,LDT1,LDT2
Grading	Vendor	—	6.90	HHDT,MHDT
Grading	Hauling	19.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.72	8.10	LDA,LDT1,LDT2
Building Construction	Vendor	0.21	6.90	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	8.10	LDA,LDT1,LDT2
Paving	Vendor	—	6.90	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.14	8.10	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	6.90	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	7,898	2,633	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	300	0.00	0.50	0.00	—
Grading	300	0.00	1.50	0.00	—
Paving	0.00	0.00	0.00	0.00	0.02

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.02	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2023	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	18.9	19.1	17.1	6,809	114	115	103	41,098

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	18.9	19.1	17.1	6,809	114	115	103	41,098

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	2
Conventional Wood Stoves	0
Catalytic Wood Stoves	0

Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	2
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
7897.5	2,633	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	330

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	330

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	12,127	204	0.0330	0.0040	79,800

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	12,127	204	0.0330	0.0040	79,800

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	60,444	388,376

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	60,444	388,376

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	0.41	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	0.41	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	8.12	annual days of extreme heat

Extreme Precipitation	6.30	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	44.2	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	2	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	5	3	0	N/A
Flooding	5	2	0	N/A
Drought	1	3	0	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	2	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	5	3	1	5
Flooding	5	2	1	5
Drought	1	3	1	3
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	11.7
AQ-PM	9.12
AQ-DPM	4.13
Drinking Water	98.1
Lead Risk Housing	12.0
Pesticides	72.4

Toxic Releases	14.4
Traffic	76.9
Effect Indicators	—
CleanUp Sites	79.7
Groundwater	94.3
Haz Waste Facilities/Generators	99.7
Impaired Water Bodies	90.1
Solid Waste	80.1
Sensitive Population	—
Asthma	24.0
Cardio-vascular	9.23
Low Birth Weights	44.8
Socioeconomic Factor Indicators	—
Education	2.30
Housing	30.6
Linguistic	0.51
Poverty	11.7
Unemployment	25.2

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	71.43590402
Employed	49.83959964
Education	—
Bachelor's or higher	81.58603875

High school enrollment	100
Preschool enrollment	55.10073143
Transportation	—
Auto Access	63.41588605
Active commuting	72.18016168
Social	—
2-parent households	99.56371102
Voting	95.94507892
Neighborhood	—
Alcohol availability	92.55742333
Park access	13.01167715
Retail density	6.672654947
Supermarket access	11.53599384
Tree canopy	91.44103683
Housing	—
Homeownership	70.96111895
Housing habitability	67.80443988
Low-inc homeowner severe housing cost burden	27.22956499
Low-inc renter severe housing cost burden	44.15501091
Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	58.10342615
Arthritis	0.0
Asthma ER Admissions	92.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	79.1
Cognitively Disabled	28.0
Physically Disabled	38.4
Heart Attack ER Admissions	93.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	58.2
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	35.8
SLR Inundation Area	50.7
Children	94.5
Elderly	3.9
English Speaking	98.1
Foreign-born	5.8
Outdoor Workers	89.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	94.8

Traffic Density	53.3
Traffic Access	0.0
Other Indices	—
Hardship	9.4
Other Decision Support	—
2016 Voting	96.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	22.0
Healthy Places Index Score for Project Location (b)	81.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	No demolition required
Operations: Road Dust	Project is located off of an unpaved driveway
Land Use	Two, 2.5-acre lots would be created for residential uses

APPENDIX C

BIOLOGICAL RESOURCES ASSESSMENT

BIOLOGICAL RESOURCES ASSESSMENT

6686 Monte Road
San Luis Obispo, California 93401
(APN: 076-251-054)

Prepared for:
Kirt Collins
6686 Monte Road
San Luis Obispo, California 93401

Prepared by:
Terra Verde Environmental Consulting, LLC
3765 South Higuera Street, Suite 102
San Luis Obispo, California 93401

June 2022
Revised December 2022

"As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief"

Signature line

21 June 2022
Date

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EXECUTIVE SUMMARY

This Biological Resources Assessment was prepared by Terra Verde Environmental Consulting, LLC (Terra Verde) at the request of Kirt Collins (applicant) in support of an application to the County of San Luis Obispo (County) for a General Plan Amendment to adjust the land use designation from Agriculture to Rural Residential and an Ordinance Amendment to create a Planning Area Standard intended to regulate future density and development on the property. The proposed project is located at 6686 Monte Road in San Luis Obispo County, California (Assessor Parcel Number [APN]: 076-251-054). The proposed project consists of dividing the existing single approximately 15-acre parcel into three parcels. The General Plan Amendment is to allow for an existing primary dwelling to be located on one 2.5-acre parcel and an additional primary dwelling to be constructed on another separately conveyable 2.5-acre parcel. The remaining non-buildable 10-acre open space parcel would allow for the continuance of existing agricultural structures and activities.

Terra Verde staff conducted a field survey of the proposed project site and surrounding areas on April 21, 2022. The survey area included the limits of proposed disturbance, the remaining property area, and a visual scan of adjacent properties. The surveys included an inventory of botanical and wildlife species observed, a jurisdictional analysis of aquatic resources identified on site, and an assessment of habitat, focusing on the potential for special-status species to occur. Terra Verde determined that 4 special-status botanical species and 9 special-status wildlife species, as well as nesting birds, have the potential to occur on the proposed project site. San Luis Obispo Creek, a U.S. Geological Survey (USGS) blue line drainage, is present along the western property boundary and one other unnamed jurisdictional ephemeral drainage is present along the southern and eastern boundaries. U.S. Fish and Wildlife Service (USFWS)-designated critical habitat for steelhead is present within the waters of San Luis Obispo Creek.

No special-status botanical species were observed during the field survey which was conducted during the typical blooming period for special-status species with the potential to occur onsite. However, coast live oak (*Quercus agrifolia*) woodland was documented within the survey area. A Cooper's hawk (*Accipiter cooperii*; State Watch List) was observed in the survey area; however, no other special-status wildlife was observed during the field survey.

As the project is currently designed, the potential for impacts to biological resources is considered low. Direct impacts to San Luis Obispo Creek, the jurisdictional ephemeral drainage, riparian vegetation, and coast live oak woodland will be avoided. Impacts to special-status wildlife could result from construction-related disturbances such as trampling or crushing from equipment during the construction phase. A series of avoidance, minimization, and mitigation measures have been recommended to reduce potential impacts to a less than significant level.

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TABLE OF CONTENTS

1.0 INTRODUCTION

This Biological Resources Assessment (BRA) was prepared by Terra Verde Environmental Consulting, LLC (Terra Verde) at the request of Kirt Collins (applicant) in support of an application to the County of San Luis Obispo (County) for a General Plan Amendment to adjust the land use designation from Agriculture to Rural Residential and an Ordinance Amendment to create a Planning Area Standard intended to regulate future density and development on the property. The proposed project is located at 6686 Monte Road in San Luis Obispo County, California (Assessor Parcel Number [APN]: 076-251-054) (see Appendix A – Figure 1: Project Vicinity and Survey Area Map).

The proposed project consists of dividing the existing single approximately 15-acre parcel into three parcels. The General Plan Amendment is to allow for an existing primary dwelling to be located on one 2.5-acre parcel and an additional primary dwelling to be constructed on another separately conveyable 2.5-acre parcel. The remaining non-buildable 10-acre open space parcel would allow existing agricultural structures and activities (see Appendix B – Proposed Lot Configuration).

1.1 *Purpose of the Biological Resources Assessment*

The purpose of this report is to identify sensitive biological resources that occur or have potential to occur within the proposed project site and surrounding areas. A sensitive resource is defined here as one that is of management concern to local, county, state, and/or federal resource agencies. Recommended avoidance, minimization, and mitigation measures are included in Section 4.2, to reduce any potential impacts to sensitive biological resources to the extent feasible. As necessary, this BRA may be used to support the County's environmental review process and future project permitting.

1.2 *Existing Conditions*

The proposed project is located within the Pismo Beach U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle. It is situated on the southern flank of the San Luis Range mountains, approximately 3.5 miles south of the City of San Luis Obispo in Squire Canyon. Elevations within the survey area range from approximately 35 to 55 feet (10 to 17 meters). The project site is bound by rural residential and agriculture land use to the north and south, Monte Road to the east, and San Luis Obispo Creek to the west. The property is developed on the eastern most portion of the site with a farmhouse, mobile home, workshop, two agricultural structures, and ground and roof mounted residential-scale photovoltaic solar power arrays. The western portion of the site remains undeveloped, with agricultural row crops and regularly maintained (i.e., mowed) annual grassland. A review of historical aerial imagery indicated that the property has remained relatively unchanged since the mid 1990's.

2.0 METHODOLOGY

Prior to conducting field surveys, Terra Verde staff completed a background review of relevant resources pertaining to sensitive resources known to occur in the project vicinity, which included the following:

- Aerial photographs (Google Earth Pro 1989 – 2022) and proposed lot configuration (see Appendix B)
- USGS topographic map of the Pismo Beach 7.5-minute quadrangle (USGS 2022)
- Online Soil Survey of San Luis Obispo County, California (Natural Resources Conservation Service [NRCS] 2022)
- Consortium of California Herbaria (CCH) online database of plant collections (CCH 2022)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants for the Pismo Beach 7.5-minute quadrangle and the six surrounding quadrangles Arroyo Grande NE, Lopez Mountain, Morro Bay South, Oceano, Port San Luis, and San Luis Obispo (CNPS 2022a).
- California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) list of state and federally listed special-status species documented within the Pismo Beach 7.5-minute quadrangle and the six surrounding quadrangles (CDFW 2022)
- CNDDB map of special-status species that have been documented within a 5-mile radius of the project site (CDFW 2022) (See Appendix A – Figure 3: 5-mile CNDDB and Critical Habitat)
- USFWS Critical Habitat for Threatened and Endangered Species Report (USFWS 2022a) (See Appendix A – Figure 3)
- USFWS National Wetland Inventory (NWI), Wetlands Mapper (USFWS 2022b)

A list of regionally occurring special-status species was compiled based on records reported in the scientific database queries (see Appendix C – Regionally Occurring Special-status Species). This species list was used to inform the field survey effort, and to determine an appropriate survey period for special-status botanical species with potential to occur on site.

Following the review of literature and scientific databases, Terra Verde botanist Amy Golub-Tse and wildlife biologist Santiago Martinez Jr. conducted a field survey of the property on April 21, 2022. The survey consisted of a habitat assessment and vegetation classification, botanical and wildlife species inventory, jurisdictional analysis, and an analysis of the potential for special-status botanical and wildlife species to occur on site.

The survey area included the entire property and a 100-foot buffer on all sides where access was feasible, as well as a visual scan of the surrounding habitat features (see Appendix A – Figure 2). The survey was conducted on foot to ensure complete visual coverage of the survey area. During the survey, all botanical and wildlife species observed, including those detected by indirect sign (i.e., tracks, scat, skeletal remains, dens, burrows, or vocalizations) were documented (see Appendix D – Botanical and Wildlife Species Observed).

Botanical species identifications and taxonomic nomenclature followed *The Jepson Manual: Vascular Plants of California*, 2nd edition (Baldwin et al. 2012), as well as taxonomic updates provided in the Jepson eFlora Project (Jepson Flora Project 2022). Vegetation communities were characterized and classified using the second edition of *A Manual of California Vegetation* (MCV) classification system (Sawyer et al. 2009), as well as updates included in MCV Online (CNPS 2022b). MCV vegetation community classifications were also compared to community descriptions for CDFW-designated sensitive natural communities. The jurisdictional analyses included mapping the linear extent of water and wetland features that may be under the jurisdiction of regulatory agencies including CDFW, the Central Coast Regional Water Quality Control Board (RWQCB), and the U.S. Army Corps of Engineers (Corps) where present.

The habitat requirements for each regionally occurring special-status species identified in the scientific database queries were analyzed and compared to the type and quality of habitats observed on site during the field survey. The potential for many species to occur within the project site was eliminated due to lack of suitable habitat, elevation, appropriate soils/substrate, and/or known distribution of the species. Special-status species for which suitable habitat was identified are discussed in-depth in the following section, and those determined to have no potential to occur based upon a lack of suitable habitat are not discussed (see Appendix C for a complete list of regionally occurring species that were evaluated)

2.1 *Sufficiency of Biological Data*

The field survey and background research completed by Terra Verde are of sufficient detail and biological expertise to identify potentially occurring special-status wildlife species and identify habitats that have the potential to support sensitive resources and/or special-status species. Specifically, the April 2022 survey was timed to coincide with the typical peak blooming and/or fruiting period for a majority of regionally occurring special-status botanical species for which suitable habitat exists on site. A reference population for Pismo clarkia (*Clarkia speciosa* subsp. *immaculata*), a state and federally-listed endangered species, was visited and observed to be in bloom on April 14, prior to the April 21, 2022, field survey. Although the region experienced below-average rainfall during the 2021 to 2022 rain season, site conditions were determined to be normal and the botanical surveys valid. Based on this and the floristic nature of surveys completed on site, it is expected that special-status plant species would have been detectable at the time of the surveys, if present.

During the surveys, visibility and conditions were suitable for the detection of wildlife species and their sign. However, migratory and transient wildlife species, such as birds and large mammals, may only be seasonally present within the survey area. Further, some species are highly transient, nocturnal, scarce, or otherwise cryptic, and therefore may not have been detected during the survey effort. As such, recommendations are provided for the avoidance of special-status species deemed to have potential to occur, based on an assessment of habitat on site.

3.0 RESULTS

The following section provides a summary and analysis of the results of the background research and field survey. The discussion includes a description of soils, terrestrial and aquatic habitat types, direct and indirect observations of botanical and wildlife species, and a discussion of the potential for special-status species to occur. Any anticipated impacts to existing wildlife migration corridors and habitat connectivity are also considered.

3.1 *Habitats and Resources Observed*

The survey area is dominated by agricultural land use and rural residential development. In total, 4 soil units, two jurisdictional drainages, and three natural vegetation communities were documented within the survey area, in addition to developed and agricultural areas. Although marginally suitable habitat for various common and special-status plants and wildlife exists on site, the proposed project footprint and surrounding areas have been subjected to regular anthropogenic disturbances (e.g., rural development, agriculture, tilling, etc.). Historical and current land management practices have greatly reduced the potential for sensitive biological resources within the property.

3.1.1 Soils

The NRCS (2022) online soil report revealed four soil units within the survey area (see Appendix A – Figure 5: Soils Map). The primary characteristics of these soil units are described below.

Soil Unit 110: Briones-Tierra complex, 15 to 50 percent slopes

These moderately steep soils are found on foothills, mountains, and dissected terraces and are formed from weathered sandstone and sedimentary rock. The natural vegetation is mainly annual grasses and forbs, hardwoods, and brush. Typically, the surface layer is gray loamy sand about 26 inches thick. The underlying materials is very pale brown loamy sand about 6 inches thick. These soils occur at elevations of 300 to 2,000 feet. Permeability of these soils is rapid, and the available water capacity is very low. These soils are suitable for rangeland or growing dry farmed beans or small grains.

Soil Unit 131: Diablo and Cibo clays, 15 to 30 percent slopes

These moderately steep soils are on foothills and mountains and are formed from weathered sandstone, shale, or mudstone. The natural vegetation is mainly annual grasses and forbs. Typically, the surface layer is very dark gray clay about 38 inches thick. The underlying material to a depth of about 58 inches is olive gray. These soils occur from 200 to 3,000 feet. Permeability of these soils is slow, and the available water capacity is moderate to very high. These soils are suitable for rangeland.

Soil Unit 135: Elder sandy loam, 2 to 5 percent slopes

These gently sloping soils are on alluvial fans and plains and are formed from weathered sedimentary rocks. The natural vegetation is mainly annual grasses and forbs with

scattered hardwoods. Typically, the surface layer is very dark gray sandy loam about 37 inches thick. The underlying material to a depth of about 60 inches is grayish brown. These soils occur from 100 to 1,000 feet. Permeability of these soils is moderately rapid, and the available water capacity is moderate or high. These soils are suitable for rangeland or hay crops.

Soil Unit 169: Marimel sandy clay loam, occasionally flooded

These nearly levels soils are on alluvial fans, flood plains, and narrow valleys, and are formed from weathered sedimentary rocks. The natural vegetation is mainly annual grasses. Typically, the surface layer is grayish brown sandy clay loam about 16 inches thick. The underlying material to a depth of about 60 inches is stratified grayish brown clay loam and gray and pale olive silty clay loam. These soils occur from 0 to 800 feet. Permeability of these soils is moderately slow, and the available water capacity is high to very high. These soils are suitable for cultivated crops.

3.1.2 Hydrologic Features

San Luis Obispo Creek and an unnamed ephemeral drainage were documented within the survey area (see Appendix A – Figure 5: Hydrologic Resource Map). Each of the hydrologic features included are described in further detail below (see Table 1 – Summary of Jurisdictional Aquatic Features).

Table 1. Summary of Jurisdictional Aquatic Features

Feature ID	Feature Type	Feature Designation*	Agency Jurisdiction*
San Luis Obispo Creek	USGS blue line; Perennial	Waters of the state, Waters of the U.S.	CDFW, RWQCB, Corps
Drainage 1	USGS blue line; Ephemeral	Waters of the state, Waters of the U.S.	CDFW, RWQCB, Corps

*Jurisdictional determinations are based on the field assessments completed by Terra Verde and are subject to concurrence from the relevant agencies.

San Luis Obispo Creek is a mapped USGS blue line drainage that flows south along the western boundary of the property. This perennial feature maintains connectivity to a Traditionally Navigable Water, the Pacific Ocean, and has a clearly defined bed and bank, including evidence of an ordinary high water mark (OHWM) in the vicinity of the survey area. As such, San Luis Obispo Creek would be considered waters of the state under the jurisdiction of CDFW and RWQCB, and waters of the U.S. under the jurisdiction of the Corps.

Drainage 1 is an unnamed ephemeral drainage that flows generally west from a culvert under Monte Road, through a heavily incised channel in the disturbed grassland, to San Luis Obispo Creek (see Appendix E). This feature has a clearly defined bed and bank, including connectivity to the Pacific Ocean, via San Luis Obispo Creek. As such, it is assumed this drainage would be considered waters of the state under the jurisdiction of CDFW and RWQCB, and waters of the

U.S. under the jurisdiction of the Corps. The proposed residential development on the east side of the property has been designed to avoid direct impacts to the jurisdictional drainages and associated riparian vegetation.

3.1.3 Vegetation Communities

Vegetation communities and land cover types were assessed, classified, and mapped based on vegetation composition, structure, and density, with consideration of known land management practices (see Appendix A – Figure 5: Vegetation Communities). The project area mostly consists of agricultural land use and disturbed annual brome grassland. Small portions of coast live oak woodland and arroyo willow thicket, associated with the drainages, are also within the survey area.

A total of 32 vascular plant species were identified in the survey area, of which 22 (69 percent) were non-native. The natural vegetation communities and land cover types are described below.

Agriculture (7.2 acres)
Most of the survey area consists of active agriculture (i.e., common barley [*Hordeum vulgare*]). This land cover type does not correspond with an MCV classification and due to the intensive level of ongoing disturbance, this area likely only provides foraging habitat for wildlife.

Annual Brome Grassland (5.3 acres)
This community occurs in the areas between agricultural crops and developed portions of the property (see Appendix E – Representative Site Photographs). This community is dominated by ripgut brome (*Bromus diandrus*), associates include barley (*Hordeum murinum*), redstem filaree (*Erodium cicutarium*), prickly sow thistle (*Sonchus asper*), and telegraph weed (*Heterotheca grandiflora*).

This species composition was used to determine the community classification, which most closely corresponds with the *Bromus* spp. Semi Natural Herbaceous Alliance (annual brome grasslands) in the MCV classification system. This community is widespread and may occur in any topographic setting in foothills, waste places, rangelands, and openings in woodlands at elevations below 7,200 feet (2,200 meters). This community provides habitat for nesting birds, burrowing mammals and their predators, herbivores, and other wildlife.

Arroyo Willow Thicket (0.8 acre)
This community occurs in a strip along or adjacent to San Luis Obispo Creek. This community is dominated by arroyo willow (*Salix lasiolepis*) with scattered Fremont cottonwood (*Populus fremontii* subsp. *fremontii*) and an understory of mule fat (*Baccharis salicifolia* subsp. *salicifolia*), western poison oak (*Toxicodendron diversilobum*), poison hemlock (*Conium maculatum*), and fennel (*Foeniculum vulgare*).

This species composition was used to determine the community classification, which most closely corresponds with the *Salix lasiolepis* Shrubland Alliance (arroyo willow thickets) in the MCV classification system. This community occurs in streambanks and benches, slope seeps,

and stringers along drainages at elevations below 7,120 feet (2,170 meters). This community provides habitat for nesting birds, small mammals, and other wildlife.

Coast Live Oak Woodland (1.07 acres)
Coast live oak woodland was observed in the upland area, between the eastern bank of the unnamed ephemeral drainage and Monte Road. This area is dominated by coast live oak, with other species in the canopy including scattered arroyo willow. The understory consisted of herbaceous species such as grasses and thistles.

This species composition was used in determining the vegetation community classification, which most closely corresponds with the *Quercus agrifolia* Woodland Alliance (coast live oak woodland) in the MCV classification system. This community typically occurs on alluvial terraces, canyon bottoms, stream banks, slopes, and flats. This community provides valuable habitat for nesting birds, small mammals, and other wildlife.

Developed (1.9 acres)
The remaining survey area is characterized as developed land. Developed land is not a natural vegetation community, but rather, is defined by areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is characterized by permanent or semi-permanent structures, and pavement or hardscape. Areas where no natural land is evident due to a large amount of debris or other materials being placed upon it may also be considered developed (i.e., roads, pullout areas, etc.). Developed portions of the site are comprised of residential buildings, agricultural ancillary structures, and ornamental plantings. This area has low habitat value for wildlife.

3.1.4 Wildlife

The habitat within and adjacent to the survey area is suitable for a variety of common and special-status wildlife species. Mature trees provide nesting opportunities for various passerine bird species; refugia and food resources for mammals and reptiles; and browsing opportunities for herbivores. Grassland habitat on site provides marginally suitable for ground-nesting birds; transient, foraging wildlife; and burrowing mammals.

Cooper's hawk, a State Watch List species, was observed within the survey area and is discussed in further detail in section 3.2.2. No other special-status wildlife species were observed during the field survey. However, numerous additional avian species, as well as other terrestrial wildlife, were detected throughout the survey area. A comprehensive list of all wildlife species observed during the surveys is included in Appendix D – Botanical and Wildlife Species Observed.

3.2 *Sensitive Resources*

Based on the results of the background research, it was determined that 9 sensitive natural communities, 109 regionally occurring special-status plant species, and 37 regionally occurring special-status wildlife species occur in the area. A review of the habitat requirements for each of these species in comparison with site conditions narrowed the list to 4 special-status plant

species and 9 special-status wildlife species that have potential to occur within the overall survey area. These species and their habitat requirements are discussed in further detail below.

3.2.1 Special-status Plant Species

Based on a review of the relevant literature and an assessment of site conditions, Terra Verde determined that there is suitable habitat on site for 4 special-status botanical species. In addition to species listed on the federal and California Endangered Species Acts, special-status plant species include those that are assigned a California Rare Plant Rank (CRPR) by the CNPS. Species are assigned a listing status based on the degree of rarity (Lists 1A through 4) and threat level (0.1, 0.2, and 0.3) (CNPS 2022a).

The following paragraphs provide a description of the special-status plant species that have the potential to occur on site.

Miles' Milkvetch (*Astragalus didymocarpus* var. *milesianus*), CRPR 1B.2
Miles' milk-vetch is an annual herb that is endemic to the central and southern coast of California. Its known range is concentrated along the Outer South Coast Ranges of San Luis Obispo and Santa Barbara Counties. This species typically occurs in clay soils in association with grassy areas and scrub near the coast. It has been documented at elevations below 400 meters and the typical blooming period is from March to May (Jepson Flora Project 2022). Documented threats to this species include development (CNPS 2022a).

According to CNDDB records (CDFW 2022), the nearest documented occurrence is more than 6.5 miles north of the project site. Marginally suitable habitat for this species is present in the herbaceous layer along the margins of the woodland habitat. This species was not detected during an appropriately timed botanical survey. Based on a lack of detection and lack of nearby documented occurrences, this species is not expected to occur.

Cambria Morning-glory (*Calystegia subacaulis* subsp. *episcopalis*), CRPR 4.2
Cambria morning-glory is a perennial herb that is endemic to central California. Its known range is concentrated along the coastal ridges and foothills of the Outer South Coast Ranges of San Luis Obispo County. This species typically occurs in clay soils in association with various vegetation communities including grassland, chaparral, and woodland. It has been documented at elevations up to 500 meters and is known to tolerate disturbance. The typical blooming period is from April to June (Jepson Flora Project 2022). Documented threats to this species include development, alteration of fire regimes, and competition from non-native species (CNPS 2022a).

According to CNDDB records (CDFW 2022), the nearest documented occurrence of this species is approximately 3 miles north of the site. Marginally suitable habitat for this species is present in the herbaceous layer along the margins of the woodland habitat. This species was not observed during an appropriately timed botanical survey. As such, this species is not expected to occur.

San Luis Obispo Owl's-clover (*Castilleja densiflora* subsp. *obispoensis*), CRPR 1B.2
San Luis Obispo owl's-clover is an annual herb that is endemic to San Luis Obispo County. Specifically, it is known to occur mostly in coastal areas along the Outer South Coast Ranges from just south of Ragged Point to Avila Beach, with several populations occurring in the Irish Hills. This species typically occurs in coastal grasslands at elevations below 400 meters and may be somewhat tolerant of disturbance. The typical blooming period is from March to June (Jepson Flora Project 2022). Documented threats to this species include development and grazing (CNPS 2022a).

According to CNDDB records (CDFW 2022), the nearest documented occurrence of this species is approximately 0.75 mile and 2 miles east of the site. Marginally suitable habitat for this species is present in the herbaceous layer along the margins of the woodland habitat. This species was not observed during an appropriately timed botanical survey. As such, this species is not expected to occur.

Pismo Clarkia (*Clarkia speciosa* subsp. *immaculata*), FE / SR / CRPR 1B.1
Pismo clarkia is an annual herb that is endemic to the Outer South Coast Ranges of southern San Luis Obispo County. This species occurs on sandy coastal hills, generally in openings of oak woodland at elevations below 100 meters. The typical blooming period is from May to July (Jepson Flora Project 2022). Documented threats to this species include development, road maintenance, and possibly grazing (CNPS 2022a).

According to CNDDB records (CDFW 2022), the nearest documented occurrence of this species is approximately 0.3 mile east of the project site. A reference population of Pismo clarkia was checked and observed to be in bloom at the time of the April 2022 survey (see Appendix E – Representative Site Photographs). This species was not detected during an appropriately timed botanical survey. As such, this species is not expected to occur.

Native Oak Trees (*Quercus* spp.), *Protected under California Environmental Quality Act (CEQA) (Senate Bill 1334/Kuehl Bill and California Public Resources Code 21083.4)*
Impacts to or removal of mature oak trees (i.e., greater than six inches in diameter at breast height [DBH]) is evaluated under CEQA. As a CEQA Lead Agency, the County of San Luis Obispo currently applies a 4:1 mitigation ratio for removed trees and a 2:1 mitigation ratio for impacted trees. Several mature coast live oak trees are present in association with the unnamed ephemeral drainage along the eastern boundary of the property. Based on the current development plans, no impacts to oak trees will occur.

3.2.2 Special-status Wildlife Species

Based on a review of the relevant literature and an assessment of site conditions, it was determined that suitable habitat for 9 special-status wildlife species occurs within the survey area, in addition to nesting habitat for migratory bird species. The following paragraphs provide a description for all the special-status wildlife species for which suitable habitat was identified on

site, and recommendations for the avoidance, minimization, and mitigation of impacts to these species are included in Section 4.2

Sensitive Amphibian Species

California Red-legged Frog (*Rana draytonii*), Federal Threatened (FT) / State Species of Special Concern (SSC)

The CRLF is endemic to California and northern Baja California, historically ranging from Mendocino County south along the coast to Baja and east from the Northern Sacramento Valley to the foothills of the Sierra Nevada at elevations up to 5,000 feet. This species requires permanent or semi-permanent bodies of water, such as lakes, streams, and ponds with emergent vegetation. They use lowland and grassland areas to hunt and forage for food. Adult frogs consume invertebrates, mice, fish, frogs, and larvae of other amphibians. Tadpoles are thought to consume algae floating on the water's surface or growing on rocks and plants. Breeding typically occurs over a one-to-two-week period between late November and early April (depending on local environmental conditions) and females lay egg masses in the water which the male externally fertilizes. The egg masses are often attached to aquatic vegetation and tadpoles hatch approximately four weeks later. Most tadpoles metamorphose in four to seven months, but some will do so the next summer. During periods of wet weather, individuals may make overland dispersal movements through upland habitats, typically at night. Evidence from San Luis Obispo and Santa Cruz counties suggest movements, via upland habitats, from 0.40 kilometer (0.25 mile) to more than 1.08 kilometers (1.74 miles) are possible over the course of a wet season (Bulgar et al. 2003). However, during dry period's frogs are rarely encountered far from water (USFWS 2002). Current threats to extant populations of red-legged frogs include non-native predators, such as bullfrogs and centrarchid fishes, urban and agricultural development, and pesticide pollution (Nafis 2022).

According to CNDDB records (CDFW 2022), the nearest documented occurrence of CRLF is 1.2 miles south of the site in Gragg Canyon. However, additional CNDDB occurrences are documented within the waters of San Luis Obispo Creek. Based on the proximity of San Luis Obispo Creek to the project site and dispersal capability of this species, there is low potential for CRLF to occur in the project site.

Southwestern Pond Turtle (*Actinemys marmorata*), SSC

Western pond turtles historically ranged from Baja California north to British Columbia, generally west of the Sierra Nevada and Cascade Range. This genus has been divided into two proposed new species, Southwestern pond turtle and Northwestern pond turtle, with the division occurring roughly near the Bay Area of California (Stebbins and McGinnis 2018). Substantial population declines, largely due to habitat loss, streambed alteration, and fragmentation of aquatic and nesting habitats, have been observed throughout most of the species' range (Stebbins and McGinnis 2018, Bury and Germano 2008). The release of the more fecund pet red-eared sliders (*Trachemys scripta elegans*) into aquatic environments is another perpetual threat to the species. Western pond turtle currently is designated a

California Species of Special Concern and the status is under review by USFWS for listing under the federal Endangered Species Act. Western pond turtles inhabit many types of permanent and ephemeral aquatic habitats, including sloughs, rivers, ponds, lakes, vernal pools, and marshes, as well as human-constructed water bodies such as irrigation ditches and impoundments and other human-made bodies of water that provide adequate basking sites (e.g., logs, rocks, mats of floating vegetation, or open mud banks), emergent vegetation, and underwater refugia (e.g., rocks or submerged vegetation) (Spinks et al. 2003). The turtles also spend significant time on land, frequently moving between aquatic and upland habitats to nest, aestivate, and overwinter. Their diet is varied and can include aquatic plants, invertebrates, frog eggs, crayfish, and occasionally fish. Between May and August, females move upland to excavate nesting chambers approximately 4 inches deep in clay or silty soil. Nests are usually partially or completely concealed beneath soil, moss, detritus, and leaf and needle litter. Nests usually are found within 165 feet of the water's edge, but females sometimes move overland to find suitable nesting sites more than 1,300 feet away. Eggs incubate for 94 to 122 days, or more, and females can have up to three clutches per season. Hatchlings do not leave the nest area immediately and typically remain at their nests for an average of 25 days and up to 59 days after hatching (Rosenberg and Swift 2013).

According to CNDDB records (CDFW 2022), the nearest documented occurrence of this species is approximately 3.0 miles north of the project site. The occurrence records indicate the species has been recorded regularly within a swale on the north side of San Luis Obispo Creek since 2001. Based on the proximity of San Luis Obispo Creek to the project site and dispersal capability of this species, there is low potential for southwestern pond turtle to occur in the project site.

Sensitive Fish Species

Steelhead – South-central California Coast DPS (*Oncorhynchus mykiss*), FT

South/Central California Coast DPS contain steelhead runs from the Pajaro River south to, but not including the Santa Maria River. These fish live in the ocean as adults but migrate to freshwater streams or creeks that have cool, flowing water, access to the ocean, and available food sources for spawning. Adults in San Luis Obispo County enter freshwater systems for spawning from December to March, depending on specific stream conditions. Specific habitat requirements for south-central California coast steelhead vary by life stage. In general, the crucial requirements of steelhead habitat include adequate substrate, water quality, water quantity, water temperature, water velocity, and cover from riparian vegetation. This DPS of steelhead tends to utilize perennial streams dominated by woody debris with relatively stable water flows. According to the NOAA/NMFS, critical habitat is currently designated for steelhead, which includes the lower reaches of San Luis Obispo Creek (NOAA 2005).

According to CNDDB records (CDFW 2022), the nearest documented occurrence of steelhead is 2.7 miles northwest of the site in a tributary to San Luis Obispo Creek. Additionally, San Luis Obispo Creek and its tributaries are known to contain steelhead, based on census surveys completed since the 1960's (Central Coast RWQCB 1996). No impacts are proposed in or

immediately adjacent to San Luis Obispo Creek, therefore no impacts are expected to occur to Steelhead.

Sensitive Invertebrate Species

Crotch Bumble Bee (*Bombus crotchii*), State Candidate Endangered

Crotch bumble bee inhabit open grassland and scrub habitats primarily in California, from Sacramento south into Mexico, and from the coast east into Nevada. Bumble bee colonies are annual with the queen mating in the fall before overwintering alone. In the spring the queen emerges and established a new colony by producing female workers and male drones. Not much is known about Crotch bumble bee overwintering sites (Hatfield et al. 2020). Generally, bumble bees overwinter in soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Queens emerge between February and April (Thorp et al. 2010) and establish a colony. Colonies are usually underground in abandoned holes made by ground squirrels, mice, and rats, or occasionally abandoned bird nests (Osborne et al. 2008). However, bumble bees may also nest above ground in tufts of grass or cavities in downed wood, rock walls or brush piles. Crotch bumble bee are generalist foragers, feeding on a variety of flowering plants (Hatfield et al. 2020). Like other bumble bees, this species feeds on both the nectar and the pollen. Select food plant genera include *Fabaceae*, *Apocynaceae*, *Asteraceae*, *Lamiaceae*, and *Boraginaceae* (Hatfield et al. 2020). Queens mate in the fall and overwinter starting in October. Threats to this species include loss of habitat due to agriculture and development, degradation of habitat due to invasive species, livestock grazing, and herbicide use, and decreases in small mammal population due to poisoning.

According to CNDDB records (CDFW 2022), the nearest documented occurrence of Crotch bumble bee is 6.1 miles northeast of the project site, in the city of San Luis Obispo. This occurrence describes one observed individual during bi-monthly surveys conducted between May and October of 2009. The occurrence also states that no individuals were detected during similar survey efforts in 2007 and 2008. Marginally suitable nesting habitat (e.g., small mammal burrows and brush piles) is present on site. However, due to frequent disturbance (i.e., mowing) throughout the site, habitat for this species is degraded. There is a low potential for Crotch bumble bee to occur in the project site.

Western Bumble Bee (*Bombus occidentalis*), State Candidate Endangered

Prior to 1998, the western bumble bee was both common and widespread throughout the western United States and western Canada. Recently, this bumble bee has undergone a drastic decline throughout some areas of its former range. While viable populations still exist in Alaska and east of the Cascades in the Canadian and U.S. Rocky Mountains, the once common populations of central California, Oregon, Washington and southern British Columbia have largely disappeared (Evans et al. 2008). Western bumble bees are generalist foragers and as such, gather pollen and nectar from a wide variety of flowering plants. The major threats to bumble bees include: spread of pests and diseases by the commercial bumble bee industry, other pests and diseases, habitat destruction or alteration, pesticides,

invasive species, natural pest or predator population cycles, and climate change (Evans et al. 2008).

According to CNDDB records (CDFW 2022), the nearest documented occurrence of Western bumble bee is 0.6 mile southwest of the project site, approximately 7 miles south of the city of San Luis Obispo. This historic occurrence describes one individual collected in July of 1936. Marginally suitable nesting habitat (e.g., small mammal burrows and brush piles) is present on site. However, due to frequent disturbance (i.e., mowing) throughout the site, habitat for this species is degraded. There is a low potential for Western bumble bee to occur in the project site.

Sensitive Mammal Species

Mountain Lion (*Puma concolor*), State Candidate Threatened
Mountain lions' range throughout most of California from sea level to alpine meadows, with the exception of xeric regions of the Mojave and Colorado deserts in southeastern California. It is primarily a predator of small to large mammals but will also feed on birds, fish, insects, grass, and berries. Mountain lions are typically active at night and during dusk and dawn. Timing of reproduction can vary but, in California, most births occur in spring. Litter size is usually two to four young. Young remain with the mother until they are about two years old. Individual home ranges can be between three and fifteen square miles, and male home ranges are typically larger than those of females. Habitat fragmentation due to development and associated roads and power transmission corridors restricts movement and increase proximity and encounter rates with humans, which can be detrimental to mountain lion populations (Zeiner et al. 1988 – 1990a).

Mountain lions in Southern California and Central Coast Regions were given Candidate status under the California ESA and therefore have not previously been tracked by CNDDB (CDFW 2022). However, based on local biological knowledge of the species, mountain lions inhabit the adjacent undeveloped lands and dense oak and riparian habitats near the project site. As such, there is potential for mountain lions to use the project site.

Pallid Bat (*Antrozous pallidus*), State Species of Special Concern (SSC)
Pallid bats range throughout the North American west, from southern British Columbia to central Mexico. They are common throughout California, except for high elevations, and are found in a variety of habitats, such as grasslands, shrublands, woodlands, and mixed conifer forests but are most commonly found in dry habitats with rocky outcrops (Verts and Carraway 1998). Colonies often consist of 20 to several hundred individual bats. Pallid bats will use a variety of roosts, like caves, rock crevices, mines, trees, and buildings. They are yearlong residents in their home range and hibernate during the winter (Vaughan and O'Shea 1967). These bats undergo daily torpor and are most active a couple of hours after sunset and shortly before sunrise. Pallid bats display the unique characteristic of foraging for invertebrates, and sometimes lizards and small mammals, on the ground, fulfilling a niche but also making them vulnerable to terrestrial predators. Mating occurs in the fall (October and November) and,

after delayed fertilization, young are gestated for 53—71 days and 1—3 are born between April and July. Young are weaned at 7 weeks but stay with the female for a year-long learning period (Bassett 1984). Pallid bats are sensitive to disturbance and will readily abandon roosting sites.

According to CNDDB records (CDFW 2022), the nearest documented occurrence of this species is approximately 6.6 miles north of the site. Suitable roosting habitat is present in the cavities of mature trees and the buildings on site.

Sensitive Avian Species and Migratory Nesting Birds

Cooper's Hawk (*Accipiter cooperii*), SSC

Cooper's hawk is known to occur throughout the southern United States and Mexico from coast to coast. Nesting habitat for this species is primarily in dense stands of coast live oak and riparian forests. This species nests and forages in close proximity to open water or riparian vegetation (Zeiner et al. 1988-1990b). Prey for Cooper's hawk consists of birds, small mammals, amphibians, and reptiles. Cooper's hawk is tolerant of human activity and will nest in relatively close proximity to developed and suburban areas. Declines in California populations can be attributed to loss of habitat through urbanization and development (Reeser 2006).

According to CNDDB records (CDFW 2022), the nearest documented occurrence of this species is approximately 10.9 miles north of the project site. Additionally, this species was observed during the April 2022 survey. Suitable nesting habitat is present within oak woodland on site for Cooper's hawk.

Western Yellow-billed Cuckoo (*Coccyzus americanus*), FT, State Endangered

Western yellow-billed cuckoo historically nested west of the Continental Divide, from British Columbia south into northern Mexico. They no long occur in much of their historic range, found only locally along rivers in Arizona, California, and New Mexico, migrating to wintering grounds in South America. Western yellow-billed cuckoo's are found in low- to moderate-elevation riparian forests during breeding, such as cottonwood-willow forests (*Populus* spp. and – *Salix* spp.), although other riparian tree species can be important components of breeding habitat as well, such as alder (*Alnus* spp.), box elder (*Acer negundo*), oak (*Quercus* spp.), etc. They require relatively large (>20 hectares), contiguous patches of multilayered riparian habitat for nesting and create a loosely-built, flat, saucer-shaped stick nest on a horizontal branch (typically in a willow tree) approximately 1 to 6 meters above the ground (Daw 2014).

According to CNDDB records (CDFW 2022), the nearest documented occurrence of this species is approximately 0.4 mile southwest of the project site within the San Luis Obispo Creek corridor. Although marginally suitable nesting habitat is present within the riparian canopy at the edge of the property, the CNDDB occurrence is a historical 1932 record, and no other nests are documented within San Luis Obispo County. The likelihood of nesting western yellow-billed cuckoo within the project area is very low.

Migratory Nesting Birds

In addition to those species protected by the state or federal government, all native avian species are protected by state and federal legislature, most notably the Migratory Bird Treaty Act (MBTA) and the CDFW Fish and Game Code. Collectively, these regulations make it unlawful to collect, sell, pursue, hunt, or kill native migratory birds, their eggs, nests, or any parts thereof. Avian species are expected to occur within the project area during all seasons and throughout construction of the proposed project. The potential to encounter and disrupt these species is generally highest between February 1 and August 31, when nests are likely to be active with eggs and/or young present. The individual mature trees around the proposed project site present the highest quality habitat for nesting birds, but open grasslands may also provide nesting habitat for various ground-nesting species. Raptors are particularly drawn to large trees and structures, and they are generally less tolerant of disturbances than other species.

Recommended avoidance and minimization measures for the protection of special-status species, including migratory nesting birds, that may occur within the project site are provided in Section 4.2 below.

3.2.3 Sensitive Habitats

Federal and State Waters and Wetlands

As described above, San Luis Obispo Creek and the unnamed ephemeral drainage maintain connectivity to a traditional navigable waterway. Banks of the drainages and associated riparian vegetation (i.e., arroyo willow thicket, coast live oak woodland) are within the jurisdiction of CDFW and RWQCB, while the bed, below the OHWM, is within the jurisdiction of the Corps.

NOAA/NMFS and USFWS-designated Critical Habitat

According to the Federal Register, NOAA/NMFS has designated critical habitat for the south-central California coast steelhead DPS within the San Luis Obispo Creek watershed. This critical habitat unit extends from just upstream of the mouth of San Luis Obispo Creek to the headwaters of Brizziolari Creek, Froom Creek, Prefumo Creek, San Luis Obispo Creek, See Canyon Creek, Stenner Creek, and one unnamed tributary. This area has been deemed essential for the long-term survival and reproduction of steelhead within the south-central California coast DPS (NOAA 2005). No impacts are proposed in or immediately adjacent to San Luis Obispo Creek.

3.3 *Habitat Connectivity*

Maintaining connectivity between areas of suitable habitat is critical for the survival and reproduction of plants and wildlife. Intact habitats benefit plants by ensuring proper dispersal of pollen and seeds, which sustains or grows the population and contributes to the genetic health of the species. Wildlife need contiguous habitats to attain sufficient food resources for their energetic demands; to locate proper resting, burrowing, and/or nesting sites; to facilitate long-distance travel or migration to seek out mates or resources; and for the safe and successful dispersal of young. The project site is located within a natural topographic corridor (i.e., Squire

Canyon) for wildlife associated with San Luis Obispo Creek. Although San Luis Obispo Creek runs through the canyon, adjacent to the property, historical agricultural practices and the development of State Route 101 has removed most of the natural vegetation associated with the corridor, impacting habitat quality and limiting movement of wildlife in the area. As such, existing habitat and movement corridors in the vicinity of the project are somewhat fragmented. The proposed project, as planned, will avoid impacts to San Luis Obispo Creek and remnant coast live oak woodland. The project may reduce the quality of natural habitat remaining on site but is not expected to substantially increase the current level of habitat fragmentation in the region, nor is it expected to create a significant barrier to wildlife movement.

4.0 IMPACT ASSESSMENT AND MITIGATION

4.1 *Summary of Potential Impacts*

The proposed project has the potential to directly and/or indirectly impact sensitive habitats, special-status wildlife, migratory nesting birds, mature oak trees, and special-status botanical species. Direct impacts to wildlife could result from injury or death via construction-related disturbances such as vehicle strikes or crushing of underground refugia from equipment or other construction activities such as grading, vegetation trimming or removal, and excavation. Long-term direct impacts to wildlife could result from operational activities. Indirect impacts could result from construction noise, harassment, dust emissions, or other disruptions during construction.

4.1.1 Impacts to Special-status Wildlife

Special-status Amphibians and Reptiles

CRLF and Southwestern pond turtle are likely utilizing San Luis Obispo Creek and associated riparian habitat areas as dispersal corridors in the vicinity of the project site. In addition, due to the dispersal capability of these species, they may also occur in upland areas of the site. If individuals are present during construction, they could be crushed or trampled by vehicles and equipment.

Special-status Invertebrate Species

Impacts to Crotch bumble bee and Western bumble bee may occur if they are present on site at the time of construction by causing the injury or mortality of adults, eggs, and larvae, burrow collapse, nest abandonment, and reduced nest success.

Special-status Mammals

Direct impacts to mountain lion may occur during construction as a result of vehicle strikes. Indirect impacts to this species could occur as a result of increased short- and long-term anthropogenic activity in the vicinity and potential primary and secondary exposure to agricultural or residential-use chemicals, including rodenticides. Indirect impacts to pallid bat may occur during short term construction activities if they are roosting in nearby mature trees with cavities or ancillary structures.

Sensitive and Nesting Birds/Raptors

Direct impacts to bird and raptor species including sensitive species are most likely to occur if construction activities take place during the typical avian nesting season, generally February 1 through August 31. Indirect impacts may occur due to habitat loss (e.g., removal of suitable nesting trees) or construction-related disturbances that may deter nesting or cause nests to fail.

4.1.2 Impacts to Sensitive Communities and Habitats

Hydrological Resources

No direct impacts are proposed to either drainage within the survey area, and the edge of new development will be setback from their jurisdictional limits. However, indirect impacts could occur to the unnamed ephemeral drainage during construction activities as a result of altered flow patterns, sedimentation, and increased runoff. Recommendations are provided for the avoidance minimization of potential indirect impacts to the unnamed ephemeral drainage during construction in Section 4.2 below.

4.2 *Recommended Avoidance and Minimization Measures*

4.2.1 General Avoidance and Minimization Measures

Measure 1: Environmental Awareness Training

An environmental awareness training shall be presented to all construction personnel by a qualified biologist prior to the start of any project activities. The training shall include color photographs and a description of the ecology of all special-status species known or with potential to occur, as well as other sensitive resources requiring avoidance during construction. The training shall also include a description of protection measures required by discretionary permits, an overview of the Federal and State Endangered Species Acts, and implications of noncompliance with these regulations. This will include an overview of the required avoidance, minimization, and mitigation measures. A sign-in sheet with the name and signature of the qualified biologist who presented the training, and the names and signatures of the environmental awareness trainees will be kept. A fact sheet conveying the information provided in the environmental awareness training will be provided to all project personnel.

Measure 2: Site Maintenance and General Operations

The following general measures are recommended to minimize impacts during active construction:

- The use of heavy equipment and vehicles shall be limited to the proposed project limits and defined staging areas/access points. The boundaries of each work area shall be clearly defined and marked with high visibility fencing. No work shall occur outside these limits.
- Project plans, drawings, and specifications shall show the boundaries of all sensitive resource areas and the location of erosion and sediment controls, delineation of construction limits, and other pertinent measures to ensure the protection of sensitive habitats and resources.

- Staging of equipment and materials shall occur in designated areas with appropriate demarcation and perimeter controls. No staging areas shall be located within 100 feet of sensitive habitat or aquatic resources.
- Secondary containment, such as drip pans, shall be used to prevent leaks and spills of potential contaminants.
- Washing of concrete, paint, or equipment, and refueling and maintenance of equipment shall occur only in designated staging areas. These activities will occur at a minimum of 25 feet from sensitive habitat or aquatic resources, including drainages. Sandbags and/or absorbent pads and spill control kits shall always be available on site to clean up and contain fuel spills and other contaminants.
- Construction equipment shall be inspected by the operator daily to ensure that equipment is in good working order and no fuel or lubricant leaks are present.
- Plastic monofilament netting (erosion control matting) or similar material will not be used on site due to the potential to entangle special-status wildlife. Acceptable substitutes are coconut coir matting, biodegradable fiber rolls, or tackified hydroseeding compounds.
- The use of pesticides (including rodenticides) and herbicides on the project shall be in compliance with all local, state, and federal regulations to avoid primary and secondary poisoning of sensitive species that may be using the site.
- During project activities, all trash that may attract predators or scavengers shall be properly contained, removed from the work site, and disposed of at the end of each work week. Following construction, all trash and debris shall be removed from work areas.
- After completion of the project's construction, all protective fencing/flagging used to delineate sensitive biological resources shall be removed from the project area and disposed of in appropriate waste receptacles or reused.

4.2.2 Avoidance and Minimization of Impacts to Special-status Wildlife

Measure 3: Protection Measures for CRLF and Southwestern Pond Turtle

- To minimize the potential for impacts to dispersing/migrating special-status amphibians and reptiles, work shall occur during dry conditions, as feasible. If work is scheduled to start during the typical rainy season (October through April), when CRLF are most likely to be dispersing, no work shall occur during or immediately after rain events of 0.25-inch or greater.
- All construction activities shall cease at dusk and not start before dawn.

Measure 4: Pre-construction Surveys for CRLF and Southwestern Pond Turtle

A qualified biologist shall conduct a pre-construction survey within 48-hours prior to the start of work to ensure special-status amphibians and reptiles are not present within proposed work areas. In the event CRLF are identified, all work shall be halted until appropriate resource agencies are contacted for further guidance.

Measure 5: Pre-construction Surveys for Crotch Bumble Bee and Western Bumble Bee
A qualified biologist shall conduct a pre-construction survey within 48-hours prior to the start of work to ensure crotch and/or western bumble bees are not present within proposed work areas. If bumble bees of any species are observed, they shall be photographed for identification following the USFWS guidance in *Appendix A - Standardized Bee Photography* in the *Survey Protocols for the Rusty Patched Bumble Bee (Bombus affinis)* (USFWS 2019). If individual crotch or western bumble bees are observed, they shall be avoided to ensure no "take" occurs. If crotch or western bumble bee colonies are identified, the qualified biologist shall implement a minimum 50-feet no-disturbance buffer to avoid take and potentially significant impacts until it has been determined that the colony is no longer active. All sightings of crotch or western bumble bee shall be reported to the California Natural Diversity Database.

Measure 6: Protection Measures for Mountain Lion
Because mountain lions are large, highly mobile predators, and no denning habitat was identified on site, a pre-construction survey targeted to mountain lions is not deemed necessary. Rather, assuming mountain lions have the potential to use the project site, the general avoidance and minimization measures listed in Section 4.2.1 are also intended to avoid and/or minimize impacts to mountain lions during the construction phase.

Measure 7. Pre-construction Survey for Pallid Bat
Prior to the start of work, all suitable roosting habitat for pallid bats (e.g., mature oak trees, existing structures) within 100 feet of work areas shall be surveyed to determine if bats are roosting in these areas. If bats are detected and impacts are deemed unavoidable, a bat exclusion plan shall be developed and submitted to CDFW for approval prior to implementing any exclusion methods. If no bats are detected, no further action is required.

Measure 8: Pre-construction Survey for Nesting Birds
If work is planned to occur between February 1 and August 31, a qualified biologist shall survey the area for nesting birds within one week prior to activity beginning on site. If nesting birds are located on or near the proposed project site, they shall be avoided until they have successfully fledged, or the nest is no longer deemed active. A non-disturbance buffer of 50 feet shall be placed around non-listed, passerine species, and a 250-foot buffer will be implemented for raptor species. All activity will remain outside of that buffer until a qualified biologist has determined that the young have fledged or that proposed construction activities would not cause adverse impacts to the nest, adults, eggs, or young. If special-status avian species are identified, no work will begin until an appropriate buffer is determined in consultation with the local CDFW biologist, and/or the USFWS.

4.2.3 Avoidance and Minimization of Impacts to Sensitive Habitats

Measure 9: Protection of Federal and State Waters
In addition to Measure 2, the following recommendations have been provided to protect drainage features and aquatic resources on site:

- The limits of the jurisdictional drainages, as well as appropriate setbacks (i.e., 25 feet) shall be shown on project site plans. All construction activities shall remain outside of the jurisdictional limits and equipment and vehicle staging, refueling, washing of concrete, and soil stockpiles shall remain outside the 25-foot setback.
- To prevent erosion and sedimentation into drainages during construction, an erosion and sedimentation control plan shall be developed and implemented. It shall outline Best Management Practices (BMPs) for short term, temporary stabilization. Acceptable stabilization methods include the use of weed-free, natural fiber (i.e., non-monofilament) rolls, jute or coir netting, and/or other industry standards. Erosion control devices shall be installed and maintained for the duration of the project.

5.0 CONCLUSION

As currently designed, the project has potential for indirect impacts to jurisdictional waters and direct and indirect impacts to special-status wildlife species, including nesting birds. The site is highly disturbed as a result of historic agricultural practices and rural residential development, and provides only marginal habitat for special-status species. Habitat connectivity is not expected to be significantly degraded. A Cooper's hawk was observed during the field survey; however, it was determined that there is potential for 8 additional special-status wildlife species, as well as other nesting birds, to be present within the project site. Implementation of the recommended avoidance and minimization measures will avoid and/or reduce impacts to sensitive resources to a less than significant level.

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Appendix A – Project Maps

Figure 1: Project Vicinity and Survey Area Map
Figure 2: Survey Area Map
Figure 3a: 5-mile CNDDB Occurrence Map (Botanical)
Figure 3b: 5-mile CNDDB Occurrence Map (Wildlife)
Figure 4: Soils Map
Figure 5: Vegetation Communities Map
Figure 6: Hydrological Resources Map

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Project Location
Survey Area
State Highway
Coastal Zone Boundary

6686 Monte Road
Biological Resources Assessment
Figure 1. Project Vicinity and Survey Area

0 0.5 1 Miles

N

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Survey Area
County Road
USGS Blue Line Drainage

6686 Monte Road
Biological Resources Assessment
Figure 2. Survey Area

0 250 500 Feet

N

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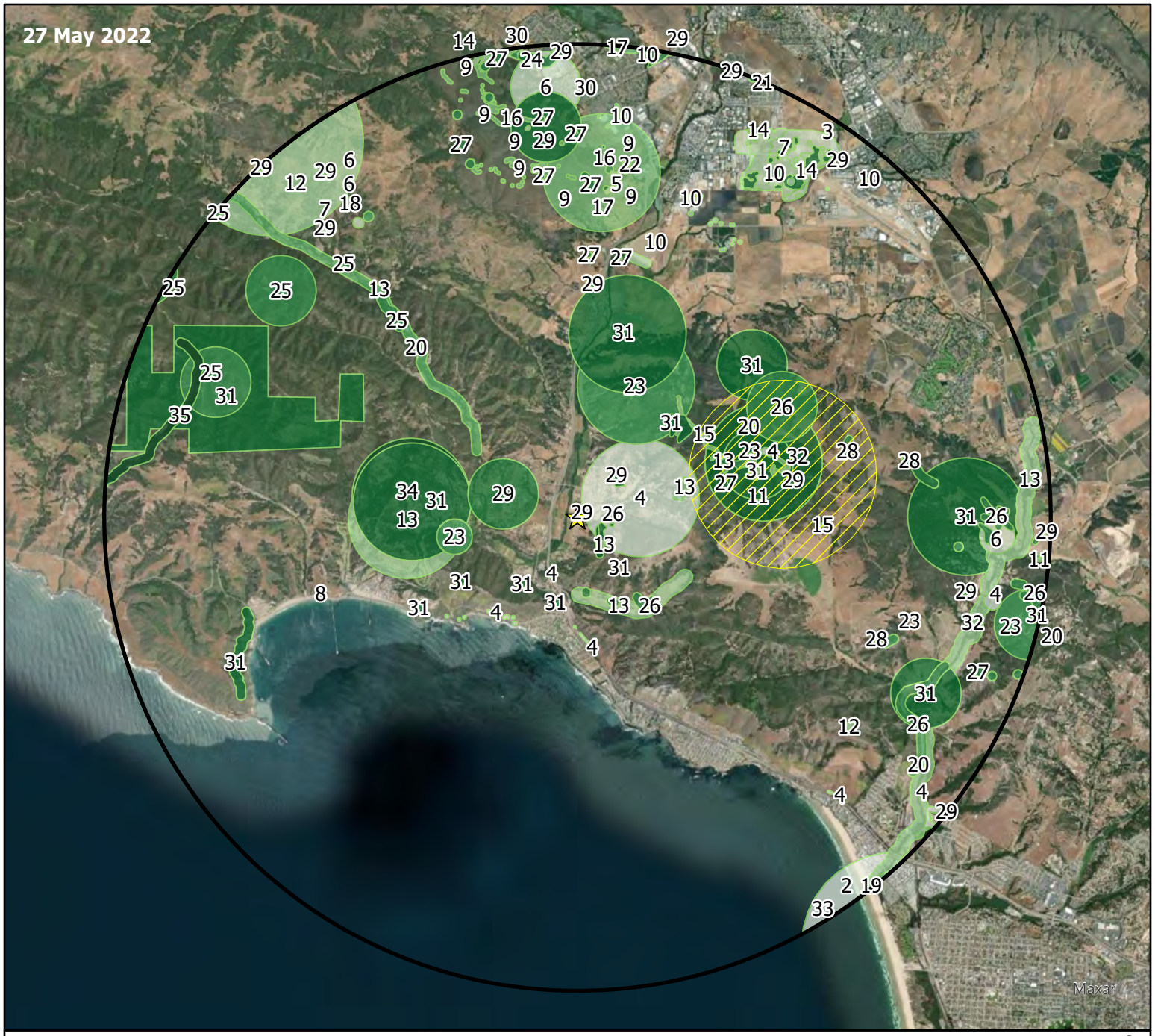

6686 Monte Road
Biological Resources Assessment
Figure 3a. 5-mile CNDDB Occurrence Map (Botanical)

Project Location
5-mile Buffer

CNDDB Occurrence (Botanical)

1 - Adobe sanicle
2 - Beach spectaclepod
3 - Betty's dudleya
4 - Black-flowered figwort
5 - Blochman's dudleya
6 - Brewer's spineflower
7 - Cambria morning-glory
8 - Chaparral ragwort
9 - Chorro Creek bog thistle
10 - Congdon's tarplant
11 - Dune larkspur
12 - Dwarf soaproot
13 - Hoover's bent grass
14 - Hoover's button-celery
15 - Indian Knob mountainbalm
16 - Irish Hills spineflower
17 - Jones' layia
18 - La Panza mariposa-lily
19 - Marsh sandwort
20 - Mesa horkelia
21 - Miles' milk-vetch
22 - Mouse-gray dudleya
23 - Nipomo Mesa ceanothus
24 - Oso manzanita
25 - Pecho manzanita
26 - Pismo clarkia
27 - San Luis mariposa-lily
28 - San Luis Obispo County lupine
29 - San Luis Obispo owl's-clover
30 - San Luis Obispo sedge
31 - Santa Margarita manzanita
32 - Southern curly-leaved monardella
33 - Surf thistle
34 - Umbrella larkspur
35 - Woodland woollythreads

CDFW Senstive Natural Community

36 - Central Maritime Chaparral

0 0.5 1 2
Miles

N

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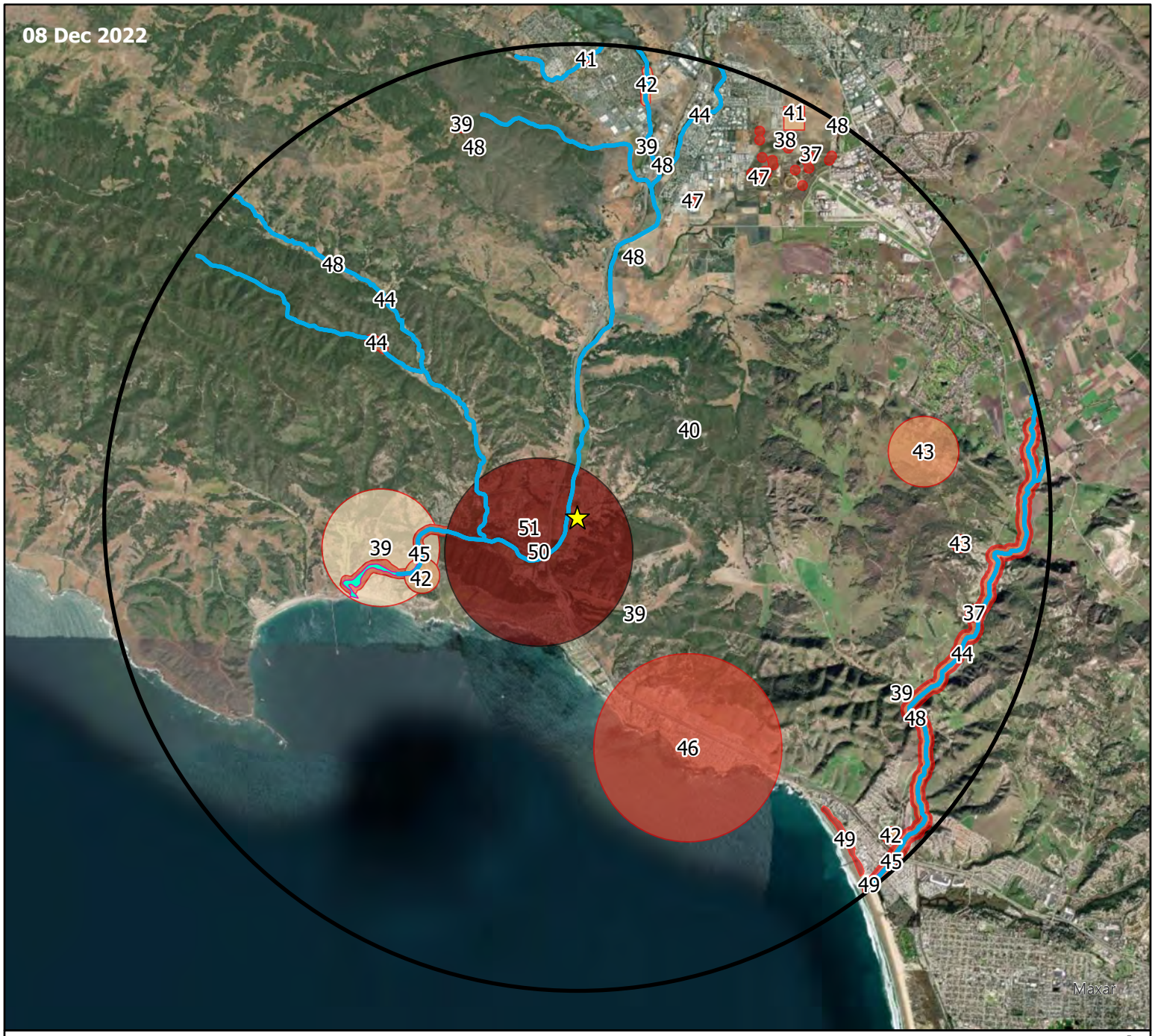

6686 Monte Road
Biological Resources Assessment
Figure 3b. 5-mile CNDDB Occurrence Map (Wildlife)

- Project Location
- 5-mile Buffer

CNDDB Occurrence (Wildlife)

- 37 - American badger
- 38 - Burrowing owl
- 39 - California red-legged frog
- 40 - Coast horned lizard
- 41 - Ferruginous hawk
- 42 - Monarch - California overwintering population
- 43 - Northern California legless lizard
- 44 - Steelhead - south-central California coast DPS
- 45 - Tidewater goby
- 46 - Townsend's big-eared bat
- 47 - Vernal pool fairy shrimp
- 48 - Western pond turtle
- 49 - Western snowy plover
- 50 - Western yellow-billed cuckoo
- 51 - Western bumble bee

USFWS-designated Critical Habitat

- Steelhead
- Tidewater goby

0 0.5 1 2 Miles

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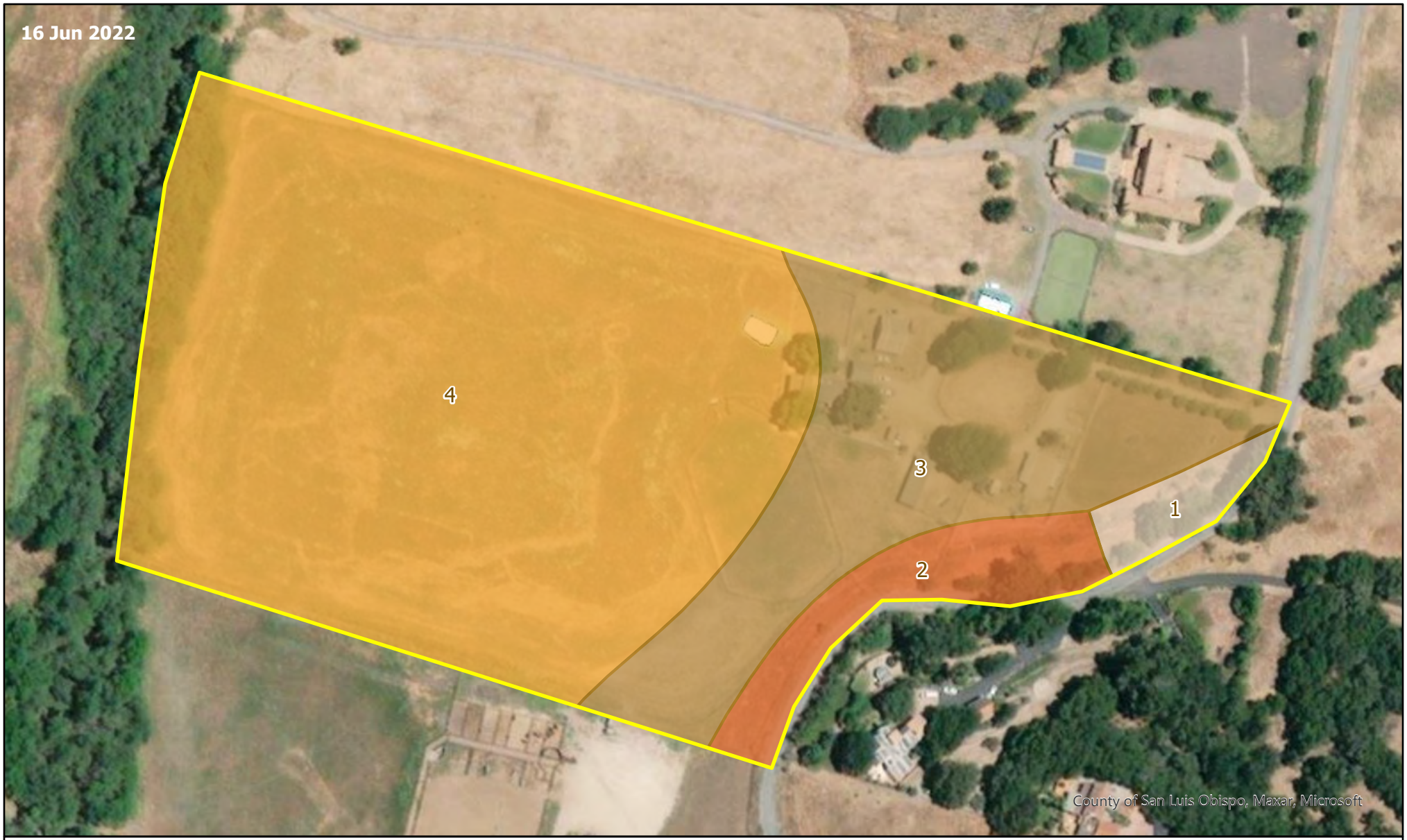

Survey Area

Soil Type

- 1 - Briones-Tierra complex, 15 to 50 percent slopes
- 2 - Diablo and Cibo clays, 15 to 30 percent slopes
- 3 - Elder sandy loam, 2 to 5 percent slopes
- 4 - Marimel sandy clay loam, occasionally flooded

6686 Monte Road
Biological Resources Assessment
Figure 4. Soils Map

0 100 200 US Feet

N

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Survey Area

Vegetation Community/Land Cover Type

- Agriculture
- Annual Brome Grassland
- Arroyo Willow Thicket
- Coast Live Oak Woodland
- Developed

6686 Monte Road
Biological Resources Assessment
Figure 5. Vegetation Communities Map

0 100 200 US Feet

N

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Survey Area
USGS Blue Line
Unnamed Drainage Centerline*
Jurisdictional Limits**
Culvert (assumed)
Culvert Outlet

6686 Monte Road
Biological Resources Assessment
Figure 6. Hydrological Resources Map

0 100 200 US Feet

N

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*Mapped from desktop satellite imagery.
**Mapped in the field by Terra Verde on April 21, 2022.

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Appendix B – Proposed Lot Configuration

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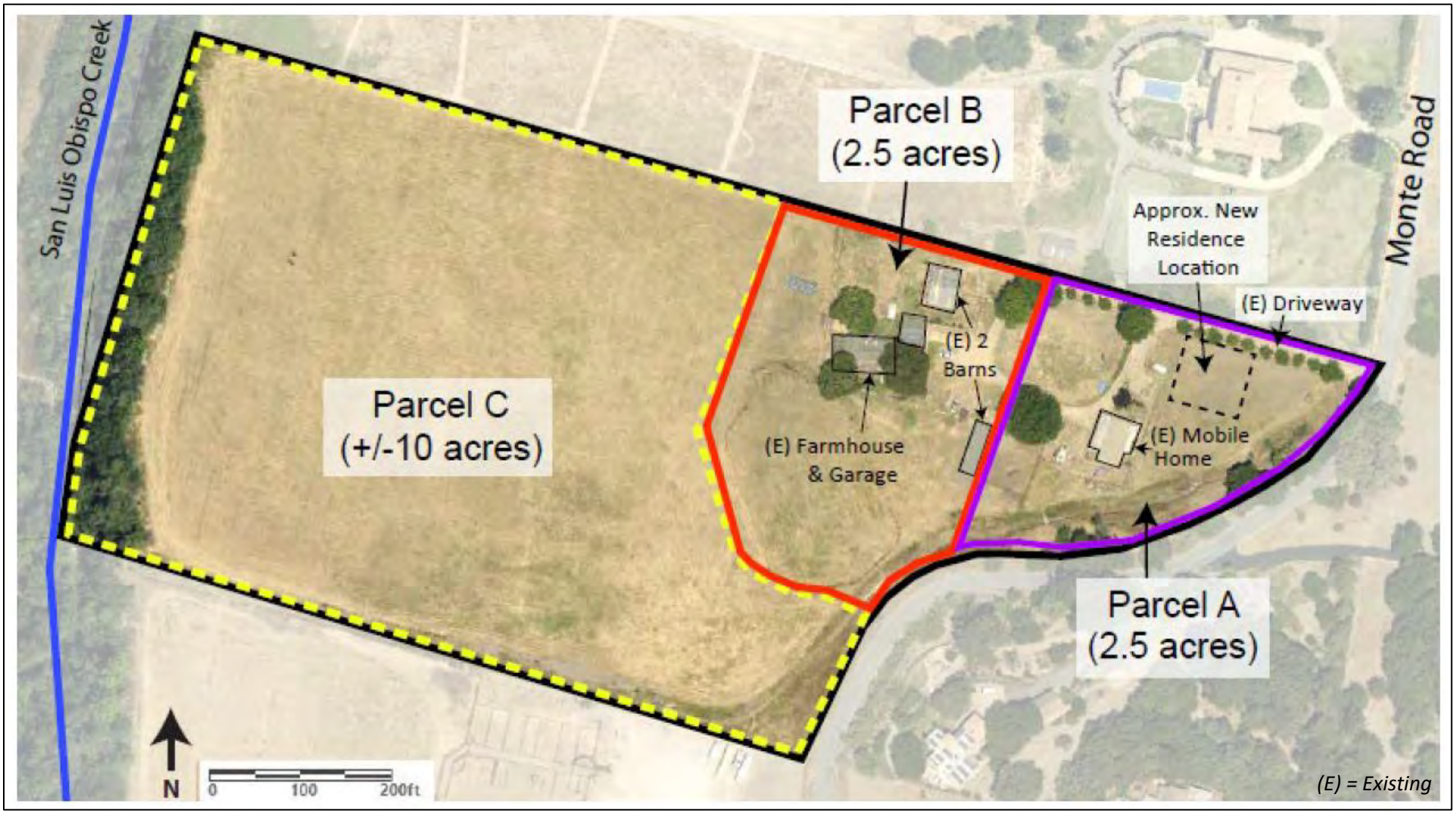
Proposed Lot Configuration



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Appendix C – Regionally Occurring Special-status Species Table

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Regionally occurring special-status species list for the Pismo Beach and surrounding 7.5-minute quadrangles: Arroyo Grande NE, Lopez Mountain, Morro Bay South, Oceano, Port San Luis, and San Luis Obispo.

SENSITIVE VEGETATION COMMUNITIES AND HABITATS			
Community/ Habitat[1]	**Description[2]**	**Observed on Site?[3]**	**Comments / Potential for Occurrence**
California Natural Diversity Database (CNDDB)-designated Sensitive Natural Communities			
Central Dune Scrub	Restricted to coastal areas with stabilized back dunes, slopes, ridges, and flats. Vegetation consists of shrubs, subshrubs, and herbs less than a meter tall. Indicator species include *Ericameria ericoides, Lupinus chamissonis*, and *Artemisia* sp.	No	Diagnostic species and substrate are not present on site; this community is not present within the survey area.
Central Foredunes	Adjacent to shoreline with harsh environmental conditions such as strong, salt-laden breezes and salt water inundation. Characterized by plants that are prostrate; with deep taproots; fleshy roots, stems, and leaves, and leaves covered with thick mats of gray hairs. Often referred to as pioneer dune community or coastal strand.	No	Diagnostic species and substrate are not present on site; this community is not present within the survey area.
Central Maritime Chaparral	Associated with well drained/dry soils. Exposed upland location with moderate to high cover. Typically dominated by *Arctostaphylos* species that develop into dense patches of vegetation.	No	Diagnostic species are not present on site; this community is not present within the survey area.
Coastal and Valley Freshwater Marsh	Dominated by perennial, emergent, and tall monocots that often form closed canopies. Tend to be *Typha*-dominated and permanently flooded with fresh water, which results in deep peaty soils.	No	Diagnostic species composition and conditions are not present on site; this community is not present within the survey area.
Coastal Brackish Marsh	Typically occurs along interior edges of coastal bays, estuaries, and in coastal lagoons. Dominated by perennial, emergent, and tall monocots that often form closed canopies. Typically composed of plants characteristic of salt and freshwater marshes. Vegetation depends on salinity, which may vary considerably.	No	Diagnostic species composition is not present in brackish areas on site; this community is not present within the survey area.

SENSITIVE VEGETATION COMMUNITIES AND HABITATS			
Community/ Habitat[1]	**Description[2]**	**Observed on Site?[3]**	**Comments / Potential for Occurrence**
Northern Coastal Salt Marsh	Dominated by herbaceous, suffrutescent, salt-tolerant hydrophytes which may be tall with dense cover, occurring along sheltered bay margins, lagoons, and estuaries. Plants are typically active in the summer and dormant in the winter and subject to regular tidal inundation for at least part of the year. Characteristic species include *Jaumea carnosa*, *Limonium californicum*, and *Frankenia salina*. Well-developed around Humboldt Bay, Tomales Bay, San Francisco Bay, Elkhorn Slough, and Morro Bay.	No	Diagnostic species composition and conditions are not present on site; this community is not present within the survey area.
Northern Interior Cypress Forest	An open, fire-dependent scrubby forest dominated by *Hesperocyparis* species with dry, rocky, sterile, often ultramafic soils. Vegetation is usually less than 15 meters tall. Frequently associated with serpentine chaparral.	No	Diagnostic species and substrate are not present on site; this community is not present within the survey area.
Serpentine Bunchgrass	Open grassland dominated by perennial bunchgrasses. Total cover is typically low, but native species are dominant and commonly include *Stipa* species. Always occurring on serpentine; scattered widely throughout the Coast Ranges, less common elsewhere.	No	Serpentine substrate is not present on site; this community is not present within the survey area.
Valley Needlegrass Grassland	A mid-height (up to two feet) grassland dominated by perennial, tussock-forming species of *Stipa*. Native and introduced annuals occur between the perennials, often actually exceeding the bunchgrasses in cover.	No	Diagnostic species are not present on site; this community is not present within the survey area.
USFWS-Designated Critical Habitat for Special-status Species			
Eucyclogobius newberryi **Tidewater goby**	Tidewater goby typically inhabits lagoons, estuaries, backwater marshes, and freshwater tributaries where a sandbar forms in the late spring. Critical habitat was designated within the lower reaches of San Luis Obispo Creek in 2013.	No	The designated critical habitat unit within the lower reaches of San Luis Obispo Creek is included within the overall survey and project area.

SENSITIVE VEGETATION COMMUNITIES AND HABITATS			
Community/ Habitat[1]	**Description[2]**	**Observed on Site?[3]**	**Comments / Potential for Occurrence**
***Oncorhynchus mykiss irideus* Steelhead – South-central California Coast DPS**	These fish live in the ocean as adults but migrate to freshwater steams or creeks that have cool, flowing water, access to the ocean, and available food sources, in order to spawn. Critical habitat has been designated within San Luis Obispo Creek.	**Yes**	Designated critical habitat within the lower reaches of San Luis Obispo Creek is adjacent to the survey area.

[1]List of sensitive vegetation communities and habitats obtained from CNDDB and USFWS Critical Habitat Portal (CDFW 2022a; USFWS 2022a).
[2]Community and habitat descriptions acquired from CNDDB and the U.C. Santa Barbara (UCSB) California Gap Analysis Project (CDFW 2022a; UCSB 2012); critical habitat descriptions were acquired from the Designation of Critical Habitat for Tidewater Goby (USFWS 2013) and the South-Central California Coast Steelhead Recovery Plan (NOAA 2013).
[3]Communities/habitats observed during field surveys indicated with **bold** font and gray highlight, and are discussed further in the report.
[4]Manual of California Vegetation (MCV) (Sawyer et al. 2009).

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments / Potential for Occurrence**
Abronia maritima Red sand-verbena	CRPR 4.2	February – October	Coastal dunes. Elevation: < 100 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Agrostis hooveri Hoover's bent grass	CRPR 1B.2	April - August	Dry, sandy soils, open chaparral, oak woodland. Elevation: < 600 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Amsinckia douglasiana Douglas' fiddleneck	CRPR 4.2	March – June	Unstable, shaly, sedimentary slopes. Elevation: 100 – 1,600 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Arctostaphylos luciana Santa Lucia manzanita	CRPR 1B.2	January – March	Shale outcrops, slopes, and upland chaparral near the coast. Elevation: 100 – 800 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Arctostaphylos morroensis Morro manzanita	Fed: Threatened CRPR 1B.1	January – March	Stabilized sand dunes, sandstones, and chaparral. Elevation: < 200 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Arctostaphylos obispoensis Bishop manzanita	CRPR 4.3	February – March	Rocky, generally serpentine soils, chaparral, open closed-cone forest near coast. Elevation: 60 – 950 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Arctostaphylos osoensis Oso manzanita	CRPR 1B.2	December – February	Dacite (volcanic) outcrops, chaparral and cismontane woodland. Elevation: 50 – 375 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Arctostaphylos pechoensis Pecho manzanita	CRPR 1B.2	January – March	Shale outcrops, chaparral, and coniferous forest. Elevation: < 500 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Arctostaphylos pilosula Santa Margarita manzanita	CRPR 1B.2	December – March	Shale outcrops, slopes, chaparral. Elevation: 30 – 1,250 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments / Potential for Occurrence**
Arctostaphylos rudis Sand mesa manzanita	CRPR 1B.2	November – February	Sandy soils, chaparral. Elevation: < 380 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Arctostaphylos tomentosa subsp. *daciticola* Dacite manzanita	CRPR 1B.1	December – March	Chaparral. Elevation 200 – 300 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Arenaria paludicola Marsh sandwort	Fed: Endangered State: Endangered CRPR: 1B.1	May – August	Wet meadows, marshes. Elevation: < 300 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Aspidotis carlotta-halliae *Carlotta Hall's lace fern*	CRPR 4.2	NA	Generally serpentine slopes, crevices, and outcrops. Elevation: 100 – 1,400 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Astragalus didymocarpus var. *milesianus* Miles' milk-vetch	CRPR 1B.2	March – May	Grassy areas near the coast, clay soils in coastal scrub. Elevation: < 400 meters.	No / Yes	Suitable habitat on site; not detected during appropriately timed surveys.
Astragalus nuttallii var. *nuttallii* Ocean bluff milk-vetch	CRPR 4.2	All year	Rock, sandy areas, bluffs, coastal scrub. Elevation: < 250 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Atriplex coulteri Coulter's saltbush	CRPR 1B.2	March – October	Alkaline or clay soils, open sites, scrub, coastal bluff scrub. Elevation: < 500 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Calandrinia breweri Brewer's calandrinia	CRPR 4.2	February – May	Sandy to loamy soil in disturbed areas and recently burned sites. Elevation: < 1,200 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments / Potential for Occurrence**
Calochortus clavatus var. *clavatus* Club-haired mariposa lily	CRPR 4.3	April – June	Generally rocky serpentine and clay. Elevation: < 1,300 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Calochortus obispoensis San Luis mariposa lily	CRPR 1B.2	May – June	Dry serpentine, generally open chaparral. Elevation: 100 – 500 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Calochortus simulans La Panza mariposa lily	CRPR 1B.3	May – July	Sand (often granitic), grassland, and yellow pine forest. Elevation: < 1,100 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Calystegia subacaulis subsp. *episcopalis* Cambria morning-glory	CRPR 4.2	April – June	Dry, open scrub and woodland, chaparral, coastal prairie, grassland; usually in clay soil. Elevation: < 500 meters.	No / Yes	Suitable habitat on site; not detected during appropriately timed surveys.
Camissoniopsis hardhamiae Hardham's evening primrose	CRPR 1B.2	March – May	Sandy soil, limestone; disturbed or burned areas in oak woodland. Elevation: 60 – 600 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Carex obispoensis San Luis Obispo sedge	CRPR 1B.2	March – June	Springs and stream sides in chaparral, generally on serpentine. Elevation: < 800 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Castilleja densiflora subsp. *obispoensis* San Luis Obispo owl's-clover	CRPR 1B.2	March – June	Coastal grassland. Elevation: < 400 meters.	No / Yes	Suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments / Potential for Occurrence**
Ceanothus cuneatus var. *fascicularis* Lompoc ceanothus	CRPR 4.2	February – May	Sandy substrates in coastal chaparral. Elevation: < 275 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Ceanothus impressus var. nipomensis Nipomo Mesa ceanothus	CRPR 1B.2	February – April	Chaparral on sandy soils. Elevation: 30 – 245 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Ceanothus thyrsiflorus var. obispoensis San Luis Obispo ceanothus	CRPR 1B.1	June	Chaparral, Cismontane woodland on sandy soils. Elevation: 140 – 225 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Centromadia parryi subsp. *congdonii* Congdon's tarplant	CRPR 1B.1	June – October	Terraces, swales, floodplains, grassland, and disturbed sites. Elevation: < 300 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Cercocarpus betuloides var. *blancheae* Island mountain-mahogany	CRPR 4.3	March – April	Chaparral. Elevation: < 600 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Chenopodium littoreum Coastal goosefoot	CRPR 1B.2	June – October	Generally sandy soils and dunes. Elevation: < 40 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Chlorogalum pomeridianum var. *minus* Dwarf soaproot	CRPR 1B.2	May – June	Serpentine outcrops in chaparral. Elevation: < 750 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Chloropyron maritimum subsp. *maritimum* Salt marsh bird's beak	Fed: Endangered State: Endangered CRPR 1B.2	May – October	Coastal salt marsh. Elevation: < 10 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Chloropyron maritimum ssp. Palustre Point Reyes salty bird's-beak	CRPR 1B.2	June – October	Coastal salt marches. Elevation: <115 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
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Chorizanthe aphanantha Irish Hills spineflower	CRPR 1B.1	April – June	Chaparral edges and openings, coastal scrub. Elevation: 100 – 370 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Chorizanthe breweri Brewer's spineflower	CRPR 1B.3	March – July	Gravel or rocks, typically on serpentine soil. Elevation: 60 – 800 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Chorizanthe douglasii Douglas's spineflower	CRPR 4.3	April – July	Sand or gravel. Elevation: 200 – 1,600 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Chorizanthe palmeri Palmer's spineflower	CRPR 4.2	April – August	Chaparral, Cismontane woodland, Valley and foothill grassland; on rocky, serpentinite soils. Elevation: 55 – 945 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Chorizanthe rectispina Straight-awned spineflower	CRPR 1B.3	May – July	Sand or gravel. Elevation: 200 – 600 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Chorizanthe ventricosa Potbellied spineflower	CRPR 4.3	May – September	Serpentine. Elevation: 500 – 1,000 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Cirsium fontinale var. obispoense Chorro Creek bog thistle	Fed: Endangered State: Endangered CRPR 1B.2	April – October	Serpentine seeps and streams. Elevation: < 350 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Cirsium occidentale var. *lucianum* Cuesta Ridge thistle	CRPR 1B.2	April – July	Chaparral, woodland or forest openings, and often on serpentine. Elevation: 500 – 750 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Cirsium rhothophilum Surf thistle	State: Threatened CRPR 1B.2	April – August	Dunes and bluffs. Elevation: < 60 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

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Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments / Potential for Occurrence**
Cirsium scariosum var. *loncholepis* La Graciosa thistle	Fed: Endangered State: Threatened CRPR 1B.1	April – September	Marshes, dune wetlands. Elevation: < 50 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Cladium californicum California sawgrass	CRPR 2B.2	June – September	Alkaline marshes and swamps. Elevation: < 2,150 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Cladonia firma Popcorn lichen	CRPR 2B.1	NA	Coastal dunes (stabilized), Coastal scrub; usually found on soil, detritus, and/or moss. Elevation: 30 – 75 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Clarkia speciosa subsp. *immaculata* Pismo clarkia	Fed: Endangered State: Rare CRPR 1B.1	May – July	Sandy coastal hills. Elevation: < 100 meters.	No / Yes	Suitable habitat on site; not detected during appropriately timed surveys.
Clinopodium mimuloides Monkey-flower savory	CRPR 4.2	June – October	Moist places, stream banks, chaparral, woodland. Elevation: 400 – 1,800 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Deinandra paniculata Paniculate tarplant	CRPR 4.2	May – November	Grassland, open chaparral and woodland, disturbed areas, often in sandy soils. Elevation: < 1,320 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Delphinium parryi subsp. *blochmaniae* Dune larkspur	CRPR 1B.2	April – May	Coastal chaparral, coastal dunes, sand. Elevation: < 200 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Delphinium parryi subsp. *eastwoodiae* Eastwood's larkspur	CRPR 1B.2	March – May	Coastal chaparral and grassland on serpentine. Elevation: 100 – 500 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Delphinium umbraculorum Umbrella larkspur	CRPR 1B.3	April – June	Moist oak forest. Elevation: 400 – 1,600 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments / Potential for Occurrence**
Dithyrea maritima Beach spectaclepod	State: Threatened CRPR 1B.1	March – August	Seashores and coastal sand dunes. Elevation: < 50 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Dudleya abramsii subsp. *bettinae* Betty's dudleya	CRPR 1B.2	May – June	Rocky outcrops in serpentine grassland. Elevation: 50 – 180 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Dudleya abramsii subsp. *murina* Mouse-gray dudleya	CRPR 1B.3	May – June	Serpentine outcrops. Elevation: 120 – 300 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Dudleya blochmaniae subsp. *blochmaniae* Blochman's dudleya	CRPR 1B.1	April – June	Open, rocky slopes, often serpentine or clay-dominated. Elevation: < 450 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Eleocharis parvula Small spikerush	CRPR 4.3	Late winter – Fall	Brackish wet soil, coastal. Elevation: < 50 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Erigeron blochmaniae Blochman's leafy daisy	CRPR 1B.2	July – October	Sand dunes and hills, coastal dunes, and coastal scrub. Elevation: < 70 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Erigeron sanctarum Saints' daisy	CRPR 4.2	March – June	Sandy sites, coastal scrub or woodland. Elevation: < 500 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Eriodictyon altissimum Indian Knob mountainbalm	Fed: Endangered State: Endangered CRPR: 1B.1	March – June	Sandstone ridges and chaparral. Elevation: < 270 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Eryngium aristulatum var. *hooveri* Hoover's button-celery	CRPR 1B.1	July	Vernal pools and seasonal wetlands, occasionally alkaline. Elevation: < 50 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments / Potential for Occurrence**
Erysimum capitatum var. lompocense San Luis Obispo wallflower	CRPR 4.2	March – September	Open areas, alpine, deserts, woodland, sandy areas, chaparral. Elevation: < 4000 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Erysimum suffrutescens Suffrutescent wallflower	CRPR 4.2	December – August	Stabilized coastal sand dunes, coastal scrub. Elevation: < 150 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Eschscholzia hypecoides San Benito poppy	CRPR 4.3	March – June	Grassy areas in woodland, chaparral. Elevation: 200 – 1,600 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Extriplex joaquinana San Joaquin spearscale	CRPR 1B.2	April – September	Alkaline soils in chenopod scrub, meadows, seeps, and grassland. Elevation: < 840 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Fritillaria agrestis Stinkbells	CRPR 4.2	March – June	Clay (generally serpentine) banks, depressions. Elevation: < 500 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Fritillaria ojaiensis Ojai fritillary	CRPR 1B.2	February – May	Rocky slopes and river basins. Elevation: 300 – 500 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Galium cliftonsmithii Santa Barbara bedstraw	CRPR 4.3	May – July	Light shade, coastal canyons, dry banks, and chaparral. Elevation: 200 – 1,220 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Gilia tenuiflora ssp. *amplifaucalis* Trumpet-throated gilia	CRPR 4.3	March – April	Sandy soil of dry creeks, floodplains, slopes. Elevation: 39 – 900 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments / Potential for Occurrence**
Grindelia hirsutula var. maritima San Francisco gumplant	CRPR 3.2	June – September	Coastal bluff scrub, Coastal scrub, Valley and foothill grassland; usually on sandy or serpentinite soils. Elevation: 15 – 400 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Horkelia cuneata var. *puberula* Mesa horkelia	CRPR 1B.1	March – July	Dry, sandy, coastal chaparral. Elevation: 70 – 870 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Horkelia cuneata var. *sericea* Kellogg's horkelia	CRPR 1B.1	April – August	Old dunes, coastal sand hills. Elevation: < 200 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Juncus acutus ssp. *leopoldii* Southwestern spiny rush	CRPR 4.2	June – August	Moist saline places, salt marshes, alkaline seeps. Elevation: < 300 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Lasthenia glabrata subsp. *coulteri* Coulter's goldfields	CRPR 1B.1	April – May	Saline marshes, swamps, vernal pools. Elevation: < 1,000 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Layia jonesii Jones' layia	CRPR 1B.2	March – May	Open serpentine or clayey slopes. Elevation: < 300 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Leptosiphon grandiflorus Large-flowered leptosiphon	CRPR 4.2	April – August	Open, grassy flats, generally sandy soil. Elevation: < 1,200 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Linanthus californicus ssp. tomentosus Fuzzy prickly-phlox	CRPR 4.2	March – August	Coastal dunes. Elevation: 1 – 185 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Lomatium parvifolium Small-leaved lomatium	CRPR 4.2	February – May	Pine woodland, serpentine outcrops. Elevation: 70 – 150 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

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Lupinus ludovicianus San Luis Obispo County lupine	CRPR 1B.2	April – July	Open, grassy areas, on limestone, in oak woodland. Elevation: 50 – 500 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Lupinus nipomensis Nipomo Mesa lupine	Fed: Endangered State: Endangered CRPR 1B.1	March – May	Stable dunes. Elevation: < 25 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Malacothamnus gracilis Slender bush-mallow	CRPR 1B.1	May – Oct	Chaparral on usually rocky substrates. Elevation: 190 – 575 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Malacothamnus jonesii Jones' bush-mallow	CRPR 4.3	May – July	Open chaparral in foothill woodland. Elevation: 250 – 830 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Malacothrix incana Dunedelion	CRPR 4.3	All year	Dunes. Elevation: < 300 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Monardella palmeri Palmer's monardella	CRPR 1B.2	June – August	Chaparral and forest on serpentine. Elevation: 200 – 800 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Monardella sinuata subsp. *sinuata* Southern curly-leaved monardella	CRPR 1B.2	April – September	Sandy soils, coastal strand, dune and sagebrush scrub, coastal chaparral and oak woodland. Elevation: < 300 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Monardella undulata subsp. *crispa* Crisp monardella	CRPR 1B.2	April – November	Active dunes. Elevation: < 100 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Monardella undulata subsp. *undulata* San Luis Obispo monardella	CRPR 1B.2	April – September	Stabilized dunes, coastal scrub, stabilized sandy soils. Elevation: < 200 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
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Monolopia gracilens Woodland woollythreads	CRPR 1B.2	March – July	Serpentine in grassland, open chaparral, oak woodland. Elevation: 100 – 1,200 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Mucronea californica California spineflower	CRPR 4.2	March – August	Sand. Elevation: < 1,000 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Muhlenbergia utilis Aparejo grass	CRPR 2B.2	October – March	Coastal Sage Scrub, Creosote Bush Scrub, wetland-riparian; usually occurs in wetlands. Elevation: 250 – 1000 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Nasturtium gambelii Gambel's water cress	Fed: Endangered State: Threatened CRPR 1B.1	May – August	Marshes, streambanks, lake margins. Elevation: < 350 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Nemacaulis denudata var. *denudata* Coast woolly-heads	CRPR 1B.2	March – August	Beaches. Elevation: < 100 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Perideridia pringlei Adobe yampah	CRPR 4.3	April – June	Grassy slopes, serpentine outcrops. Elevation: 300 – 1,800 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Piperia michaelii Michael's rein orchid	CRPR 4.2	April – August	Generally dry sites, coastal scrub, woodland, and mixed-evergreen or closed-cone-pine forest. Elevation: < 700 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Plagiobothrys uncinatus Hooked popcornflower	CRPR 1B.2	April – May	Chaparral, canyon sides, and rocky outcrops; ± fire follower. Elevation: 300 – 600 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
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Poa diaboli Diablo Canyon blue grass	CRPR 1B.2	March – April	Thin soils on Edna shale slopes, upper coastal scrub, live-oak woodland, Bishop-pine forest, near coast. Elevation: 120 – 400 meters.	No / No	No suitable elevation range and habitat on site; not detected during appropriately timed surveys.
Prunus fasciculata var. *punctata* Sand almond	CRPR 4.3	March – April	Sandy soils, scrubland, oak woodland. Elevation: < 200 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Ribes sericeum Santa Lucia gooseberry	CRPR 4.3	December – April	Forest openings, coastal scrub, streamside thickets. Elevation: 180 – 800 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Sanicula hoffmannii Hoffmann's sanicle	CRPR 4.3	March – May	Shrubby coastal hills, pine/oak /broadleaf forest/woodland, chaparral, coastal bluff scrub; often on serpentine or clay. Elevation: < 500 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Sanicula maritima Adobe sanicle	State: Rare CRPR 1B.1	April – May	Coastal grassy, open wet meadows and ravines. Elevation: ± 150 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Scrophularia atrata Black-flowered figwort	CRPR 1B.2	April – July	Calcium, diatom-rich soils in forest, scrub, chaparral, riparian, and dune habitats. Elevation < 400 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Senecio aphanactis Chaparral ragwort	CRPR 2B.2	February – May	Alkaline flats, dry open rocky areas. Elevation: 10 – 800 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Senecio blochmaniae Blochman's ragwort	CRPR 4.2	May – November	Coastal sand dunes, sandy floodplains. Elevation: < 150 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

SPECIAL-STATUS BOTANICAL SPECIES					
Scientific/Common Name[1]	**Listing Status[2]**	**Blooming Period[3]**	**Habitat Type[3]**	**Observed/ Habitat Present?[4]**	**Comments / Potential for Occurrence**
Sidalcea hickmanii subsp. *anomala* Cuesta Pass checkerbloom	State: Rare CRPR 1B.2	May – June	Closed-cone coniferous forest, generally serpentine. Elevation: 600 – 800 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Suaeda californica California seablite	Fed: Endangered CRPR 1B.1	July – October	Margins of coastal salt marshes. Elevation: < 5 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Sulcaria isidiifera Splitting yarn lichen	CRPR 1B.1	NA	Coastal scrub (old growth) on branches of oaks and shrubs. Elevation: 20 – 30 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Sulcaria spiralifera Twisted horsehair lichen	CRPR 1B.2	N/A	Coastal dunes, North Coast coniferous forest. Elevation: 0 – 90 m.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Symphyotrichum defoliatum San Bernardino aster	CRPR 1B.2	July – November	Grassland, disturbed places. Elevation: < 2,050 meters.	No / No	Not within known species range; nearest occurrence > 30 miles away. Not detected during appropriately timed surveys.
Trifolium hydrophilum Saline clover	CRPR 1B.2	April – June	Salt marshes and open areas in alkaline soils. Elevation: < 300 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.
Tropidocarpum capparideum Caper-fruited tropidocarpum	CRPR 1B.1	March – April	Alkaline soils, low hills, valleys. Elevation: < 400 meters.	No / No	No suitable habitat on site; not detected during appropriately timed surveys.

[1]List of regionally-occurring special-status species acquired from CNDDB (CDFW 2022a), CCH (2022), and CNPS Rare and Endangered Plant Inventory (CNPS 2022a), and local expert knowledge.

[2]Listing status obtained from CNPS Rare and Endangered Plant Inventory (CNPS 2022a).

[3]Blooming period and habitat type obtained from Jepson eFlora (2022) and occasionally supplemented with information provided by CNPS (Jepson eFlora 2022; CNPS 2022a).

[4]Species observed during field surveys indicated with **bold** font; species determined to have suitable habitat present on the site, even marginally suitable habitat, indicated with gray highlight. Species highlighted gray are discussed further in the report.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Accipiter cooperii **Cooper's hawk**	State: Watch List	March – May	Found in woodland habitats such as woodlots, riparian woodland, and patched woodlands. Nests 25ft. - 50ft. high in crotches or horizontal branches of trees. Prefers perched locations where it can watch for small birds or rodents to prey on.	Yes / Yes	Suitable nesting habitat within the oak woodland in the survey area.
Accipiter striatus Sharp-shinned hawk	State: Watch List	March – June	Native to aspen, pine, and fir forests. Attracted to urban, rural and agricultural areas for food. Elevation from sea level to mountains.	No / No	Outside of known breeding range; not expected to nest in the project area.
Agelaius tricolor Tricolored blackbird	State: SSC	Spring – Fall	Nests near water sources such as marshes, grassland, and wetlands. Requires access to substrates, usually aquatic, to build nests. Forages for insects and plant matter on agricultural sites and grasslands. Very colonial.	No / No	No suitable nesting habitat in the survey area; not expected to occur.
Anniella pulchra Northern California legless lizard	State: SSC	March – July; live birth September - November	Moist warm loose soil with plant cover and under leaf litter. Found in beach dunes, chaparral, foothill woodlands, desert scrub, sandy washes, and stream terraces.	No / No	No suitable habitat in the survey area; not expected to occur.
Antrozous pallidus Pallid bat	State: SSC	Winter	Low elevations of California within grasslands, shrublands, woodlands, and forests. Most common in dry habitats with rocky areas for roosting.	No / Yes	Suitable roosting habitat within the oak woodland in the survey area.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Athene cunicularia Burrowing owl	State: SSC	March – July	Open, dry grasslands and deserts. Will use the burrows of other terrestrial animals. Also found in cleared residential areas such as vacant lots and golf courses.	No / No	No suitable habitat in the survey area; not expected to occur.
Batrachoseps minor Lesser slender salamander	State: SSC	Spring	Moist locations in mixed oak forests, sycamore, and laurel above 400 meters. Found only in southern Santa Lucia Mountains of San Luis Obispo County.	No / No	No suitable habitat in the survey area; not expected to occur.
Bombus crotchii Crotch bumble bee	State: Candidate	March – September	Open grassland and scrub habitats. Colonies or nests are typically found underground in small mammal burrows, logs, stumps, and in birds nests. Queen bees typically overwinter in soft disturbed soil.	Yes / Yes	Low suitable grassland habitat in the survey area; not observed during surveys.
Bombus occidentalis Western bumble bee	State: Candidate	March – September	Open grassland and scrub habitats. Colonies or nests are typically found underground in small mammal burrows, logs, stumps, and in birds nests. Queen bees typically overwinter in soft disturbed soil.	Yes / Yes	Low suitable grassland habitat in the survey area; not observed during surveys.
Branchinecta lynchi Vernal pool fairy shrimp	Fed: Threatened	Rainy season	Vernal pools and depressions in grasslands.	No / No	No suitable habitat in the survey area; not expected to occur.
Buteo regalis Ferruginous hawk	State: Watch List	February – July	Lowlands, plateaus, rolling hills of grasslands, ranches and agricultural fields. Primarily nests in trees.	No / No	No suitable nesting habitat in the survey area; not expected to occur.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Charadrius alexandrinus nivosus Western snowy plover	Fed: Threatened State: SSC	March – September	Coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek mouths, and estuaries.	No / No	No suitable habitat in the survey area; not expected to occur.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	Fed: Threatened State: Endangered	May – July	Dense woodlands and low foliage near slow moving water bodies. Forages in cottonwood trees and builds nests in trees and shrubs. Limited occurrences in San Luis Obispo County.	No / Yes	Low suitable riparian habitat adjacent to San Luis Obispo Creek.
Corynorhinus townsendii Townsend's big-eared bat	State: SSC	November – May	Montane forests including pine, fir, and aspens surrounded by shrub and grasslands. Colonies roosts in caves, mines, tunnels, buildings, and human made structures.	No / No	No suitable habitat in the survey area; not expected to occur.
Danaus plexippus Monarch butterfly	Fed: Candidate State: Special Animal	Spring	Relies on milkweed and protected stands of trees for roosting, usually blue gum eucalyptus. Found in fields, meadows, weedy areas, marshes, and along roadsides.	No / No	No suitable stands of trees (*Eucalyptus* sp.) for roosting observed in survey area.
Dipodomys heermanni morroensis Morro Bay kangaroo rat	Fed: Endangered State: Endangered Fully Protected	March – August	Stabilized sand dune, coastal dune and coastal sage scrub; sandy soils essential for burrowing. Localized south of Morro Bay in Baywood fine sands.	No / No	No suitable habitat in the survey area, and outside known range; not expected to occur.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Elanus leucurus White-tailed kite	State: Fully Protected	March – August	Savannah, open woodlands, marshes, desert, grassland. Prefer partially cleared fields such as ranches and cultivated fields. They build nests on top of old ones of other species in trees.	No / No	No suitable nesting habitat in the survey area; not expected to occur.
Emys marmorata Western pond turtle	State: SSC	April – October	Ponds, lanes, rivers, creeks, marshes, and irrigation ditches. Prefers abundant vegetation and exposed banks for basking. Nests along stream or pond margins in areas of full sunlight.	No / Yes	Dispersal habitat present on site.
Eremophila alpestris actia California horned lark	State: Watch List	March – August	Open, barren country. Prefers short grasses. Ground nests woven of fine grasses.	No / No	No suitable habitat in the survey area; not expected to occur.
Eucyclogobius newberryi Tidewater goby	Fed: Endangered State: SSC	Year – round (April - May)	Found in shallow water lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels. Can tolerate an array of different conditions depending on seasonal changes.	No / No	No suitable habitat in the survey area; not expected to occur.
Eumetopias jubatus Steller (=northern) sea-lion	Fed: Delisted	May – July	Coastal waters from Alaska to central California. Spend time in the Pacific Ocean feeding but haul-out onto land to reproduce, raise their pups, molt, and rest.	No / No	No suitable habitat in the survey area; not expected to occur.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Eumops perotis californicus Western mastiff bat	State: SSC	March – July	Broad open areas, chaparral, montane meadows, rocky cliffs, canyon areas, roosts in crevices, tunnels, also in buildings.	No / No	No suitable habitat in the survey area; not expected to occur.
Falco columbarius Merlin	State: Watch List	April – July (typically breeds outside of California)	Open country habitats including grasslands, seashores, sand dunes, marshlands, and steppes.	No / No	No suitable habitat in the survey area; not expected to occur.
Falco mexicanus Prairie falcon	State: Watch List	February – July	Primarily inhabits dry grasslands, woodlands, savannahs, cultivated fields, lake shores, and rangelands. Primarily nests on cliffs, canyons, and rock outcrops.	No / No	No suitable nesting habitat in the survey area; not expected to occur.
Helminthoglypta walkeriana Morro shoulderband snail	Fed: Endangered	October – April	Found in association with woody coastal dune scrub and under iceplant. Current range limited to south of Morro Bay, west of Los Osos Creek, and north of Hazard Canyon.	No / No	Site is outside well-documented species range, and suitable habitat features are very limited; not expected to occur.
Lanius ludovicianus Loggerhead shrike	State: SSC	April – July	Open country with short vegetation and well spaced shrubs. Frequents agricultural fields, pastures, desert scrublands, savannas, and prairies.	No / No	No suitable nesting habitat in the survey area; not expected to occur.
Laterallus jamaicensis coturniculus California black rail	State: Threatened Fully Protected	February – June	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, flooded grassy vegetation. Requires dense cover for predator protection.	No / No	No suitable nesting habitat in the survey area; not expected to occur.

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Neotoma lepida intermedia San Diego desert woodrat	State: SSC	November – April	Woodland, mixed chaparral and desert habitats. Forms dens using gathered materials, such as twigs and leaves, in cracks of boulders.	No / No	No suitable habitat in the survey area; not expected to occur.
Nyctinomops macrotis Big free-tailed bat	State: SSC	February – June	Rugged, rocky terrain; preferably weathered fissures and crevices. Roosts in rocky cliffs, buildings, and some plants (ponderosa pines, Douglas fir, and desert shrubs.	No / No	No suitable habitat in the survey area; not expected to occur.
Oncorhynchus mykiss Steelhead – south-central California coast DPS	Fed: Threatened	February – April	Federal listing refers to runs in coastal basins from Pajaro River south to, but not including, the Santa Maria River.	No / Yes	Suitable habitat present in, and known to occur throughout, San Luis Obispo Creek.
Phrynosoma blainvillii Coast horned lizard	State: SSC	May – September	Inhabits open, loose, sandy soil and low vegetation in valleys, foothills, and semiarid mountains below 2,438 meters. Found in grasslands, coniferous forests, woodlands, and chaparral, and frequently found near ant hills.	No / No	No suitable habitat in the survey area; not expected to occur.
Puma concolor Mountain Lion	State: Candidate Threatened	Year-round (usually spring)	From sea level to alpine meadows. Found in nearly all habitats. Excludes Mojave and Colorado deserts and croplands in the Central Valley. Most abundant in riparian areas, and brushy stages of most habitats.	No / Yes	Suitable habitat present

SPECIAL-STATUS WILDLIFE SPECIES					
Scientific/Common Name[1]	**Listing Status[1]**	**Nesting/ Breeding Period[2]**	**Habitat Type[2]**	**Observed/ Habitat Present?[3]**	**Comments / Potential for Occurrence**
Progne subis Purple martin	State: SSC	May – June	Woodlands in close proximity to water bodies and open fields for foraging. Will live close to humans and are very attracted to bird feeders. They are cavity nesters.	No / No	No nesting suitable habitat in the survey area; not expected to occur.
Rallus obsoletus obsoletus California Ridgway's rail	Fed: Endangered State: Endangered Fully Protected	March – July	Found in wetlands and coastal salt marshes.	No / No	No suitable nesting habitat in the survey area; not expected to occur.
Rana boylii Foothill yellow-legged frog	State: SSC	April – July	Rocky streams and rivers with rocky substrate. Found in woodlands, chaparral and forests with open sunny banks.	No / No	No suitable habitat in the survey area; not expected to occur.
Rana draytonii California red-legged frog	Fed: Threatened State: SSC	January – July	Most common in ponds of woodlands and grasslands. Found in habitats adjacent to streams or water access.	No / Yes	Dispersal habitat present on site.
Sternula antillarum browni California least tern	Fed: Endangered State: Endangered Fully Protected	April – June	Seacoasts, beaches, bays, estuaries, lagoons, and lakes. Needs sandy or gravelly areas to construct nests.	No / No	No suitable nesting habitat in the survey area; not expected to occur.
Taricha torosa Coast Range newt	State: SSC	December – April	Slow moving streams, ponds, and lakes with surrounding evergreen/oak forests along coast. Aquatic when breeding.	No / No	No suitable habitat in the survey area; not expected to occur.
Taxidea taxus American badger	State: SSC	Late Summer – Early Fall	Dry, open fields with friable soil for tunneling and foraging.	No / No	No suitable denning habitat in the survey area; not expected to occur.

[1]List of regionally-occurring special-status species and listing status acquired from CNDDB (CDFW 2022a) and local expert knowledge.

[2]Life history information obtained from multiple sources, including Cornell Lab of Ornithology Online (Cornell) (Cornell 2022), CaliforniaHerps.com (Nafis 2022), and USFWS Environmental Conservation Online System (ECOS) (USFWS 2022c).
[3]Species observed during field surveys indicated with **bold** font; species determined to have suitable habitat present on the site, even marginally suitable habitat, indicated with gray highlight. Species highlighted gray are discussed further in the report.

Appendix D – Botanical and Wildlife Species Observed

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6686 Monte Road, San Luis Obispo County
List of Botanical Species Observed on April 21, 2022

Family	Scientific Name	Common Name	Origin
Anacardiaceae, Sumac Family	*Schinus molle*	Pepper tree	Naturalized
	Toxicodendron diversilobum	Western poison oak	Native
Apiaceae, Carrot Family	*Conium maculatum*	Poison hemlock	Naturalized
	Foeniculum vulgare	Fennel	Naturalized
Asteraceae, Sunflower Family	*Artemisia douglasiana*	Mugwort	Native
	Baccharis pilularis	Coyote brush	Native
	Baccharis salicifolia subsp. *salicifolia*	Mule fat	Native
	Carduus pycnocephalus	Italian thistle	Naturalized
	Helminthotheca echioides	Bristly ox-tongue	Naturalized
	Heterotheca grandiflora	Telegraph weed	Native
	Matricaria discoidea	Pineapple weed	Naturalized
	Silybum marianum	Milk thistle	Naturalized
	Sonchus asper	Prickly sow thistle	Naturalized
Brassicaceae, Mustard Family	*Hirschfeldia incana*	Mustard	Naturalized
	Raphanus sativus	Radish	Naturalized
Convolvulaceae, Morning-Glory Family	*Convolvulus arvensis*	Bindweed	Naturalized
Cyperaceae, Sedge Family	*Cyperus eragrostis*	Tall cyperus	Native
Fabaceae, Legume Family	*Trifolium* sp.	Clover	Native
Fagaceae, Oak Family	*Quercus agrifolia*	Coast live oak	Native
	Quercus lobata	Valley oak	Native
Geraniaceae, Geranium Family	*Erodium cicutarium*	Redstem filaree	Naturalized
	Geranium dissectum	Wild geranium	Naturalized
Juncaceae, Rush Family	*Juncus* sp.	Rush	Native
Malvaceae, Mallow Family	*Malva parviflora*	Cheeseweed	Naturalized
Plantaginaceae, Plantain Family	*Plantago lanceolata*	English plantain	Naturalized
Poaceae,	*Avena barbata*	Slender wild oat	Naturalized

Family	Scientific Name	Common Name	Origin
Grass Family	*Bromus diandrus*	Ripgut brome	Naturalized
	Bromus hordeaceus	Soft chess	Naturalized
	Dactylus glomerata	Orchard grass	Naturalized
	Festuca perennis	Rye grass	Naturalized
	Hordeum murinum	Wall barley	Naturalized
Polygonaceae, Buckwheat Family	*Rumex crispus*	Curly dock	Naturalized
Salicaceae, Willow Family	*Salix lasiolepis*	Arroyo willow	Native
	Populus fremontii	Fremont's cottonwood	Native

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6686 Monte Road, San Luis Obispo County
List of Wildlife Species Observed on April 21, 2022

Family	Scientific Name	Common Name	*Listing Status Federal/State
Birds	*Accipiter cooperii*	Cooper's hawk	Watch List
	Agelaius phoeniceus	Red-winged black bird	--
	Aphelocoma californica	California scrub-jay	--
	Ardea herodias	Great blue heron	--
	Calypte anna	Anna's hummingbird	--
	Corvus brachyrhynchos	American crow	--
	Euphagus cyanocephalus	Brewer's blackbird	--
	Haemorhous mexicanus	House finch	--
	Junco hyemalis	Dark-eyed junco	--
	Melospiza melodia	Song sparrow	--
	Melozone crissalis	California towhee	--
	Passer domesticus	House sparrow	--
	Pipilo maculatus	Spotted towhee	--
	Psaltriparus minimus	Bushtit	--
	Sayornis nigricans	Black phoebe	--
	Sialia mexicana	Western bluebird	--
	Spinus psaltria	Lesser goldfinch	--
	Streptopelia decaocto	Eurasian collared-dove	--
	Sturnus vulgaris	European starling	--
	Tyrannus vociferans	Cassin's kingbird	--

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Appendix E – Representative Site Photographs

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Photo 1. Pismo clarkia observed in bloom at a reference population prior to the April 21, 2022 survey (April 14, 2022)

Photo 2. View west of the parcel proposed for the new residential structure (April 21, 2022)

Photo 3. View south of the existing rural residential and agricultural developed landscape (April 21, 2022)

Photo 4. View north of the culvert outlet at Monte Road and the existing driveway (April 21, 2022)

Photo 5. View southwest of the unnamed ephemeral drainage and coast live oak woodland (April 21, 2022)

Photo 6. View east of the unnamed ephemeral drainage and annual grassland (April 21, 2022)

Photo 7. View north along the western property boundary of the arroyo willow thicket, annual grassland, and agricultural field (April 21, 2022)

Photo 8. View southeast of the agricultural field (April 21, 2022)